

Apacer

Technology Inc.

2018

Corporate Social
Responsibility Report

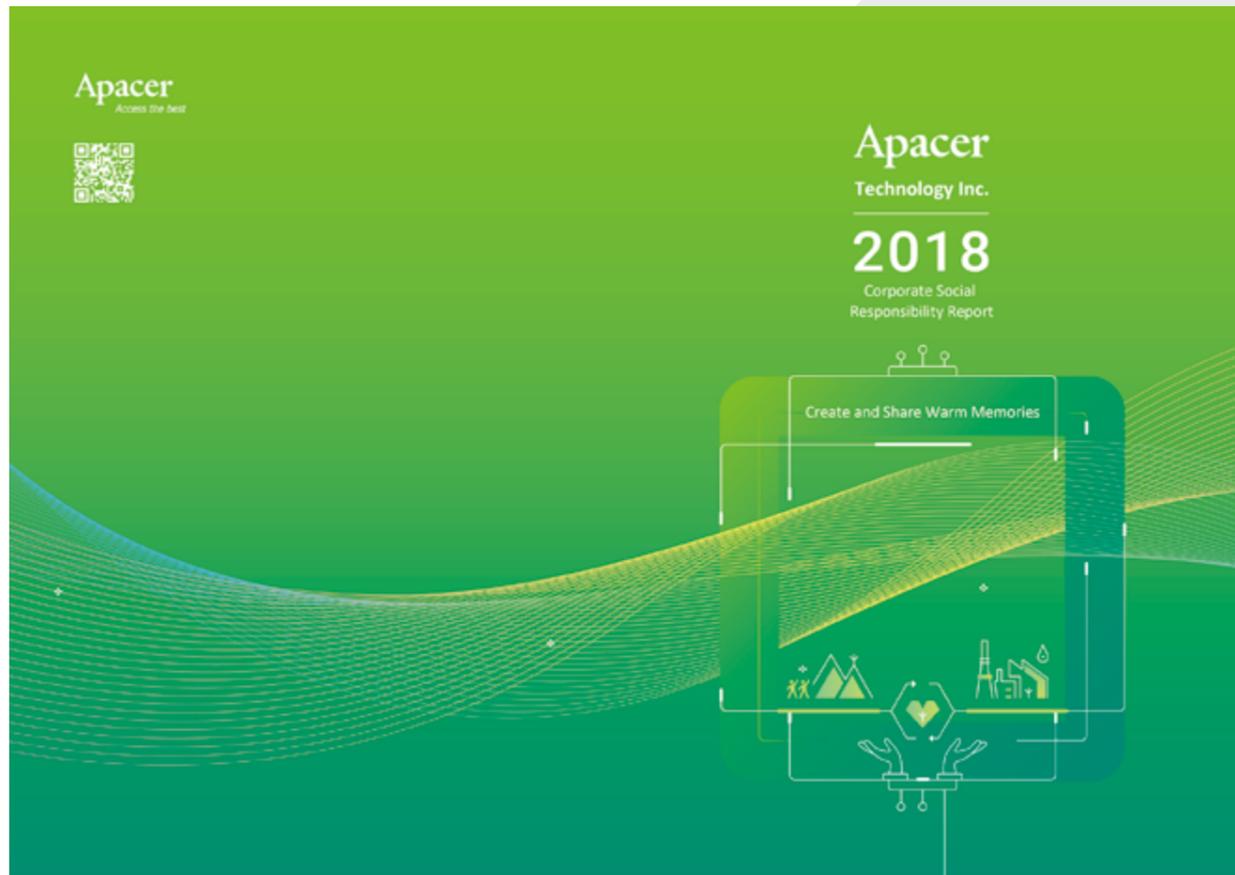
Create and Share Warm Memories



Table of Contents

About this Report	1	Chapter 2 Persistence: Green and Eco-friendly Manufacture Process	33
A Word from the Chairman	3	2.1 Commitment to the Environment and Legal Compliance	35
A Word from the President	4	2.2 Energy and Resource Management	36
Sustainability Strategy Development (SSD)	5	2.3 Green Production and Products (Material Issues)	41
CSR internal management measures	5	Chapter 3 Commitment: Improve Sustainability with Partners	43
Corporate Social Responsibility (CSR) Committee - Organizational Structure	5	3.1 Sustainable Supplier Management	45
CSR Committee - Annual Management Procedures	5	3.2 Customer Relationship Management (Material Issues)	50
Materiality Analysis	6	Chapter 4 Commitment: Friendly and Healthy Workplace	53
Materiality Analysis Procedures and Methods	6	4.1 Employee Overview	55
Materiality Analysis Matrix	7	4.2 Employee Safety and Health (Material Issues)	58
List of Material Issues	7	4.3 Employee Benefits and Communication (Material Issues)	61
Material Issues and Boundaries	8	4.4 Compensation System	65
Stakeholder Engagement	10	4.5 Talent Cultivation and Development (Material Issues)	70
Channels of Communications for Stakeholders and Issues	10	Chapter 5 Commitment: A Livable and Synergistic Hometown	75
Fulfilling the UN's Sustainable Development Goals (SDGs)	11	5.1 Local Participation (Material Issues)	77
Key CSR Performance in 2018	13	5.2 Social Concern (Material Issues)	79
Chapter 1 Persistence: Creating Trust in Brand Value	15	Appendix: Global Reporting Initiative (GRI) Standards	81
1.1 About Apacer	17		
1.2 Ethical Management and Corporate Governance	20		
1.3 Operating Performance (Material Issues)	25		
1.4 Products and Services	27		
1.5 Innovative R&D (Material Issues)	30		

About this Report



◆ Theme and Cover Design

To achieve the main scheme of Apacer Corporate Social Responsibility: "Create and Share Warm Memories", we based on the core ability of "storage" to commit our brand promise: "Access the best". It symbolizes Apacer will play a role to influence the industries to respond to the needs of stakeholders.

The cover design is expressing three key facets of Apacer's Corporate Social Responsibility: social, economy and environmental, extending to employee health, give back to the local and green production. Apacer aims to exert to the greatest, respect local development and create a sustainable and synergistic environment.

◆ Report Structure

This report adopts the GRI Standards of the Global Reporting Initiative (GRI) and was compiled based on the core options. Through the globally recognized reporting framework, this report fully discloses information for Apacer's stakeholders regarding economic, environmental, and social issues.

◆ Principles of Compilation

Apacer has referenced domestic and international sustainable and industry trends, and identified stakeholders' issues of concern through materiality analysis, which is then used as the core of information disclosure within this report. In addition, the editors of this report comply with the four major reporting principles and six reporting quality principles required by the GRI guidelines, and adopt the AA1000 Account Ability Principle Standard (APS): Materiality, inclusivity, responsiveness and degree of impact (2018 edition) when compiling this report.

◆ Reporting Scope

The information disclosure period of this Report was from January 1, 2018 to December 31, 2018. This is the sixth CSR Report that Apacer has published, and the date of publication for the most recent report was in August 2018. Apacer publishes CSR Reports annually and discloses the CSR Reports on the company website to continue communicating with external parties on Apacer's sustainable actions. The scope of information disclosure for the report is focused on Apacer's operating headquarters and production site in Taiwan. Notes and explanations will be available in the Report in case any content or information refers to the company's overseas operations.

◆ Third-Party Verification

To ensure transparency and reliability in information disclosure, this Report has commissioned the independent and credible BSI (British Standards Association) for assurance in accordance with AA1000 AS (2008) Type 1, Moderate level assurance, and GRI Standards Core option. Please see the Attachment: Declaration for Independent Assurance for BSI's independent third-party verification statement.

◆ Contact Information

We hope to maintain close communication with our stakeholders. Your opinions will be the greatest driving force for our improvement, and we look forward to hearing from you.

Secretariat Office, Corporate Social Responsibility (CSR) Committee
Specialist Hsiao-Mei, Lin
Tel: (02)2267-8000 Ext. 5519
Email: Mei_Lin@apacer.com
Address: 1F., No. 32, Zhongcheng Rd., Tucheng Dist., New Taipei City 236

A Word from the Chairman


Austin Chen

Apacer celebrated its 21th anniversary in 2018. We reoptimized our brand philosophy of "reliability and innovation", hoping to illustrate it in a more intuitive and understandable light. In the end, we changed it to four words - "Be a good partner", which means: "Do what we say, insist on the best and work together". By upholding the philosophy "Be a good partner", we can surely become good companions for our employees, upstream vendors and downstream customers.

Regarding corporate sustainability, Sustainable Development Goals (SDGs) have become the common language for global sustainability issues. In 2018, we adopted an SDG perspective in examining Apacer's sustainable actions and planning future strategies. With enterprise's core competitiveness as backbone, we have extended Apacer's Sustainability Strategy Development (SSD), created new values and achieved new feats with our employees, suppliers and other stakeholders. We have extended the positive influence of the Company to our value chain while also setting short-, mid-, and long-term objectives for economic, environmental, and social actions, which we keep regular track of and communicate improvements.

In terms of caring for employees, our employee cohesiveness and organizational development serve as foundation which allows Apacer to combine Corporate Social Responsibility (CSR) and Responsible Business Alliance (RBA) sustainability philosophies. We provide a premium workplace environment and take care of valuable business partners and their family members through three main aspects: Work +, Life + and Health +. In addition to the 2018 "Apacer A+ EAEP (Employee Assistance & Exercise Programs)" winning the Ministry of Labor's Work-Life Balance Award, Apacer also hopes to establish a positive employer image, retain good talents and attain new opportunities that will help Apacer to continuously grow.

As an important global memory module manufacturer, we fully comply with the RBA regulations and were honored with the RBA Silver Award for the first time in 2018. Apacer promises to promote the values of a responsible business and focus on production, environmental protection and ensuring labor rights. With construction of the sustainable value chain as our primary goal, we advocate the CSR sustainability to our supply chain partners, hoping to encourage others within the industry to practice corporate social responsibility.

As for local community relations, Apacer engages in active communication with communities, schools, and arts & cultural groups. Apacer held volunteer events in neighborhood communities to support sport development in schools. This year, we expanded the scope of our actions and helped pass down traditional folk arts and the sharing of memories. We understand that business operations have a great effect on local communities and will maximize the scope of our actions to give back to the community, enhance local development and to create a sustainable environment for all.

Apacer's 2018 CSR Report was awarded the Gold Medal in IE and IC Manufacturing Group, CSR Report category, "Taiwan Corporate Sustainability Awards (TCSA)". For Apacer, it is definitely a new milestone in its path of pursuing sustainable governance. In the future, we will hold on to our core value, which is "Do what we say, insist on the best and work together". Apacer creates a responsible corporate culture and work hand in hand with partners starting from the core competitiveness of the company to respond to stakeholders and give back to society in an environmental friendly method.



A Word from the President

Chia-Kun Chang



Since its establishment, Apacer has laid a solid foundation that enables the Company's stable development. As of 2018, Apacer has acquired steady revenue for ten consecutive years. In the ever-changing memory market, we have to not only master core technologies and expand application fields, but also constantly pursue sustainable development. Apacer was also honored with the Gold Medal at the "Taiwan Corporate Sustainability Awards (TCSA)" in 2018. It affirmed Apacer's continual effort in promoting CSR. Let me share with you Apacer's CSR achievements in the recent years as well as our future business strategies.

In view of the overall business operation, Apacer's annual revenue reached NT\$9.64 billion and achieved a gross margin of 13.87% for the turbulent year of 2018. Apacer ranked among the top 5% in the 5th Corporate Governance Evaluation while also receiving the Taiwan Excellence Award for ten consecutive years. It is a true testament to Apacer's outstanding business governance and R&D performance. Aside from laying a solid foundation for vertical applications and the consumer digital storage market, we also actively deploy gaming application groundwork and AIoT integration solutions in response to industry trends. By diversifying the scope of our business operations, we accumulate growth momentum for the future. In terms of mid to long-term operational objectives, we hope to not only pursue profits, but also respond directly to the needs of stakeholders in a positive and concrete manner.

Regarding environmental protection, Apacer is committed to achieving green sustainability of our manufacturing processes and products. We introduced environmental systems that reduce negative impact to the environment while also lowering energy consumption. By adopting Hazardous Substance-Free (HSF) regulations, Apacer ensures the products are harmless to the environment and human health. After receiving the "Responsible Business Alliance (RBA)" Silver Certification, Apacer applied the RBA regulations on our Tier 1 suppliers. Together with our supply chain partners, we advocate labor rights, environmental protection, as well as ethical and transparent business operations, enhancing the industry's concern for sustainability.

When it comes to caring for employees, Apacer not only agrees to society's trend of optimizing the workplace environment, but goes further in providing superior conditions. Apacer strives to create a healthy and friendly workplace environment for employees, thereby encouraging talent development. In 2018, our "Apacer A+EAEP (Employee Assistance & Exercise Programs)" planned various welfare systems revolving around three specific aspects: Health, Family and Work. Apacer also offers numerous parenting programs for our employees, allowing them to enjoy healthy and happy family life.

In terms of giving back to society, Apacer's "One Day Volunteer" event is on its third consecutive year. Colleagues are encouraged to help and care for the local community and environment. Fully aware of the importance of "education" and "culture" in achieving sustainability, Apacer started sponsoring the track team of New Taipei City Municipal Yulin Junior High School since 2015, allowing students to pursue their dreams. In 2018, Apacer launched a three-year sponsorship program for Tainan Municipal Daguang Elementary School, hoping to pass down traditional "folk arts" as "memory". We believe that these actions will not be short-lived. We hope that in the near future, Apacer can become the driving force in leading our stakeholders to giving back to society.

A corporate's path to achieving sustainable development is one of continuous self-growth and breakthroughs. Much like the core value of Apacer's brand: "Do what we say, insist on the best and work together", we are committed to continuous improvement and practice on sustainability issues. It is our determination to "do the right thing" that has allowed Apacer to become a trusted leading brand in the industry. I would like to thank all my colleagues for their devotion and hard work. I also hope that more Taiwanese companies can join our ranks in promoting CSR, optimizing the international competitiveness of Taiwanese companies.

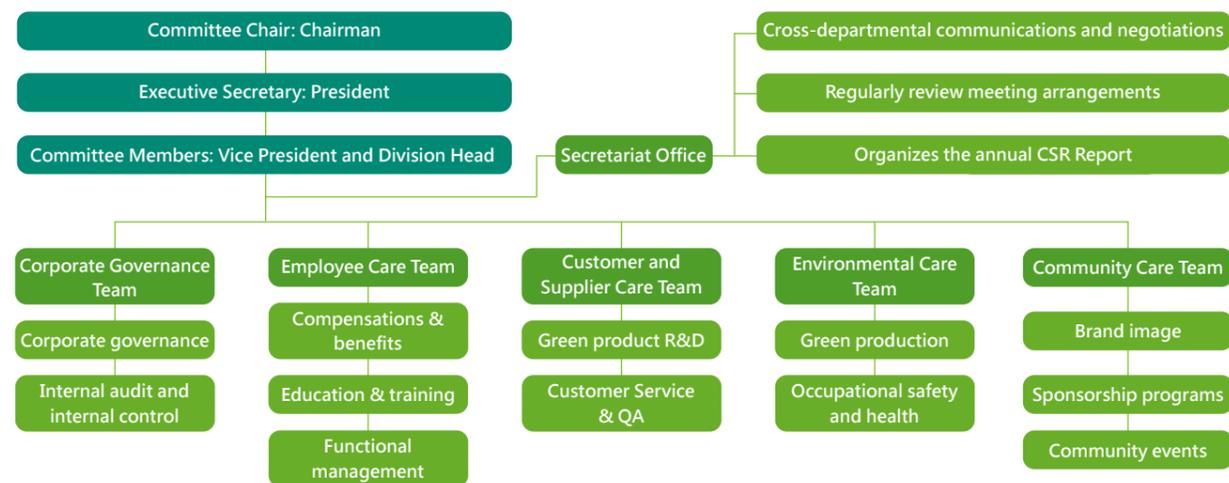
Sustainability Strategy Development (SSD)

◆ CSR internal management measures

Corporate Social Responsibility (CSR) Committee – Organizational Structure

Apacer integrates sustainability into its business operations. In 2015, we established a CSR Committee and created a formal organizational structure that is chaired by our Chairman, while the President serves as the Head Secretary. Based on the company's overall operational objectives, the CSR Committee establishes the overall direction of approach for Apacer's CSR sustainable management objectives and also proposes the Company's short, mid and long term CSR goals, strategies and management systems.

The CSR Committee has established five working teams: "Corporate Governance", "Employee Care", "Customer and Supplier Care", "Environmental Care", and "Community Care". The managers of relevant departments are appointed the heads of each team. Together they integrate CSR objectives into the daily businesses and sustainable development of each department.



CSR Committee - Annual Management Process

Chaired by the Chairman and the President, Apacer's CSR Committee meetings are held quarterly to monitor the progress of CSR projects for each team. Through PDCA systematic management methods, the committee meetings decide on the goals for each team, plan project tasks, conduct cross-department communications and review achieved performance in facilitating vertical & horizontal integration and communication.



The CSR implementation status and future planning will be reported to the Board of Directors at the beginning of the fiscal year, ensuring that the core of Apacer's business operations closely align with sustainable management objectives.

Materiality Analysis

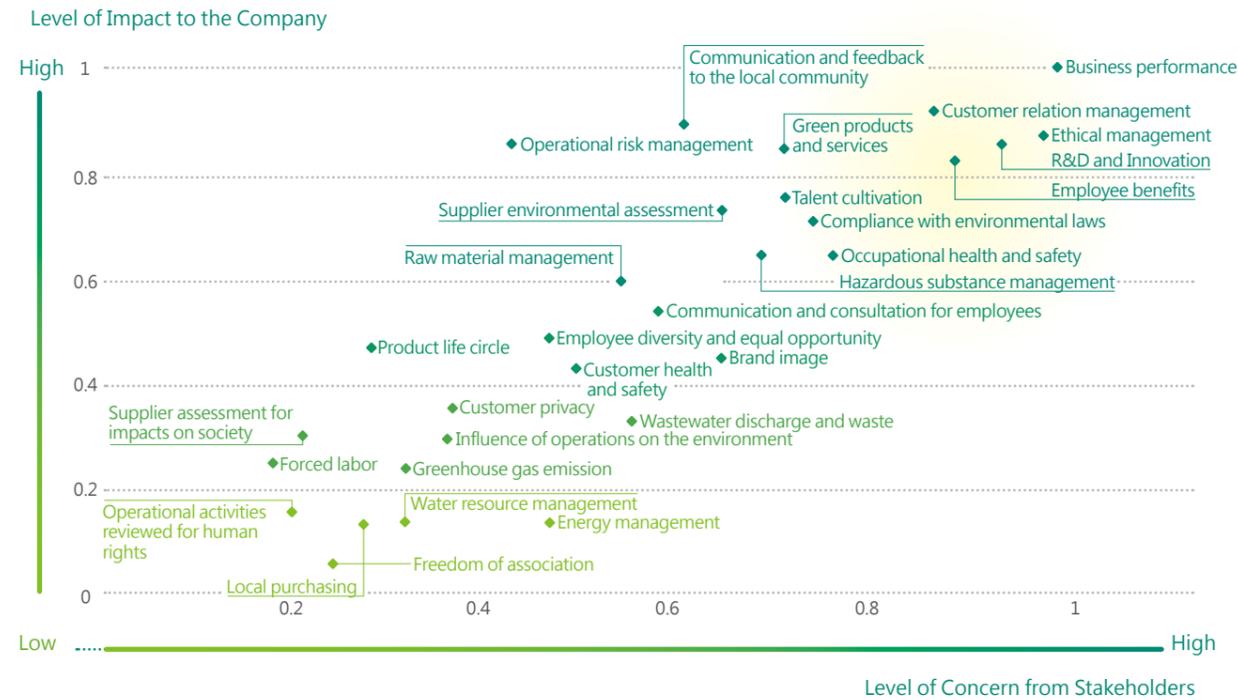
◆ Materiality Analysis Procedures and Methods

To allow information disclosure to better meet the expectations of stakeholders, this report is based on the internal discussions of the CSR Committee, supplemented by the use of questionnaires to identify key stakeholders and material sustainability issues. This provides stakeholders with a clear understanding of Apacer's various sustainability actions regarding governance, environmental protection, and contributions to society.



◆ Materiality Analysis Matrix

This year's material analysis adopted online questionnaires to understand the level of concern of stakeholders and senior management regarding sustainability issues and the impact of the issues on the company. After conducting the questionnaire surveys, the core members of the CSR committee defined 0.6 as the requirement value of being deemed a material issue this year. 12 material issues were identified as key disclosure information in this year's report.



◆ List of Material Issues

Issue Aspect	Material Issues	Material Topics	Importance to Apacer Technology Co., Ltd.	Corresponding Chapter	Page Number
Economics	Economic Performance	GRI 201 Economic Performance	Finance and Performance form the foundation of a corporation's business operations. It also represents our commitment to our investors and employees.	1.3 Operational Performance	P.25
	R&D and Innovation	GRI 201 Economic Performance	In face of ever-changing industry trends, only by continuously investing in R&D and innovative breakthroughs can we maintain the business.	1.5 Innovative R&D	P.30
	(New issue) Ethical Management	GRI 205 Anti-corruption	Ethical Management is the cornerstone of sustainable business. We conduct all business activities in a fair and transparent manner, maintaining the company's positive brand image and goodwill.	1.2 Ethical Management and Corporate Governance	P.20
Environmental	Green Products and Services	GRI 302 Energy	From product design to production, we integrate sustainability ideas, thereby providing environmentally friendly products, and creating a green supply chain.	2.3 Green Production and Products	P.41
	(New issue) Compliance with Environmental Law	GRI 307 Compliance with laws related to environmental protection	Apacer strictly complies with relevant laws and regulations. Operation sites in Taiwan abide strictly by local rules and regulations.	2.1 Commitment to the Environment and Legal Compliance	P.35
	Hazardous Substance Management	GRI 308 Supplier environmental assessment	Hazardous substances have negative impact on people's health and the natural environment. We start with supply chain management to comply with domestic and international hazardous material regulations.	3.1 Sustainable Supplier Management	P.45

Issue Aspect	Material Issues	Material Topics	Importance to Apacer Technology Co., Ltd.	Corresponding Chapter	Page Number
Environmental	Supplier Environmental Assessment	GRI 308 Supplier environmental assessment	Starting from the procurement of raw materials, the products meet the domestic and international standards for hazardous substances, reducing the negative impact on the environment and people's health.	3.1 Supplier Sustainability Management	P.45
Social	Employee Benefits	GRI 401 Employer/employee relations	Employees are Apacer's most valued stakeholders. Focusing on the needs of our employees, we arrange a good working environment and implement welfare to attract talents to stay on a long-term basis.	4.3 Employee Benefits and Communications	P.61
	Occupational Health and Safety	GRI 403 Occupational health and safety	Employees are Apacer's most valued stakeholders. To ensure the stability of talents, Apacer provides a safe and healthy workplace environment so that employees can fully focus on their line of work.	4.2 Employee Safety and Health	P.58
(New issue)	Cultivation of Talent	GRI 404 Training and education	Employees are the driving force behind Apacer's continuous innovation. We have set a blueprint for education and training, systematically enhancing our employee's career development and grow alongside them.	4.5 Talent Cultivation and Development	P.70
Communication and feedback to the local community	Local community	GRI 413 Local community	Apacer focuses on responding to local needs through action. We create opportunities to cooperate with our employees in giving back to the neighborhood and society.	5.1 Local Participation	P.77
				5.2 Social Concern	P.79
(New issue)	Customer Relationship Management	GRI 416 Customers' health and safety	"Access the best" is Apacer's commitment to customers. We fulfill customers' needs from their point of view.	3.2 Customer Relationship Management	P.50

Note: In 2018, Apacer re-evaluated sustainability and material issues to demonstrate Apacer's actions and strategies in achieving sustainability. Compared to 2017, newly added issues included "Anti-corruption", "Compliance with Laws Related to Environmental Protection" and "Training and Education".

◆ Material Issues and Boundaries

After identifying material issues through materiality analysis and collecting data by referencing to GRI topics, we have explained how Apacer manages economic, environmental, and social impacts that are relevant to the material issues. To ensure the transparency and completeness of information disclosure, we define the boundaries of information within and outside the organization.

Category	Material Issues	Value Chain					Relevant Stakeholder	Impact Description	Responsive Actions
		R&D and Improvement	Raw Material Procurement	Production	Product Sales	After-sales Service			
Economics	Economic Performance	▲	■	▲	▲		• Employees • Shareholders / investors	Apacer invests resources in R&D innovation to meet market demands and maintain operational performance.	Diversified products: - Consumer products - Industrial control products - eSports products - AIoT integration solutions
	Ethical Management	●	●	●	●	●	• Shareholders / investors • Suppliers	Apacer conducts business and sales in a fair and transparent manner to prevent fraud.	- Establish codes of ethical conduct - Reporting system - Education and training on ethical management
	R&D and Innovation	▲		▲	▲	▲	• Employees • Customers • Media	Focusing on the needs of customers and users, we create a new corporate culture and expand into multiple fields.	- R&D and customization - Professional design team - Establish five major patent themes - Clearly establish relevant regulations governing rewards

Note: Symbols indicate the degree of involvement of the organization in major issues. ▲ indicates that it causes direct impact; ● indicates that it contributes to impact; ■ indicates that it causes impact through business relations.

Stakeholder Engagement

◆ Channels of Communications for Stakeholders and Issues

Stakeholders	The importance and meaning for Apacer	Channels and frequency of communications	Relevant issues	Corresponding chapter	Page number
Employee	Employees are one of our most important stakeholders. The creativity and stable retention of employees are important foundations for Apacer to maintain its leading position in the industry.	1. Orientation training (irregular) 2. Hold Regular Labor-Management (quarterly) 3. Regularly convene an Employee Welfare Committee meeting (quarterly) 4. Promote the Code of Conduct (irregular) 5. An internal employee grievance channel (at any time)	Economic performance	1.3 Operating Performance	P.25
			Employee benefits	4.3 Employee Benefits and Communications	P.61
			Occupational health and safety Talent cultivation	4.2 Employee Safety and Health 4.5 Talent Cultivation and Development	P.58 P.70
Customer	We develop new products and services based on customer needs to provide the best product experience. Customers' requirements on environmental and social responsibilities prompt Apacer to continuously improve its own regulations.	1. Use the CRM system to monitor customer requirements and product status (irregular) 2. Regular review with sales representatives from major customers (quarterly) 3. Customer satisfaction survey and improvement measures (annually)	R&D and innovation	1.5 Innovative R&D	P.30
			Customer relations management	3.2 Customer Relations Management	P.50
Shareholders / Investors	The capital investment represents the trust and support of shareholders/investors to the company, enabling Apacer to continue to innovate its way toward sustainable operation.	1. Shareholders' Meeting (annually) 2. Investor Conference (irregular)	Economic Performance	1.3 Operating Performance	P.25
			R&D and Innovation	1.5 Innovative R&D	P.30
			Compliance with environmental laws	2.1 Environmental Commitment and Compliance with Laws	P.35
Suppliers	Suppliers are Apacer's key partners in fulfilling our green production. We work together with suppliers on sustainability issues through cooperation, communication and coaching audits.	1. APG Supplier Platform (irregular) 2. Supplier coaching and auditing (every six months) 3. Suppliers required to sign the Declaration of Environmental Protection (irregular) 4. Convene a Supplier Conference (irregular)	Hazardous substance management	3.1 Sustainable Supplier Management	P.45
			Green products and services	2.3 Green Production and Products	P.41
Media	Media reports influence Apacer's image and public's opinion. We convey our brand image through public relations management and communication with the media.	1. Press release (irregular) 2. Press conference (irregular) 3. Interview (irregular) 4. Product review (irregular) 5. Media gathering (annually)	R&D and innovation	1.5 Innovative R&D	P.30
			Compliance with local laws	2.1 Environmental Commission and Compliance with Laws	P.35
Government Institutions	Global sustainability trends and government regulations are our ongoing focus, allowing us to better plan corporate sustainability blueprints and strategies.	1. Company website (at any time) 2. Disclosing and reporting on Market Observation Post System (annually) 3. Participate in promotional meetings and relevant advocacy programs held by competent authorities (irregular)	Compliance with local laws	2.1 Environmental Commission and Compliance with Laws	P.35
			Occupational health and safety	4.2 Employee Safety and Health	P.58

Category	Material Issues	Value Chain					Relevant Stakeholder	Impact Description	Responsive Actions	
		R&D and Improvement	Raw Material Procurement	Production	Product Sales	After-sales Service				
Environmental	Green Products and Services	▲	■	▲			• Employees • Suppliers	Reduce energy consumption and comply with international hazardous substances regulations in design, raw material procurement, manufacturing and production processes.	- Introduce environmental management systems - Sustainable supplier management - Green product design - Improve energy-saving process - Promote education and training on environmental protection	
	Hazardous Substance Management		■	▲			• Employees • Suppliers	The introduction and evaluation of suppliers are added to the relevant Hazardous Substance Regulations.	- Introduce QC 080000: 2017 Hazardous Substance Management System - Hazardous Substance-Free (HSF) regulation for suppliers	
	Supplier Environmental Assessment		■				• Suppliers	We work hand-in-hand with suppliers to create a green and sustainable supply chain.	- Suppliers sign letters of undertaking for environmental protection - Suppliers provide raw material test reports and complete substance surveys	
	Compliance with Environmental Laws				▲		• Employees • Shareholders / investors • Government	Apacer's manufacturing process complies with environmental laws and regulations, aiming to be a sustainable green enterprise.	- Quarterly check-up on regulation updates - Audit on deficiency improvements	
Social	Employee Benefits	●	●	●	●	●	• Employees	We offer a welfare system that is superior to regulations; create a balance between life and work, as well as a workplace environment worthy of long-term engagement.	- Provide a welfare system that exceeds the Labor Standard Laws - Promote Apacer A+ EAEP Employee Assistance & Exercise Program - A sport-supporting and gender friendly workplace	
	Occupational Health and Safety					▲	• Employees	Apacer provides a safe and healthy workplace environment, allowing employees to fully focus on their line of work and stay in their position for a long period of time.	- Verified by OHSAS 18001 Occupational Safety and Health Management System - Disaster prevention - Implement safety and health education programs - Implement automatic inspection - Employee health management	
	Communication with Local Communities and Relevant Feedback				●		• Employees • Media	Apacer creates a livable synergistic hometown through proper communication, relevant actions, and responding to local needs.	- Green plan - Support local education - Promote traditional culture and art - Promote local care and actively encourage employees to participate	
	Customer Relations Management	▲			▲	▲	• Customers	Apacer working with customers to co-develop products and provide zero-time difference services, creating optimal service experience.	- Global after-sales service system - Product customization service - Annual customer satisfaction survey	
	Talent Cultivation	▲	▲	▲	▲	▲	• Employees	We provide education and training courses according to the needs and career development of our employees, pursuing growth and improvement for both the company and the industry.	- Establish a Human Resource Committee - Create a blueprint for education and training - TTQS (Taiwan Training Quality System) project	

Fulfilling the UN's Sustainable Development Goals (SDGs)

Apacer is committed to practicing the core values of the brand "Do what we say, insist on the best and work together" to fulfill the United Nations Sustainable Development Goals (SDGs) with strategic local actions.



Key CSR Performance in 2018



Economic

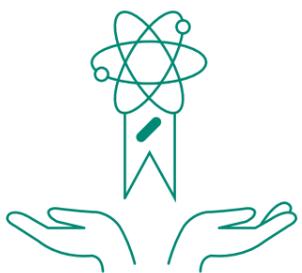
The annual revenue for 2018 reached NT\$ **9.44** billion, with gross margin increased to **13.87%**

We were honored with the **Gold Medal in IE and IC Manufacturing Group** for the CSR Report category in the "Taiwan Corporate Sustainability Awards (TCSA)".

In 2018, Apacer ranked top **5%** (top 43 companies) in Corporate Governance Evaluation.

We were honored with the Taiwan Excellence Awards for **10** consecutive years. As of now, a total of **51** products received this distinction and were awarded the "Achievement Awards".

Apacer ranked No. **35** in the Best Global Taiwan Brands and were listed as one of the "Emerging Brands".



All products are **lead-free.**

All raw materials comply with EU RoHS standards.



Environmental

We were honored with Ministry of Labor's **Work-Life Balance Award** in 2018.

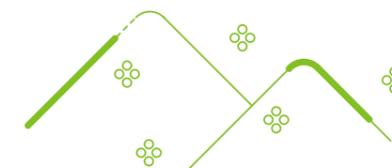
Sponsored the track team at New Taipei's Municipal Yulin Junior High School for 4 consecutive years.



Social

Launched the **Apacer A+ EAEP Employee Assistance & Exercise Program** to improve employee welfare in three major aspects, which are work +, life +, and health +.

Sponsored the Folk Drums & Art Troupe at Tainan Municipal Daguang Elementary School to support the development of traditional culture in Taiwan, passing down the "folk arts" and "memory".



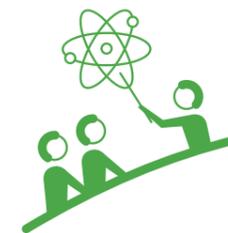
Organized Apacer's Tung Blossom One Day Volunteer activity for three consecutive years. Added the fireflies theme to promote the concept of ecological conservation.

Introduced halogen-free product process and the proportion of halogen-free products has reached **38%**.



In 2018, we reduced a total of **71.9** tons in carbon emissions.

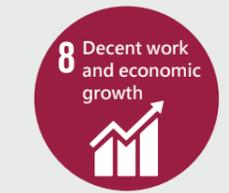
All new employees have passed a general knowledge course on environmental protection and energy conservation.



Chapter 1 Persistence: Creating Trust in Brand Value



Corresponds to the Sustainable Development Goals (SDGs) set by the UN



Vision

Apacer creates a fast, stable and reliable intelligent storage application environment, utilizing digital storage as foundation in becoming an outstanding company specializing in integrated information services.

Policy and Commitment

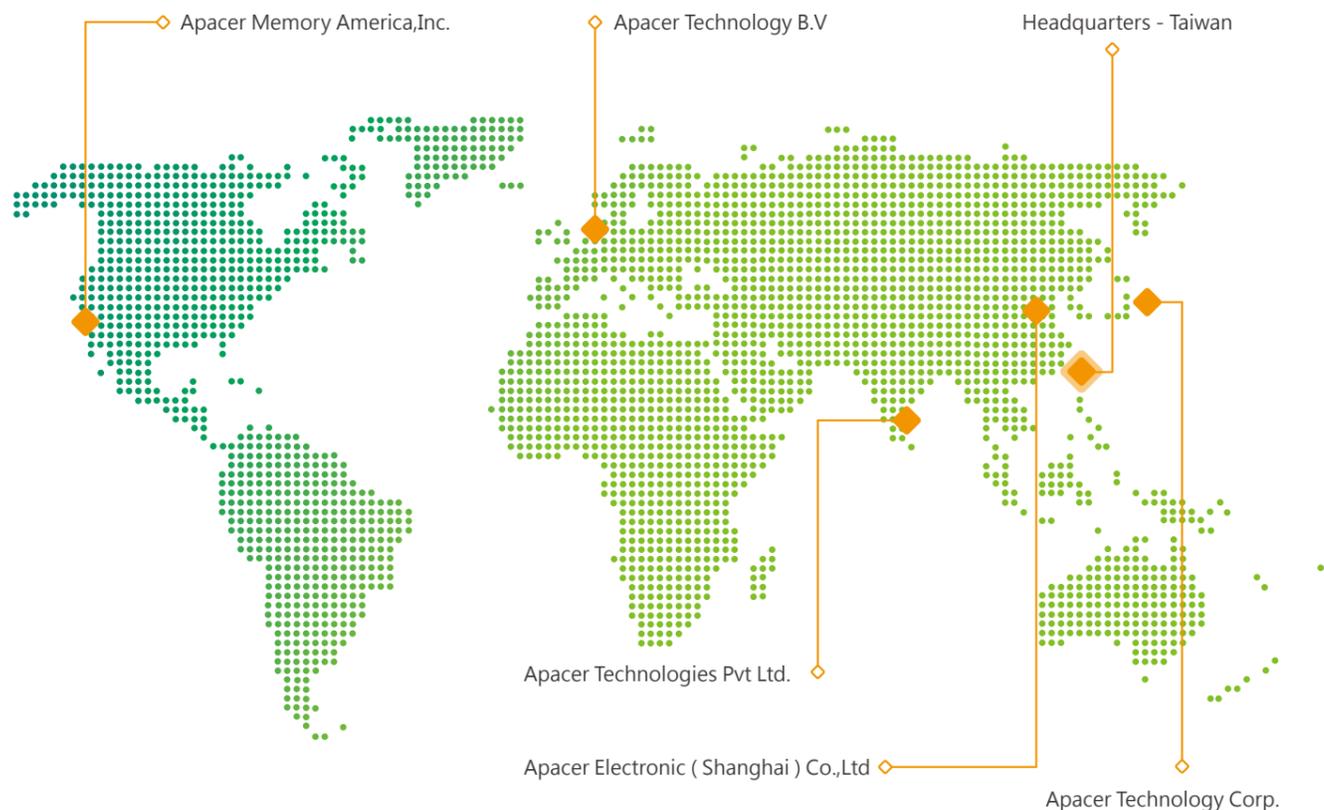
Apacer upholds "Access the best" as its brand commitment, continuously engaging in innovation and the expansion of products across different fields with the goal of becoming a technology-based information service integrator that outlines the blueprint for the future. Aside from pursuing growth and breakthroughs, we practice ethical operations and consider sustainable development to be a core value of our business as we continue to create value for our stakeholders.

Material Topics	Economic Performance	Ethical Operation	R&D and Innovation	
Responsibility	- Board of Directors - Strategy and Management Committee	- Board of Directors - Corporate Social Responsibility (CSR) Committee	R&D Division	
Resources	Manpower: 9 seats on the Board of Directors, 6 members from the Strategy and Management Committee	Manpower: The chief financial officer is the person in charge, with 6 members from the Finance and Risk Management Division	Manpower: 41 personnel in the R&D Division Budget: Compile and review budget based on research and development needs	
Actions	Diversified products: 1. Consumer products 2. Industrial control products 3. eSports products 4. AIoT integration solutions	1. Internal audit and reporting system 2. Maintain shareholders' equity and treat shareholders equally 3. Strengthen the structure and operation of the Board of Directors 4. Enhance information transparency 5. Implement corporate social responsibility	1. R&D and customization 2. Professional design team 3. Establish five major patent themes 4. Clearly establish relevant regulations governing rewards	
Channels of Communication	Make important decisions regarding business and product operations through Board and business management meetings	Report on planning and performance in CSR committee meetings	Establish a patent development committee and a patent review team to conduct internal patent reviews	
Evaluation Method and Results	Revenue: Annual revenue amounted to NT\$9.44 billion in 2018, gross margin increased to 13.87% Awards: In 2018, we were honored with the Taiwan Excellence Award for the 10 th consecutive year. A total of 8 products stood out	1. Reporting system: No report cases in 2018 2. Education and training on ethical management: 438 participants, 657 hours in total. 3. Corporate governance In 2018, a total of 868 companies participated in the Corporate Governance Evaluation. We ranked among the top 5%	A total of 21 patents granted in 2018	
Sustainability Goals	Short term	Develop industrial control products, and expand into the e-sports, AIoT, and optical applications	1. First adoption of a nomination system, in which new directors and independent directors are elected 2. Establish an audit committee to replace supervisors 3. Enhance the Company's information disclosure in English, including the annual reports at the shareholders' meetings, financial statements and other major announcements	Recruit talents of professional expertise
	Mid term	Strengthen global groundwork, construct a global marketing network, introduce excellent industrial talent and construct an accurate talent database	1. Implement ethical business operations, prohibit improper profits and apply regulations on confidentiality, non-retaliation etc. 2. Maintain top 5% ranking in the Corporate Governance Evaluation	R&D innovation technology transforms into substantial business benefits
	Long term	Promote sustainable business, stable growth and profitability by saving energy	Continue to strengthen corporate governance to enhance information transparency and respect the rights of shareholders and stakeholders	Focus on storage, expand the application fields in receiving, analyzing, sharing, and controlling, as well as deploy the technology-based information service integration ecosystem

1.1 About Apacer

Apacer (stock code: 8271) is a company listed on the Taiwan Stock Exchange Corporation (TWSE). Founded in 1997, Apacer's business scope spans industrial solid-state drives (SSD), memory modules, consumer digital products, and emerging application solutions. As a globally renowned company, Apacer has integrated R&D, design, production, and marketing competencies. Apacer embodies our brand's promise of "Access the best" by providing trustworthy, innovative products and customized software, hardware and firmware integration services.

With our global operating headquarters located in New Taipei City, Taiwan, Apacer's business scope spans five continents, with established subsidiaries in the U.S.A, the Netherlands, Japan, China, and India. Our clientele includes global distributors, equipment manufacturers, system integrators, and retailers. Apacer is dedicated to cultivating the global market with our close-knit retail channels and partners.



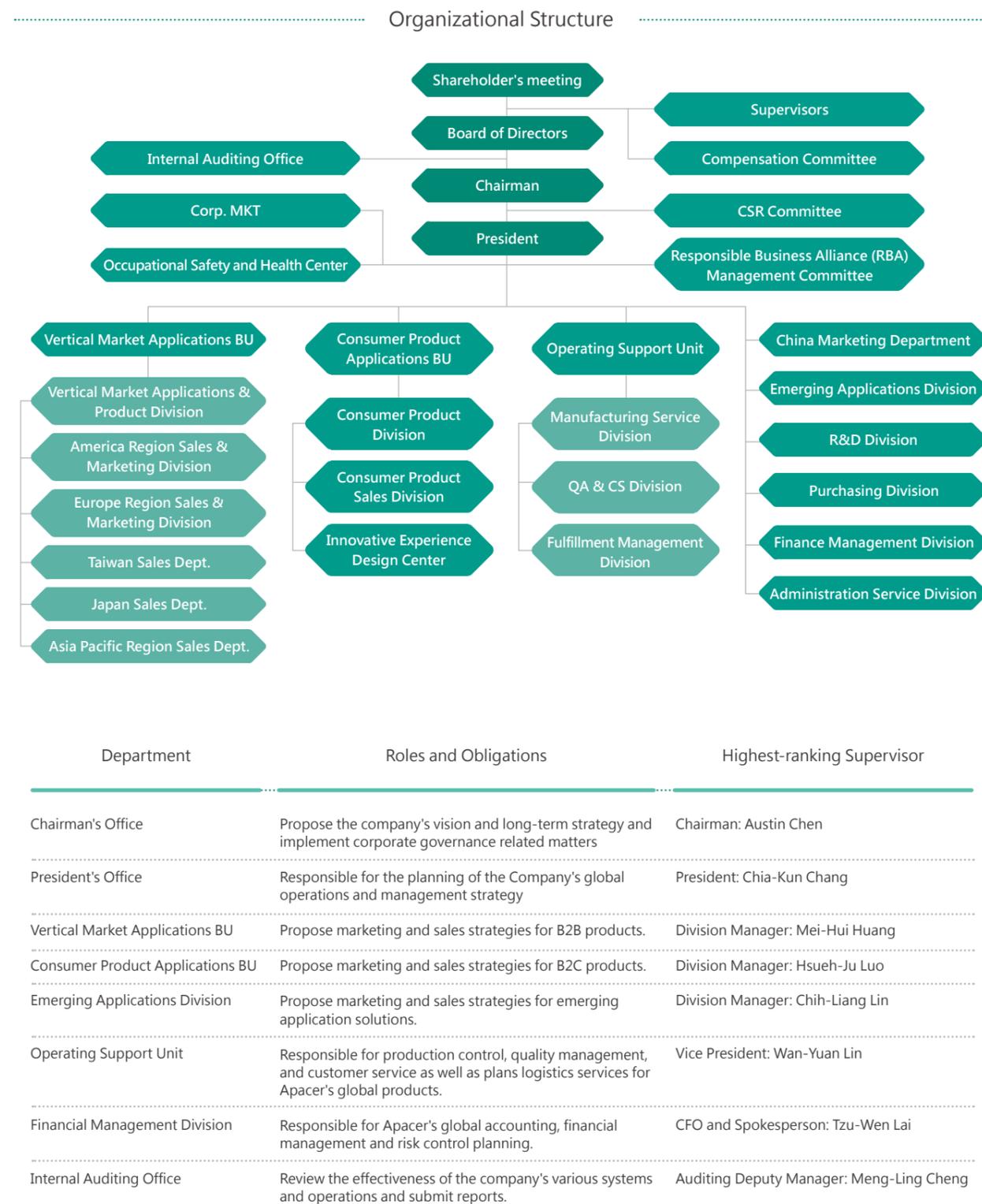
Company Name	Apacer Technology, Inc.
Company Address	1F., No.32, Zhongcheng Rd., Tucheng Dist., New Taipei City 236
Date of Establishment	April 16, 1997
Stock Information	Taiwan Stock Exchange Corporation (stock code: 8271)
Capital	NT\$ 1.008 billion
Main Products	Industrial solid-state drives (SSD) Flash drives/External hard drive Memory modules Consumer digital products Emerging application integration solutions
Total Employees	589 persons

Note 1:
Data taken as of December 31, 2018

Note 2:
Number of total employees is calculated based on the number of employees at Apacer's Taiwan headquarters.

Corporate Organization and Culture - People-Oriented and Creating a Happy Workplace

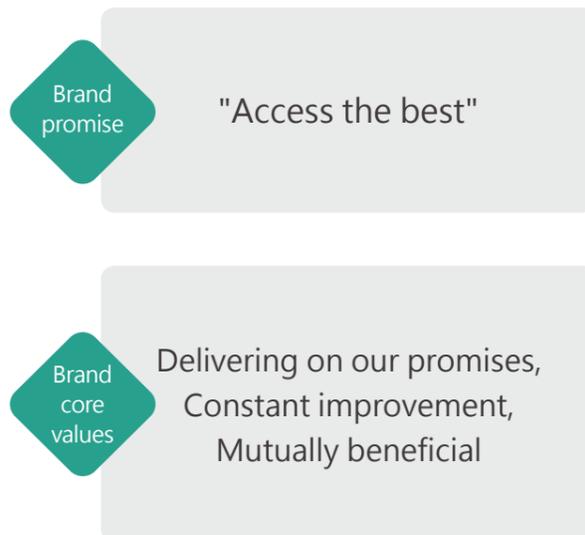
Apacer upholds the philosophy "we give back what we take from the society" and integrates the concept of CSR into our day-to-day operations based on a human-centered approach. In terms of business operations, we pursue long-term stable profit and growth to enhance the competitiveness of our enterprises. We adopt humanistic management and implement an employee benefit system in creating a happy workplace. Our practices fully reflect Apacer's enterprise culture of looking after Apacer's employees, giving back to the society and pursuing a sustainable business.



Brand Spirit

"Access the best" has been our brand's promise since our establishment in 1997. With digital storage technology as core, we provide diversified products and services by offering our customers the best digital storage applications, striving to create unlimited possibilities for the future technology era.

In 2018, Apacer set the brand's core value as "Delivering on our promises, Constant improvement, Mutually beneficial". Together with our employees and partners, Apacer is persistent in pursuing breakthroughs. We commit to making improvements when it comes to speed, quality and service, thereby satisfying diversified and customized needs as well as creating optimal service experiences for our clients.



Main Product Fields

In the early stages of Apacer's establishment, revenue from the Company's own brand products accounted for 90% of its total revenue. Over the past 21 years, Apacer has committed to the digital storage field and has continuously developed innovative products and new technology, fully demonstrating the technology expertise and R&D capabilities of a technological information service integrator.

In order to better utilize Apacer's cross-disciplinary integration competencies and expand its diversification operations, not only have we focused on industrial and consumer digital storage market in recent years, but also expanded to high-end eSports and smart applications. Aside from continuing R&D and operation momentum, Apacer implements groundwork that will allow long-term sustainable innovation.



Vertical Market Applications

We have established a leadership position in industrial control through pioneering technology, high levels of customized software and hardware, and firmware integration services in vertical market applications.



Consumer Product Applications

In terms of consumer product applications, we strive to build an optimized user experience to fully satisfy our customers' lifestyles and entertainment needs through obtaining insights to consumer trends.



Emerging Applications

For smart IoT applications, we can cater to IoT planning needs from every industry through our Solution Ready Platform (SRP) system integration kit.



High-end eSports Applications

High-end eSports applications help to strengthen the unique characters of gamers through energy-saving, high-performing, light-up storage products.

1.2 Material Topic

Ethical Management and Corporate Governance

Board of Directors

The transparency, professionalism and efficiency of Apacer's Board of Directors are what guarantees effective corporate governance. The Board of Directors supervises the Company's major decisions evaluating global occurrences, market observations and financial assessments. With professional judgment, Apacer protects shareholders' rights, enhances operating performance, ensures proper supervision, strengthens risk management and guarantees information transparency.

Currently, the Board of Directors comprises nine seats. Among them, three serve as Independent Directors. One of the Directors is between 30 to 50 years old while eight of them are above 50 years old. The Board of Directors has convened 4 meetings since May 30, 2018, with an average attendance of 94%.

The members of the Board of Directors fulfill their obligations with due diligence and commit to information transparency, legal compliance, and the full disclosure of material information. The members of the Board propose business operation suggestions based on their professional background and experiences in dealing with the market. The Board respects the opinions of Independent Directors and records the reasons for their approval or objection within the meeting minutes, adopting recusal principles to effectively protect the interests of the Company.

Title	Name	Gender	Actual Attendance	Attendance by proxy	Actual attendance ratio (%)	Description
Chairman	Austin Chen	Male	6	0	100%	Re-appointed
Director	Li-Da Lu	Male	6	0	100%	Re-appointed
Director	C.K. Chang	Male	6	0	100%	Re-appointed
Director	Hung-Po Hsieh	Male	6	0	100%	Re-appointed
Director	Shao-Hua Huang	Male	4	0	100%	Newly appointed
Director	Representative of Phison Electronics Corp. Wen-Chieh Weng	Male	3	1	75%	Newly appointed
Director	Jiun-Yung Yang	Male	1	0	50%	Previously appointed
Independent Director	Chin-Pin Peng	Male	3	1	75%	Newly appointed
Independent Director	Hui-Chuan Hsieh	Female	4	0	100%	Newly appointed
Independent Director	Hsing-Cheng Hung	Male	2	0	100%	Previously appointed
Independent Director	Kuang-Yi Wu	Male	6	0	100%	Re-appointed
Supervisor	Shao-Hua Huang	Male	2	0	100%	Previously appointed
Supervisor	Jen-Hung Huang	Male	1	0	50%	Previously appointed
Supervisor	Chung-Jen Cheng	Male	2	0	100%	Previously appointed

Note 1: The inauguration date of this Board of Directors' was on May 30, 2018, and the Board has convened 4 meetings up to date.

Note 2: Summary of Board of Directors' major resolutions

◆ Functional Committee

◆ Compensation and Benefits Committee

Established in August 2011

Function :

- Assist the Board of Directors in evaluating the Company's compensation and benefits policy
- Review policies, systems, assessment benchmarks and structures for performance evaluation and compensation for directors and managers

Attendance rate for the Committee

Title	Name	Actual attendance	Actual attendance ratio (%)	Description
Convenor	Kuang-Yi Wu	4	100%	
Member	Hsing-Cheng Hung	1	100%	Previously appointed
Member	Yen-Sung Li	1	100%	Previously appointed
Member	Chin-Pin Peng	3	100%	Newly appointed
Member	Hui-Chuan Hsieh	3	100%	Newly appointed

◆ Audit Committee

Established in May 2018

Function :

- Fair financial statements
- The election (dismissal) certified public accountant and its independence and performance
- Effective implementation of the Company's internal control
- The Company's compliance with relevant laws and regulations
- Control over the Company's existing or potential risks

Attendance rate for the Committee

Title	Name	Actual attendance	Actual attendance ratio (%)
Convenor	Kuang-Yi Wu	3	100%
Member	Chin-Pin Peng	3	100%
Member	Hui-Chuan Hsieh	3	100%

◆ Material Topic Cornerstone of Corporate Sustainability - Ethical Management

Upholding ethical management, Apacer conducts all business activities in a fair and transparent manner, and actively prevents unethical behaviors across all of its business operations. In addition, Apacer has established a reporting system which allows the reporting of violations regarding the company's financial system, regulations, policies, and ethical standards as well as any form of malpractice. Apacer designates processing personnel for a whole range of issues, including ethical management, ethical conduct, CSR practices and the reporting system.

Codes on ethical management are published on the company's Intranet for internal promotion. Annual education training held in 2018, include ethical management, RBA, as well as education and training of occupational safety and health affairs. The total number of participants was 438 and the total accumulated man hours was 657. Apacer achieved 100% employee training rate.

Principle

Summary

Ethical Corporate Management Procedures and Code of Conduct	Strictly requires employees to avoid instances where their personal gains are in conflict with the overall interest of the company.
Code of Ethical Conduct	Guides members of the Board of Directors and managers to comply with the ethical standards and helps company stakeholders gain a better understanding of Apacer's ethical standards.
Corporate Social Responsibility Practice Principles	Clearly stipulates that the company must value governance, social, and environmental factors in the pursuit of sustainable operations and profitability. These aspects shall be included in the company's management objectives and operating activities.
Reporting System	Establishes rules and procedures for the reporting system. Any inappropriate business conduct should be reported through relevant channels and be investigated and handled by relevant personnel.
Education and Training	Offers courses related to labor, occupational health and safety, environmental health, code of ethics (the regulatory compliance with Ethical Corporate Management Principles) and project management.

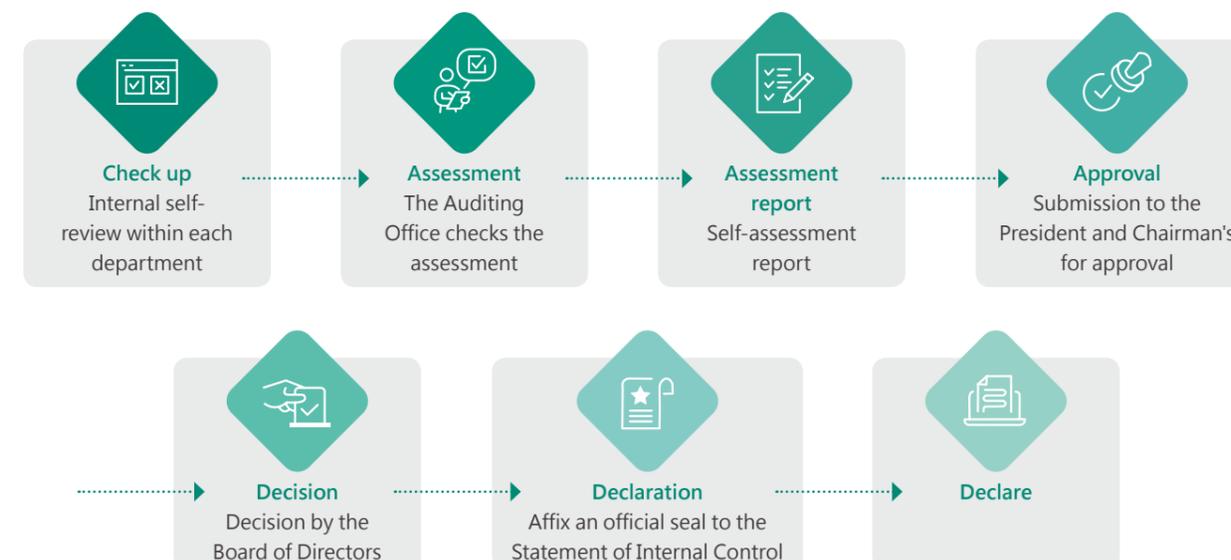
Note: Important internal rules of the company: (Click [here](#) to download relevant rules and regulations)

Apacer has operating branches all over the world. We strictly require all operating sites to comply with regional regulations and follow any changes to domestic and foreign policies as well as regulations that may affect the Company's operations. Additionally, the Audit Office helps in evaluating and reviewing the effectiveness and rationality of the internal control system. In addition, all members of the Company can report any illegal, fraudulent matters and matters that damage the Company's interests and reputation through the reporting system, in efforts of maintaining the Company's image.

◆ Internal Audit

Apacer has a rigorous internal auditing system. Directly under the Board of Directors, the Internal Auditing Office consists of two full-time personnel responsible for auditing and evaluating all operating procedures and internal controls of the company and its subsidiaries. In addition, they have to report on the adequacy, effectiveness and efficiency regarding the design of routine procedures and internal controls.

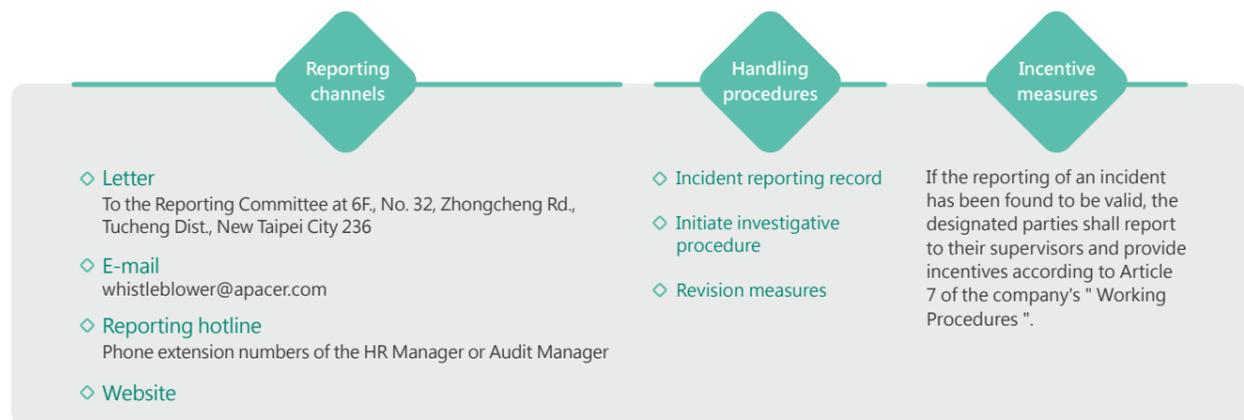
Apacer's Internal Auditing Office develops 7 internal control procedures to effectively strengthen the internal risk control:



◆ Reporting System

Apacer addresses corruption, fraud and all ethical violations with absolute solemnity. To this end, the regulations for the "Reporting System" are established. Any inappropriate business conduct should be reported through relevant channels and be investigated by relevant responsible personnel.

Apacer also employs confidentiality and protection measures for all informers. It assigns the Audit Manager and Human Resources Manager as persons in charge to ensure informers are free of unfair treatment as a result of reporting violations. No relevant matters have occurred during this CSR report's disclosure period of 2018.



Note: Reporting System: Click [here](#) for further details

◆ Organizational Risk Management Objectives

To implement corporate operational risk management and strengthen corporate governance, Apacer systematically strengthens the company's risk-oriented strategies and management measures from two aspects - operational risk and climate change risk. By engaging in risk identification, assessment, processing and implementing response mechanisms, Apacer's risk management is enhanced.

◆ Operational Risk Management

Apacer defines organizational units and the division of responsibilities according to operational risk categories. We collect information on possible international and industrial operational risks. After systematic evaluation, we further identify the likelihood of occurrence, level of impact and response measures with each individual unit, and regularly evaluate and report the risk management performance to the Board of Directors for review.



Types of operational risks	Responsible unit	Explanation of responsibilities
Internal control risks	Auditing Office	Regularly review and supervise the implementation of various internal control processes and arrange annual audit plans
Legal risks	Legal Office	Responsible for legal risk management, contract review and handling litigation disputes to reduce relevant risks
Financial risks	Financial and Risk Management Department	Responsible for financial hedging and execution of hedging transactions

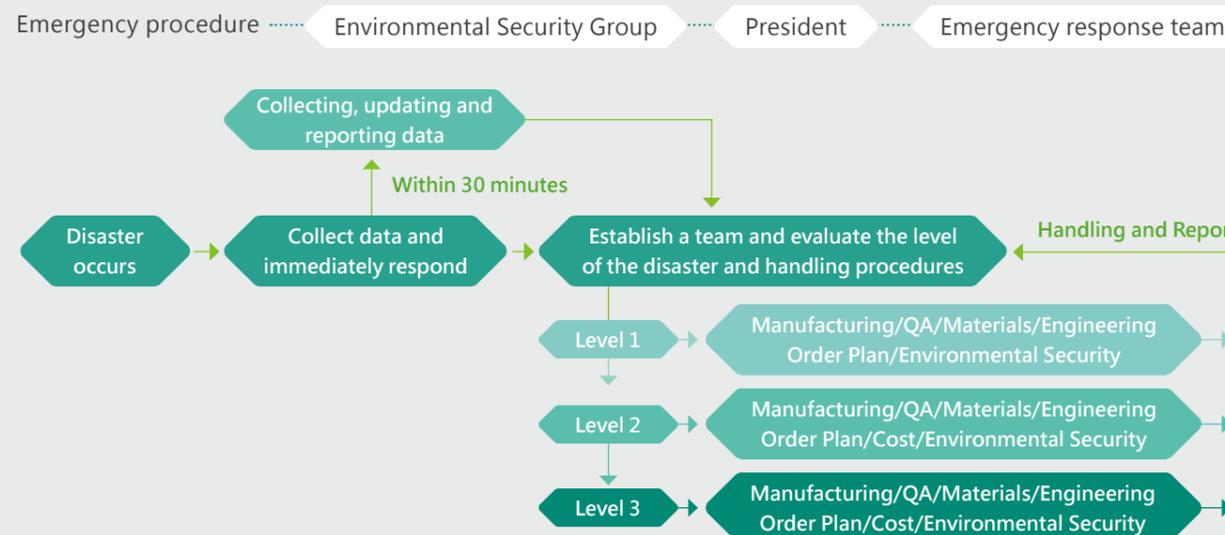
Types of operational risks	Responsible unit	Explanation of responsibilities
Trading risks	Accounting Department	Responsible for confirmation of accounting and taxation, as well as account verification to ensure correct transactions and accuracy of financial statements.
Supply chain risks	QA and Manufacturing Department	Compliance with RBA standards and review the safety of suppliers' working environments and the human rights of their employees. The goal is to lower the supply chain risks.

◆ Climate Change Risk Management

As climate change causes frequent climate anomalies, Apacer has listed natural disasters as an important risk assessment target, and developed a Business Operational Continuity Plan (BCP) to comprehensively assess the risk of natural disaster disruptions and develop relevant response measures. We compile relevant backup steps and principles to improve the efficiency of our incident response actions, thereby lowering possible losses. Apacer has planned five steps regarding our Emergency Response Principles:



Furthermore, relevant response procedures are established. The Environmental Security Group are responsible for the frontline collection of relevant information and provide the information, information updates and feedback by which the Emergency Group identifies the disaster level and immediately responds.



Note: Level 1: Local production site cannot carry out normal production due to a disaster.
 Level 2: Regions on the island cannot carry out normal production due to a disaster.
 Level 3: Production sites throughout the island cannot carry out normal production due to a disaster.

1.3 Material Topic

Operating Performance

Apacer's long-term overall operating performance is based on its stable profit and growth. We continue to maximize value for all shareholders and stakeholders. We develop a whole variety of products in achieving stable profit and becoming a technological information service integrator.

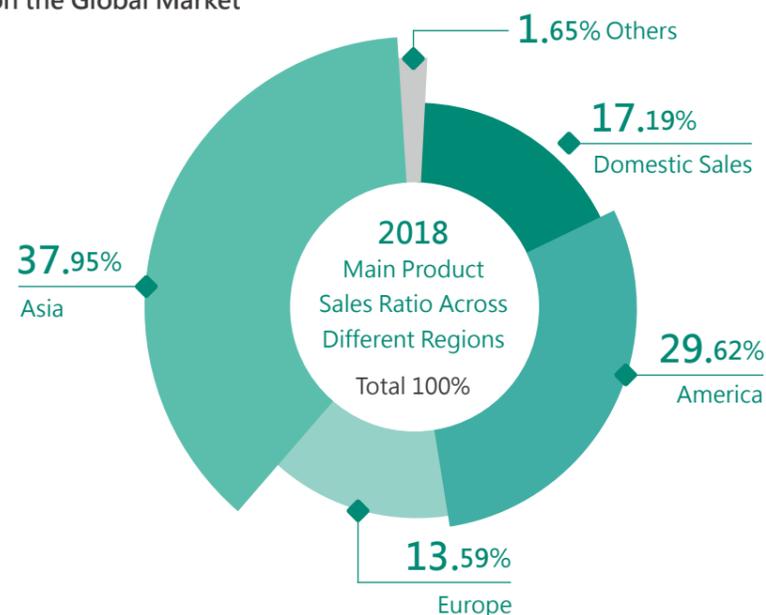
Item	2016	2017	2018
Revenue	6,822,226	10,043,476	9,441,618
Gross Profit	1,156,300	1,298,790	1,309,289
Net Operating Income	406,303	474,842	437,883
Net Income After Tax	349,291	404,957	358,830
EPS (NT\$)	2.74	4.02	3.56

Unit: NT\$ 1,000

Note 1: Financial numbers are taken from the Annual Consolidated Financial Statements and have been audited by a CPA.

◆ Cultivation in Taiwan while Fixed on the Global Market

Apacer's clientele includes distributors, information equipment manufacturers, system integrators and retail customers around the globe, with sales networks covering five continents. Thanks to its sound retail system and partners, we provide digital storage applications that offer high performance, high stability and high value as well as offer integration services in striving for perfection.



◆ Operating Strategy Planning

Apacer's short-term operating objectives are to expand the growth and profitability of existing consumer and industrial control products, as well as expand into the e-sports market, develop cloud/IoT and optical application services.

In the long run, we utilize our memory storage advantage and expand our technological applications across four areas: Reception, Analysis, Sharing and Control. Moreover, Apacer will strengthen global sales and service network, enhance brand image and visibility, as well as build a talent supply chain system to reserve high-potential talents for the company's medium and long-term goals.

Short-term Operating Objectives

- Strategic alliances, cultivating industrial control:** Form alliances with strategic partners to create a synergistic effect in the industrial chain
- Expanding in the e-sports industry:** Launch a brand-new e-sports brand targeted at the Greater China region
- Cater to the mobile trend:** Provide OTG, Type-C USB flash drive, fingerprint recognition technology products to upgrade information security
- Cloud/IoT application development:** Highly integrated smart cloud-based storage and application service solutions
- Expand into the optical inspection field:** Developing relevant applications and products by integrating micro-optics and spectral measurement technology

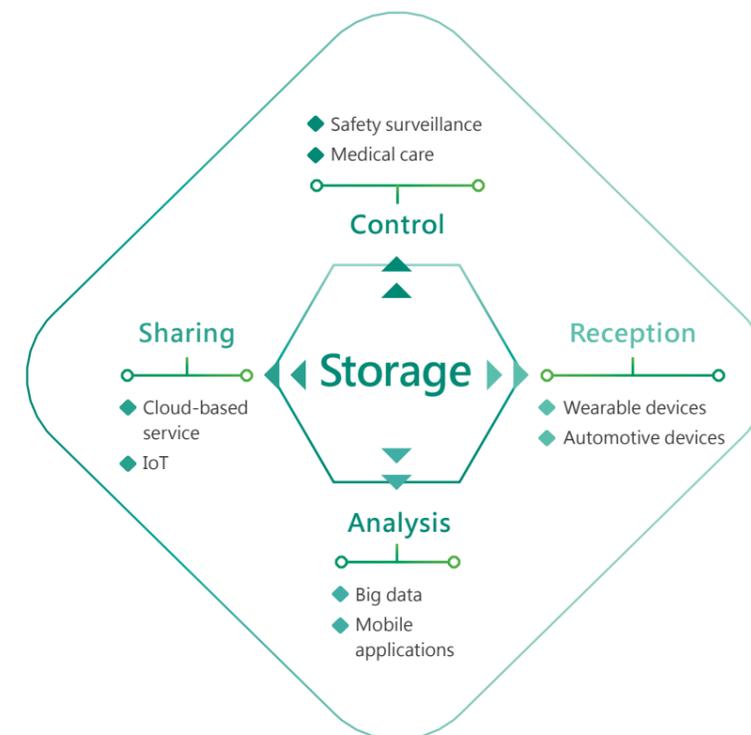
- Strengthen the global business layout:** Expand our global channels and provide a more effective sales and service network
- Product Technology Development:** Introduce and cultivate outstanding R&D talents as well as combine key technologies, such as cloud-based and Big data applications
- Global marketing strategies:** Establish a global marketing network to enhance our global brand image and visibility
- Establish a talent supply chain system:** Tie in with organizational strategic objectives to precisely target and build a talent database

Long-term Operating Objectives

◆ Corporate Development Vision -

Technology Information Service Integration Ecosystem

Apacer continues to enhance its memory modules and industrial solid-state drive (SSD) competitive advantage. With its competitive advantage in memory storage, Apacer actively engages in cross-disciplinary resource integration and develops potential markets through integration of cloud and big data products and application service platforms, in order to secure itself an advantageous position.



Products and Services

With our core in digital storage, Apacer's product types can be divided into two main categories: "B2B Industrial Control Products" and "B2C Consumer Products". Industrial control products emphasize high-performance and value-added services, meeting the diverse development characteristics of vertical application market and customized needs. As for consumer products, we design and develop products that meet consumer needs while taking design aesthetics and safety into consideration to provide the best user experience.

Industrial Solutions



Industrial or specialized fields such as Solid-State Drives (SSD), memory modules, and storage devices for web communications, national defense, medical, or automotive use.

Consumer Products



Computer peripheral products including memory modules, mobile hard drives, memory cards, USB flash drives, and SSDs for gaming.

The Reliable Innovator – The Leading Brand in Industrial Control

Apacer has long dedicated to industrial control applications. With decades of leading expertise and integrative competency, Apacer provides reliable products and services and builds strong partnerships with its customers. Not only are we the eighth largest memory module supplier, but also ranked No. 1 in terms of global industrial SSD market share for five consecutive years. Apacer's industrial control vertical application products and integration services span six major fields, including cloud computing, transportation, embedded & IPC (industrial PC), national defense, gaming and healthcare, providing comprehensive solutions for our customers.

Access the best – Optimized Consumer Experience

"Access the best" is our promise as a brand. We provide memory modules, flash drives, memory cards, SSDs, external storage devices, portable chargers and other mobile peripherals, satisfying consumers' needs in terms of digital storage and diversified mobile lifestyle.

Beyond The Boundry – Lightning-Fast Gaming Experience

Apacer is actively seeking development in the gaming market. Our excellent R&D team and cross-disciplinary integrative competency allow us to develop unique gaming products based on suggestions from US-based modification players and European exterior designs. We demonstrate Apacer's comprehensive development competency through a whole variety of applications, from machine components to the integration of software, hardware and firmware.

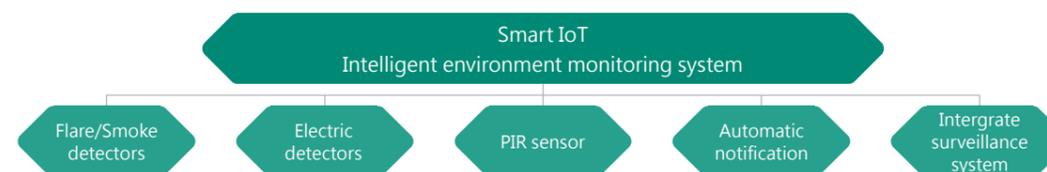
Smart IoT – AIoT Integration Solutions

In response to the demand of IoT deployments in various industries, Apacer has launched an AIoT integration solution covering IIoT, IoV, optical solutions and other related applications. Through Apacer's SRP (Solution Ready Platform) system integration kits, we can dramatically reduce customers' time and labor costs when building systems.

Industry-Academia Cooperation, Working with IoT Partners in Promoting Smart Painless Upgrade for the Long-term Care Wards

Long-term care is an issue which Taiwan currently faces. Together with Robotelf Technologies and EcoLumina Technology, Apacer developed the "Smart IoT Ward Environmental Intelligence Monitoring System" using IoT technology.

Designed for utilization in long-term care organizations, this system includes a comprehensive environmental sensing device, a companion robot patrolling the wards and remote monitoring equipment. A fire alarm automatic notification system is integrated to greatly reduce errors, missed notification risks and labor costs, which solves the current labor shortage problem. This allows all levels of long-term wards to achieve smart painless upgrades.



Robelf, a companion robot, is one of the highlights of the "Smart IoT Ward Environmental Intelligence Monitoring System". Apart from accompanying patients in reading, Robelf also reminds them to take medicine. It is equipped with diaper sensor and other personalized service functions. With help from the Apacer team, Robelf can be interconnected with on-site sensing devices as well as local fire departments to immediately notify the caregiver and on-duty personnel of any abnormal activity.



The "Smart IoT Ward Environmental Intelligence Monitoring System" integrates with the popular communication software, LINE. Thus, the cost of learning is minimized when using the system. Through industry-academia cooperation, we will provide professional customized environmental intelligent monitoring system services for medical institutions, nursing institutions, and long-term institutions of different sizes and functions.

Product Quality Assurance

We believe that quality assurance is the most fundamental promise to our customers. Apacer has the highest requirement for the quality of our products. From product R&D, design, usage safety, product lifespan to after-sale services, Apacer adopts rigorous designs and the strictest of inspections.



All of Apacer's products have undergone legal requirements evaluations and are in compliance with EU's RoHS, REACH usage standards in addition to WEEE (EU's Waste Electrical and Electronic Equipment Directive) recycling standards to provide products, and therefore customers are offered low hazard and toxicity products. Also, we have introduced green production procedures, and promised to abide by international protocols, domestic laws related to environmental protection, safety, health and energy to ensure our products fully comply with international standards.

Product Safety Testing

From the early stages of product development, we conduct a series of basic functional tests, reliability tests, consecutive power on/off tests, power failure tests, environmental reliability tests (operation tests in high/low temperature & humidity environments, drop tests, vibration tests, shock tests, and storage tests), EMC tests, safety tests, compatibility tests, Data Retention Test and RDA tests (Reliability Demonstration Test) to comprehensively examine the quality and usability of all our products.

To ensure the consistency of materials and production standards during the mass production, we will undertake an On-Going Reliability Test (ORT Test) to monitor the quality of our mass-produced products over the long-term, as an effective way to ensure the quality of each product we produce and deliver.

Product Labeling

All products sold by Apacer are packaged with clearly marked labels that provide complete information on the product itself, the product manufacturer, content components, instructions, international certifications and EU RoHs restricted substances (lead, mercury, cadmium, chromium, PBB, and PBDEs), realizing transparent disclosure in protecting the rights of our consumers.

Our products are also marked with the WEEE (EU Waste Electrical and Electronic Equipment Directive) mark of approval. Our goal is to achieve 80% recovery rate and 70% re-use and recycle rate in working toward long-term sustainability.



WEEE Recycling Label

Product EMC Label



Taiwan BSMI



US FCC



US FCC



New Zealand & Australia RCM



Japan VCCI

We also conduct EMC tests in accordance with regional differences. To ensure safe and stable product use, our products are sold in target countries only after passing EMC tests. These include Taiwan's BSMI, USA's FCC, European Union's CE, Australia & New Zealand's RCM and Japan's VCCI. The respective logos will be marked on our products.

Honorable Performances



- Taiwan Excellence Award winner for 10 consecutive years

In 2018, 8 of our products spanning across multiple categories (industrial control, optics and consumer products) stood out from the rest, which is not only a testament to our R&D competency, but also highlights our ability to form designs which optimize user experience.



- Gold Medal in IE and IC Manufacturing Group for the CSR Report category in the Taiwan Corporate Sustainability Awards (TCSA)

Following the Silver Medal acquired for our first edition CSR Report last year, Apacer's effort and dedication in terms of corporate social responsibility have helped it acquire the Gold Medal this year.

[Apacer's award record over the years](#)

1.5 Material Topic

Innovative R&D

Apacer focuses on the development of digital storage industry and is constantly strengthening its R&D momentum with the vision of "focusing on digital storage and becoming the leader in the integration of technology-based information services".

In order to continuously enhance Apacer's "innovation" momentum, we promote diversified education, lectures and internal reward guidelines to encourage employee creativity. At the same time, through cross-industry cooperation, we stimulate different thoughts, promote creativity and build corporate culture centered around innovation.

Innovative Momentum and New Opportunities

Apacer's forward-thinking insight identifies industry development opportunities with great potential. Backed by innovative corporate culture, Apacer cultivates a young professional design team, listens to customer feedback and offers them customized products of high added-value. Over the years, we insist on utilizing storage technology as foundation in expanding into different fields and generate new momentum for sustainable development.



R&D and Customization

Accelerate product development, increase product design flexibility, enhance product added value, and customize products for customers



Professional Design Team

With cross-border thinking, the design team uses professional experience to design products with both aesthetic and electromechanical functions

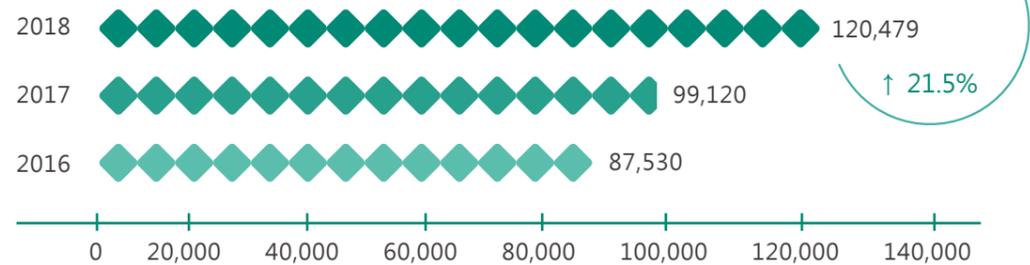


Innovative Thinking

With digital storage technology as the core, we continuously innovate applications and accumulate intellectual property rights

Apacer acknowledges the importance of R&D and innovation, which is why Apacer continuously plans and reviews budgets based on R&D needs. To deploy a foundation which ensures future industrial development competitiveness, Apacer's R&D budget has risen year by year. In 2018, it increased by 21.5% compared to the previous year.

R&D Expenditures



Year	2016	2017	2018
R&D Expenses	87,530	99,120	120,479
Operating Revenue	6,822,226	10,043,476	9,441,618
R&D Ratio	1.28%	0.99%	1.28%

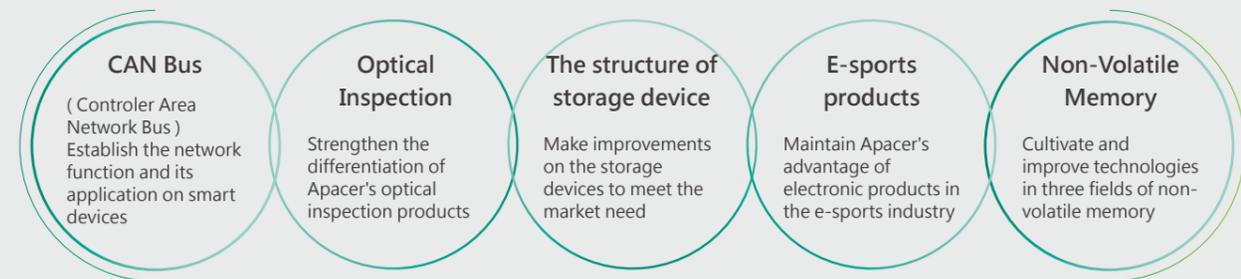
Unit: NT\$ 1,000

◆ Patent Development Committee

To strengthen innovative R&D momentum, Apacer established a Patent Development Committee in May 2017. The President served as its Chairman's and a Patent Review Team was formed to review internal patent developments and define relevant reward guidelines. When the revenue of a commercialized product has exceeded NT\$1 million, the company immediately awards NT\$100,000 as a bonus to encourage developer's contribution for patented products, as well as encourage employees to actively engage in research, development and innovation of new ideas.



◆ Key point of R&D



In 2018, a total of 21 patents were granted. As of today, Apacer has applied for 246 patents (both in process and granted). This is clear indication that the Company constantly pools resources into generating innovative momentum, thereby accessing new business opportunities.

In addition, we participate in industry related public associations to better master market trends in addition to expanding new business opportunities.

Associations

Form of participation

Taiwan Stock Affairs Association	Members periodically attend meetings and seminars
Responsible Business Alliance	Member
GS1 Taiwan	Member
SATA-IO (The Serial ATA International Organization)	Member
JEDEC (Global Standard for Microelectronics Industry)	Member
SDA (SD Association)	Member
CFA (CompactFlash Association)	Member
PCI-SIG (Peripheral Component Interconnect Special Interest Group)	Member
DRAM EXCHANGE	Member
INSPECTRUM	Member
Taipei Computer Association	Member
Taiwan External Trade Development Council - Taiwantrade	Member

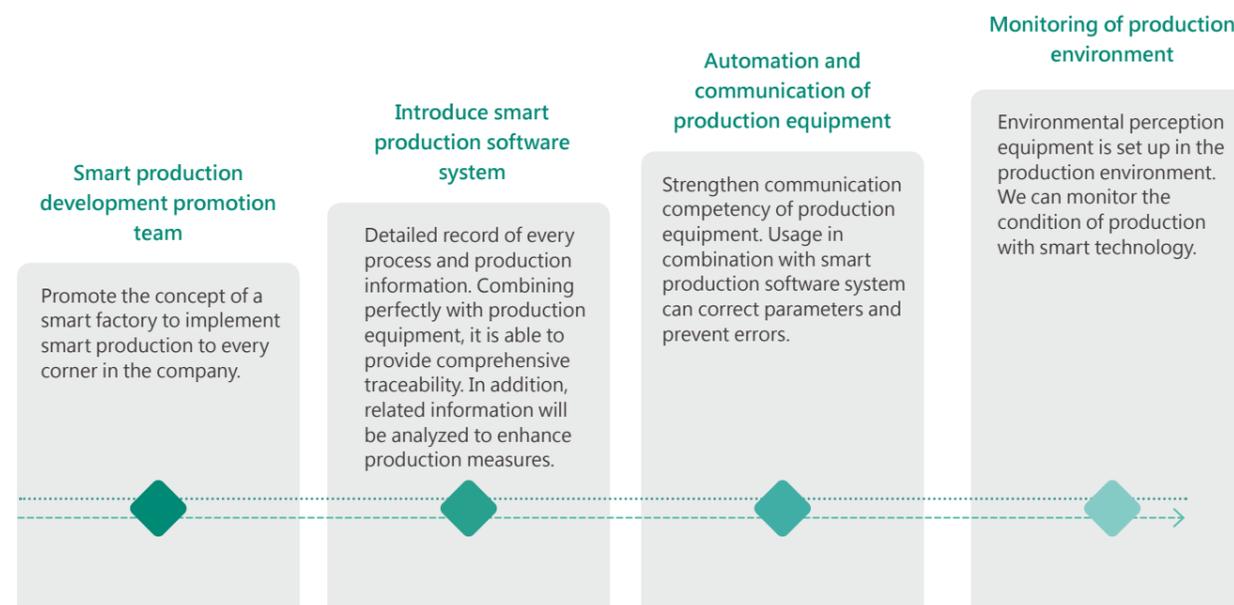
◆ Smart Factory - Re-enhancing Manufacturing Management

Apacer has built a "smart factory production system" by combining three elements: Automated facilities, web communication technology, and production systems, therefore effectively enhancing overall production efficiency and cost competitiveness.

We adopted a click-and-mortar approach to make our production process more flexible and lower the gap between quality and service, as well as improve customer satisfaction.

Our superior production equipment, autonomous R&D capabilities and comprehensive factory management have allowed us to build a green production environment that meets international standards. Not only can we customize optimal production processes for our customers, but we can also control production costs with utmost precision. This allows us to maximize production efficiency and optimize production competency.

◆ Apacer "Smart Factory" Vision



Chapter 2 Persistence: Green and Eco-friendly Manufacture Process

Vision

By introducing environmental systems, supplier management, green product design and environmental education, the concept of environmental protection is extended to the overall value chain of the company. Through top-down "policies" and the bottom-up "actions", we practice green sustainability within our business operations.

Policy and Commitment

Alignment with "legal compliance, energy-saving and waste reduction, consulting and communication, risk control, green design, and continuous improvement" environmental safety and energy policies. We deliver competitive, defect and hazard-free products and services on time to satisfy customers.

Corresponds to the Sustainable Development Goals (SDGs) set by the UN



	Material Topics	Compliance with Environmental Law	Green Products and Service
	Responsibility	- Factory Affair Responsible Person - Factory Supervisor	- R&D Management Supervisor - Supplier Chain Management Supervisor
	Resources	Budget: Investing NT\$ 809,000/year in RBA counseling and management system certification	Budget: Investing NT\$ 349,000/year in management system certification
	Actions	1. The regulatory team identifies the applicability and compliance of relevant domestic labor/environmental regulations 2. Quarterly review all company's regulation related work or activities in accordance with laws and regulations	1. Introduce management system 2. Sustainable supplier management 3. Green product design 4. Improve energy-saving process 5. Promote education and training on environmental protection
	Channels of Communication	ISO 14001 management system: For material environmental and product life cycle issues, management representatives may be invited to convene a management review meeting when necessary, formulate handling methods, and implement them after approval	Through quarterly CSR review meetings, report on project planning, review achieved performance, and conduct horizontal cooperation between departments
	Evaluation Method and Results	1.Compliance with the management system: - ISO 14001 Environmental Management System - QC 080000 Hazardous Substance Process Management System 2.Customer demands that are in compliance with RBA	Compliance with the management system: 1. ISO 14001 Environmental Management System, 2. ISO 50001 Energy Management System 3. QC 080000 Hazardous Substance Process Management System
Sustainability Goals	Short term	100% compliance, no penalty	1. Upgrade air conditioning equipment to improve energy efficiency 2. Improve process to reduce power consumption
	Mid term	100% compliance, no penalty	100% in line with green product design, strengthen power saving mode design of products
	Long term	100% compliance, no penalty	Improve automation of special operations and reduce environmental pollution in the production process

2.1 Material Topic

Commitment to the Environment and Legal Compliance

Apacer abides by the environmental safety and energy policy of "legal compliance, energy-saving and waste reduction, consulting and communication, risk control, green design, and continuous improvement", using less substances that may harm the environment, and making good use of existing resources. By means of energy-saving, carbon reduction and resource reuse, Apacer reduces energy and resource consumption and is committed to "becoming a renowned green enterprise."

- ✓ Check the status of regulatory updates quarterly and comply with domestic environmental protection and energy management regulations. No penalties for environmental violations ascribed in 2018
- ✓ Introduce environmental management system to systematically manage manufacturing process and negative environmental impact of products
- ✓ Procurement and manufacturing processes comply with international environmental standards for electronic products and comply with Hazardous Substance-Free (HSF) standards
- ✓ Develop green products and reduce resource use starting from the product design stage
- ✓ Establish short, medium and long-term environmental sustainability goals, and continuously enhance its green and sustainable actions

◆ Introduction of the Management System

To become a green enterprise, Apacer has gradually introduced quality management and environmental management systems. The company follows the PDCA (Plan-Do-Check-Act Cycle) management cycle to ensure that all phases of operation and production comply with policy and achieve its objectives. Systematic management methods ensure product quality and environmental assurance to reduce the negative impact on the environment caused by products and production processes.

Apacer received the ISO 14001 2015 Environmental Management Systems certification in 2017. The company established risk-oriented thinking and a life cycle perspective in terms of environmental management to ensure that environmental requirements have been incorporated into each stage of a product's life cycle, including product design and production. In 2018, Apacer also completed the ISO 14001:2015 renewal.

We also introduce QC 080000 Hazardous Substance Process Management System. The raw materials meet the EU RoHS and environmental hazardous substance and chemical substance prohibition and restriction standards from REACH. The raw material suppliers must sign the Declaration to Environmental Protection, provide the raw material test reports and complete the material surveys to be qualified. We start with source management to ensure that the environment and consumers are not exposed to hazardous substances.



◆ Conflict Minerals

Conflict Minerals refers to minerals extracted under conditions of armed conflict and human rights violations, especially tungsten, tantalum, tin, and gold (collectively known as the "3TG" minerals) that are mined in the Democratic Republic of the Congo (DRC) and its neighboring countries. The minerals extracted in these areas are collected through the extortion of civilians, who are forced to work in an inhumane manner and harsh working conditions. The profits from mining are used for war and resource plundering. The ongoing civil war has increased the poverty level of residents and the deterioration of public security.

Since 2013, Apacer has undertaken 3TG mineral investigation for Tier 1 suppliers by using the Conflict Minerals Reporting Template (CMRT) developed by Conflict-Free Sourcing Initiative (CFSI). All suppliers are required to fill out a Conflict Mineral Investigation Form during basic information registration. In 2018, a total of 299 suppliers were investigated. The results show that metallic mineral used in Apacer's products were sourced from Europe, Asia, and America, and none were sourced from regions and neighboring countries controlled by non-governmental or military groups in the DRC.

2.2

Energy and Resource Management

Apacer has passed the ISO 14001 Environmental Management Systems. Besides, Apacer has established pollution prevention and improvement mechanisms, conserved energy consumption to lower the environmental impacts from our business operations.

The internal energy resources consumption is mainly based on the power and domestic water of the operating headquarters. The manufacturing process of the products does not require water, so no reduction related wastewater is produced.

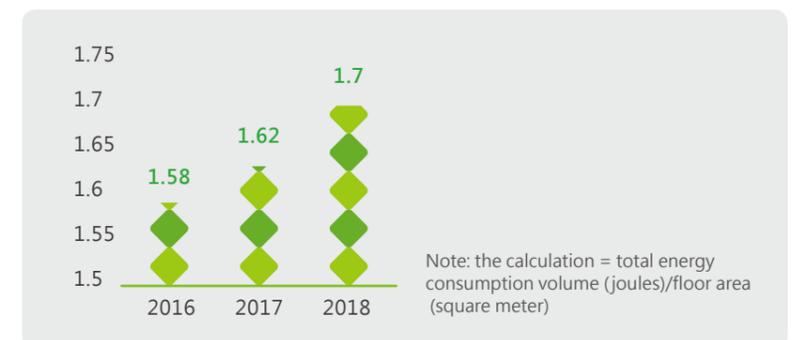
Apacer's water consumption is from Taiwan Water Corporation, and the source of water is from the Shimen Reservoir. Domestic wastewater is collected through wastewater pipelines and sent to the wastewater disposal company. Apacer's water consumption and wastewater discharge do not have significant environmental impacts. In terms of energy consumption, purchased electricity (indirect energy) accounts for over 90% of total energy consumption. In 2018, due to the increase in product capacity, the energy intensity has increased slightly.

Energy Consumption over the Years

Types of Energy	Direct energy		Indirect energy	
Purpose of Energy Consumption	Diesel-fueled fork lift truck		Factory/office power consumption	
Year	Volume of energy consumption			
2016	20 liters	702.24 million joules	3,435,484kWh	12,367,742.4 million joules
2017	40 liters	1,404.48 million joules	3,531,621kWh	12,713,835.6 million joules
2018	20 liters	702.24 million joules	3,700,777kWh	13,322,797.2 million joules

Note 1: 1 liter of diesel = 8,400 kcal; 1 cal = 4.18 joules (in reference to the Product Unit Calorific Value Table from the Energy Bureau)
 Note 2: 1 kWh of power = 3.6 million joules

Energy Intensity



◆ Greenhouse Gases and Energy Management

In order to grasp the impact of the operation on the environment, Apacer has implemented a self-initiated greenhouse gas verification since 2013, and set 2012 as the benchmark year to track the company's greenhouse gas emissions. Voluntary greenhouse gas reduction targets are set based on the verification results.

In March 2019, Apacer completed the Scope 1 and Scope 2 greenhouse gas verification for 2018. Apacer's operating headquarters in Tucheng District, New Taipei City was used as the boundary, and the sources of emissions included facilities within and outside the factory buildings and purchased electricity. In 2018, due to the increase in product capacity, the intensity of greenhouse gas emissions has increased slightly.

Volume of Greenhouse Gas (GHG) Emissions

Scope	2016	2017	2018
Scope 1 (metric tons of CO2e)	8.05	8.51	8.75
Scope 2 (metric tons of CO2e)	1,813.60	1,868.23	2,055.21
Total volume of emissions (CO2e)	1,821.65	1,876.74	2,063.96

Note 1: GWP refers to IPCC 2007
 Note 2: The source of carbon emission coefficient: refers to the latest power emission coefficient announced by Energy Bureau during the time of the inventory
 Note 3: Boundary investigation: Operational Control Method

Intensity of Greenhouse Gas Emissions

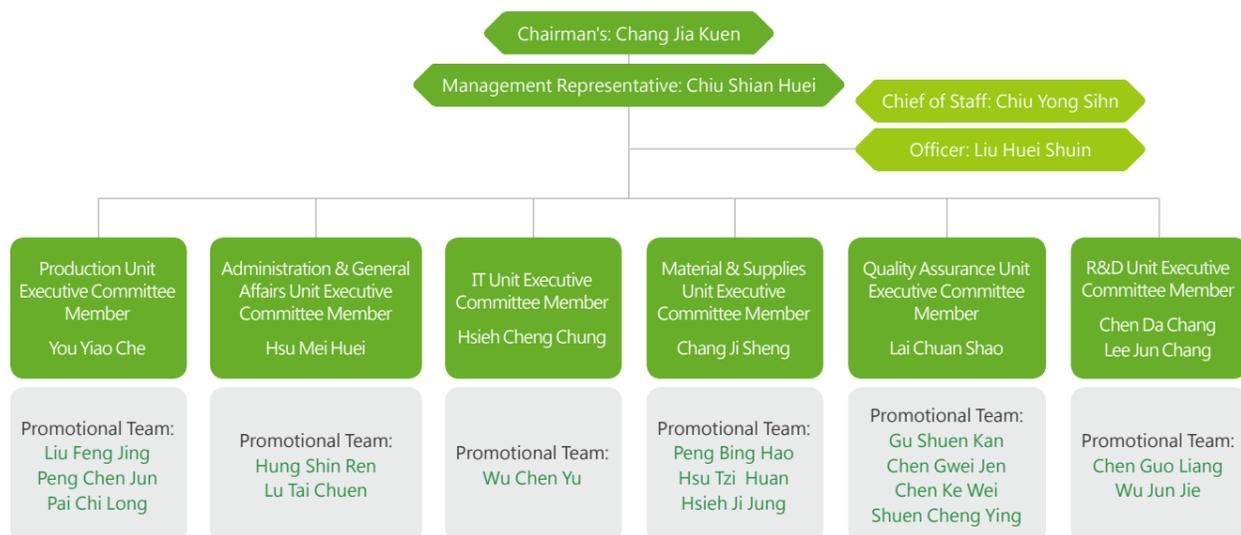


Note: Total emissions (metric tons)/ floor area (square meters)

◆ ISO 50001 Energy Management Systems

Over 99% of Apacer's GHG emissions come from indirect energy consumption. To effectively reduce the amount of GHG emissions, the company has introduced the ISO 50001 Energy Management Systems, in which major energy consumption is identified to find ways for improvement in order to reduce energy waste and carbon emissions. The Energy Management System promotional team collaborates with all departments to implement the energy-saving and waste reduction environmental policy. Apacer received the ISO 50001 Certification in September 2015.

ISO 50001 Promotional Team Organization Chart



Chairman's	Chief of Staff	Executive Committee Member	Promotional Committee Member
1.Determines energy policies 2.Approves, authorizes	1.Management of the Committee's resolutions as well as P-D-C-A affairs 2.Reviews performance 3.Ensures continues development of improvement actions	1.Nominates committee members to push for the energy system 2.Reviews executive performance 3.Ensures the continuous development of improvement actions	1.Promotes, maintains and improves energy systems 2.Compiles and executes different energy management projects 3.Conducts energy management-related resolutions 4.Provides suggestions or makes actionable plans 5.System-related training 6.Supervises on implemented energy policies 7.Implements energy system goals/targets
Management Representative	Officer	General Affairs Coordinator	
Responsible for the energy management system and reports to the Chairman's	1.Executes tasks assigned by the Chief of Staff 2.Collects energy-related data	1.Responsible for all power plant-related equipment matters 2.Collection of energy-related regulations and their assertion	

◆ 2018 Benefits from Energy-Saving Improvement



Adopted Run-in Apparatus for the Manufacturing Process



5 Level Power-saving Nitro Machinery

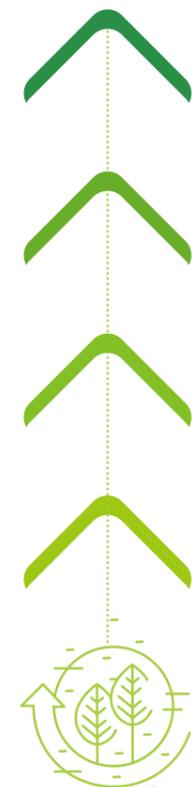
Testing of manufacturing process optimization and reducing power consumption
 Number of platforms reduced from 52 to 39, saving 20-37% in energy consumption.

Anti-seepage tank prevents leakage of chemicals
 Implemented with emergency eye-wash equipment and anti-seepage tank within the explosion-proof room. This prevents leakage of chemicals into the sewage system.

Installation of a Dust Emission Monitoring System
 PCB dust generated in the manufacturing process will be recycled while natural gases are released into the air. Statistic monitoring before and after dust processing ensures alignment with air quality regulations. Apacer is fully against air pollution.

APACER Power-saving Patrol Team
 In 2016, employees took the initiative in establishing the APACER Power-Saving Patrol Team, which assesses and executes the Company's power-saving implementations, preventing waste of energy.

Introduction of water-saving apparatus
 Water-saving apparatus for daily water usage was installed in 2016, achieving a 24.8% water-saving rate compared to 2015.



Optimize SMT equipment, using nitro machine to reduce energy consumption
 Renewal of nitro machine provides 5 level power-saving modes. Manufacturing machinery can engage in automated power-saving adjustments depending the current production line status.

Reducing energy consumption through manufacturing process refinement testing
 1. Run-in apparatus enhancement: Energy consumption reduction 19.64%, annually saving 6,920.64 megajoules.
 2. Improved energy efficiency in air compressors: saved 19.35% of power and 466,560 million joules/Year

Introduction of Cloud Monitoring for Water Chillers
 Full access to data regarding power consumption, amount of backwater, backwater temperature and quality of cooling water. Monitoring of long-term power consumption to prevent waste of energy resources and set power-saving goals.

Room Temperature Control Measures
 Air curtains are installed in the entry passageways of the production line. This not only reduces air exchange, but also enhances temperature-humidity control; thereby meeting clients' needs and reducing energy consumption for air conditioning.

Air Conditioning Power-saving Measures
 Internal windows are fitted with air curtains, sheathing paper and ventilation fans to enhance energy usage efficiency. Indoor air conditioning temperatures are set at 26° C to minimize unnecessary energy consumption.

Measures for improvement	Energy-saving description	Expected benefits	
		Energy conservation	Carbon reduction
Reduce power wasting in production processes:improved energy efficiency in run-in facility	Require less machines under the same productivity needs	362.9 million joules/year	71.9 metric tons/year
Reduce power wasting in production processes: Adopt five-stage energy-saving air compressor	The Nitro machine automatically adjusts the current to save power	466,560.0 million joules/year	

Note 1: The calculation of energy efficiency in run-in facility: 8.4kWh/Month x 12(Month) x 3.6=362.9 million joules/year
 Note 2: The measurement of energy-saving benefits by the air compressors: Saved 15 KW (54 million joules) x 360 days x 24 hours =466,560 million joules
 Note 3: 0.554 kg CO2 produced for 1,000kWh (refers to Energy Bureau 2017 discharge coefficient)

◆ Waste Processing

To effectively dispose of waste materials and prevent them from polluting the environment, Apacer puts great effort into reducing production waste by properly sorting, recycling, and outsourcing the disposal of waste materials. Common commercial waste and hazardous commercial waste are both processed by external qualified vendors. On-site auditing will be undertaken by responsible department as needed to ensure the appropriateness and the compliance of the waste processing, helping the company fulfill its corporate responsibility in waste management. As for waste effluent produced by the manufacturing process, we installed a liquid barrier in the eye-washing equipment and explosion-proof room in 2018 to prevent chemical leakage and flow into the drainage channel.

Types of waste		Processing measures	Volume processed (metric tons)	Ratio
Common commercial waste	Domesticgarbage	Incinerate	28.14	51.3%
	Recycle	Recycle and reuse	18.74	34.1%
Hazardous commercial waste		Reclamation or reuse	3.1	14.6%



Liquid barrier installed in explosion-proof room



Liquid barrier installed in eye-washing equipment

◆ Office Energy-Saving Measures

Apacer is devoted to integrating energy conservation and environmental protection into our day-to-day operations, reducing environmental impacts and cultivating employees to adopt environmentally friendly behaviors. Since Apacer's water consumption is mainly domestic water, the company has replaced all faucets at the company with water-saving faucets to avoid wasting water.

Water-saving posters are posted and designated personnel delegated to inspect the water facilities so as to undertake timely maintenance.



Moreover, the company uses electronic forms for all operational processes to reduce paper use. The air-conditioning units are regularly maintained and the internal windows have been installed with blinds, thermal papers, and circulation fans to improve energy efficiency.

During non-working, the air-conditioning systems in the office areas will automatically stop to avoid wasting energy.

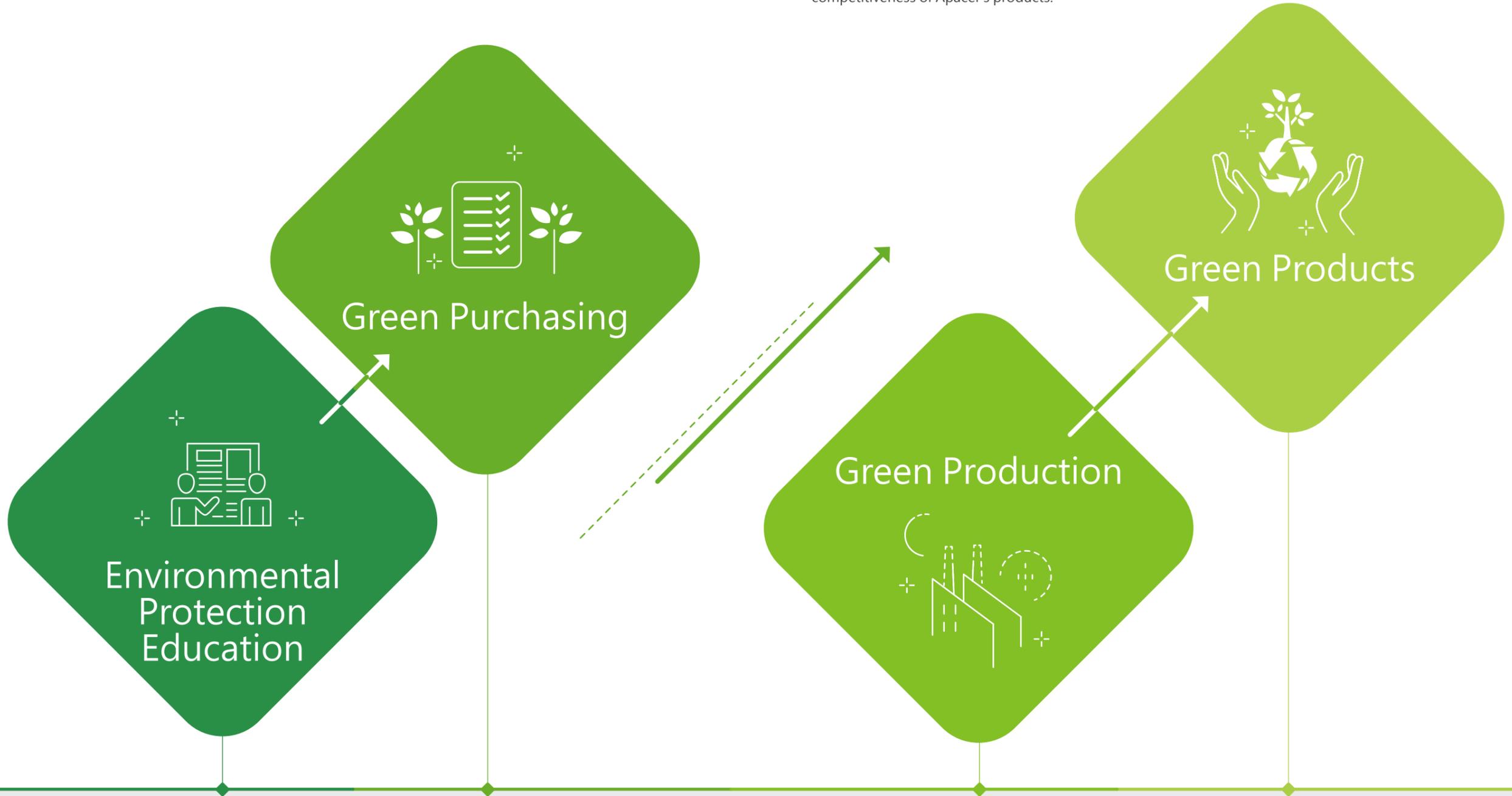


◆ 2018 Environmental Protection Expenditure

Items of expenditure	NT \$
Verification fee of environmental management systems	394,823
RBA coaching and verification fees	414,282
Equipment improvement	6,455,917
Common commercial waste	170,100
Hazardous commercial waste process	143,050
Working environment measurement	61,000
Environmental sanitation inside and outside the office area	1,672,860
Environmental greenification	33,000
Total	8,930,750

Green Production and Products

In response to the global trend for environmental protection and in order to work toward our vision of becoming a renowned green enterprise, Apacer is constantly thinking about how to make a positive impact on the global environment starting with the core of its operations. We have extended the concept of environmental sustainability to our overall business value chain, by introducing environmental management systems, supplier management, green product design, environmental protection education and implementing the concept of green production and products, in order to comply with the latest international environmental regulations, to ensure the green international competitiveness of Apacer's products.

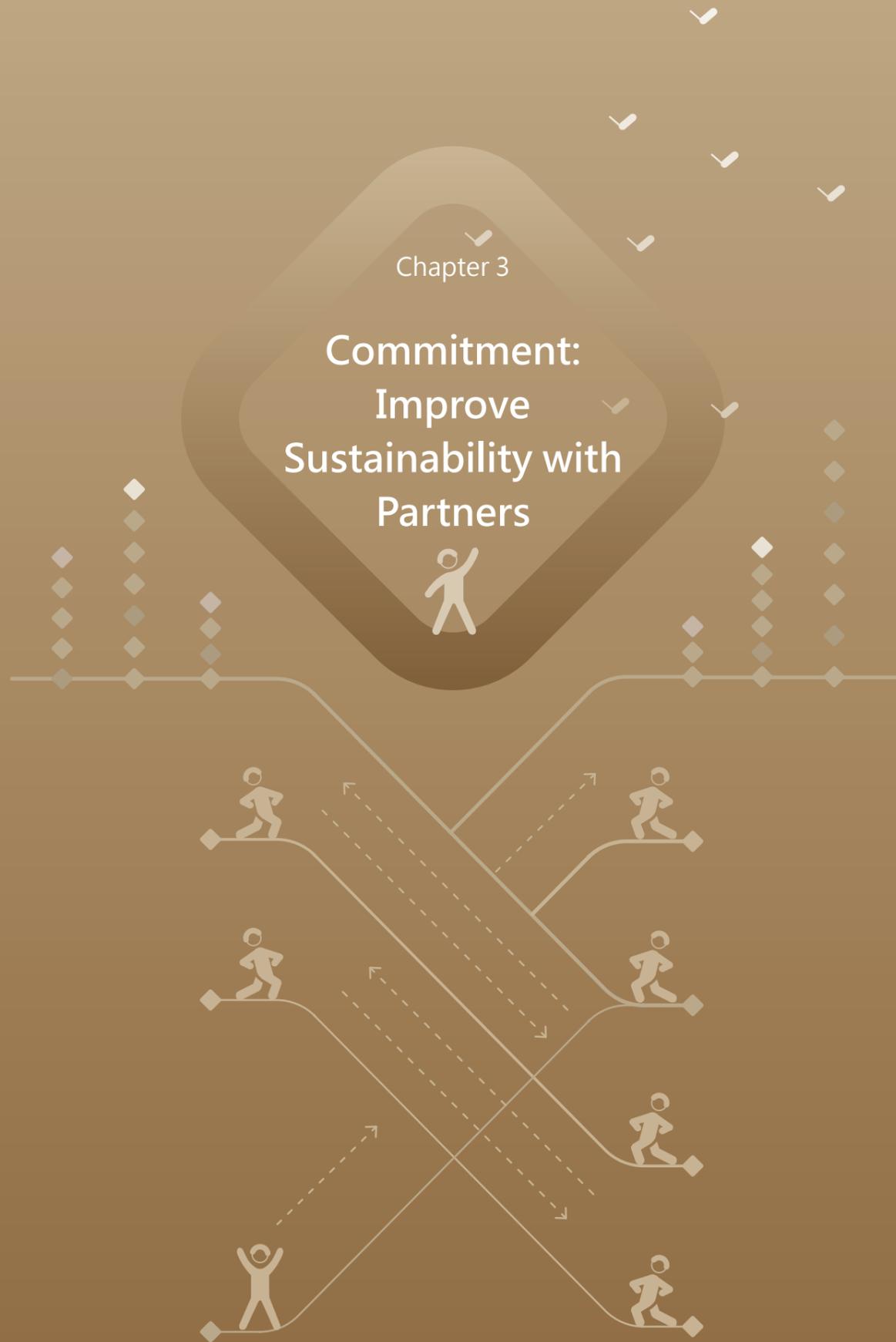


- ◆ All new employees have passed a general knowledge course on environmental protection, as well as policies and indicators regarding ISO 14001 Environmental Management System, and ISO 14064 GHG Management System.
- ◆ In 2018, a total of 100 persons completed HSPM training, with 200 hours accumulated in total.

- ◆ In 2018, all of our raw material suppliers sign the commitment declaration to environmental protection.
- ◆ In 2018, all of our suppliers provide RoHS testing report and fill out a REACH Candidate List of Substances of Very High Concern (SVHC).
- ◆ We hold supplier conference annually to communicate the latest international environmental regulations.

- ◆ Introduce ISO 14001 Environmental Management System to reduce waste and lower pollution & energy use.
- ◆ Introduce QC 080000 Hazardous Substance Process Management System to reduce the usage of substances that are hazardous for the environment and human health.
- ◆ Through our 2018 manufacture production energy reduction project, we reduced an estimated 7.5 tons in carbon emissions.

- ◆ All products comply with EU RoHS standards.
- ◆ All products are lead-free.
- ◆ In 2018, the proportion of halogen-free products reached 38%.
- ◆ Our products comply with WEEE (EU Waste Electrical and Electronic Equipment Directive) regulations. All products achieve 80% recovery rate, and 70% re-use & recycle rate.



Corresponds to the Sustainable Development Goals (SDGs) set by the UN



Vision

Apacer upholds the core value of "Do what we say, insist on the best, and work together". With supplier management and customer cooperation, Apacer implements international environmental regulations, continuously improves technical quality, and creates a worth trusting international green brand.

Policy and Commitment

Apacer's quality and HSF (Hazardous Substance-Free) policy: We deliver competitive, defect and hazard-free products and services on time to satisfy customers.

Material Topics	Supplier Environmental Assessment	Hazardous Substance Management	Customer Relations Management
Responsibility	Customer Service Department, Purchasing Division	R&D Division, Purchasing Division, Customer Service Department	Customer Service Department, Sales Division
Resources	Manpower: Total 30 staff in Customer Service Department and the Purchasing Division Budget: NT \$ 510,000	Manpower: Total 50 staff in R&D Division, Purchasing Division, and Customer Service Department Budget: NT \$ 300,000	Manpower: Total 52 staff in Customer Service Department and Sales Division Budget: NT \$ 700,000
Actions	The suppliers sign the Declaration to Environmental Protection, and provide raw material test reports and complete material investigation to ensure that the original materials meet the international non-hazardous substances (HSF) specifications	1. Introduce QC 080000 Hazardous Substance Process Management System 2. Supplier Hazardous Substance-Free (HSF) standard	1. Global after-sales service system 2. Product customization service 3. Annual customer satisfaction survey
Channels of Communication	1. AGP Supplier Management Platform 2. Annual Supplier Conference	QC 080000: 2017 Hazardous Substance Process Management System for managing review meetings	1. The CRM system of customers 2. Annual customer satisfaction survey
Evaluation Method and Results	All suppliers sign the Declaration to Environmental Protection, provide raw material test reports and complete substance surveys	Received QC 080000: 2017 Hazardous Substance Process Management System Certification	Through the annual customer satisfaction survey, the average score in 2018 is 92.29, reaching the target we set
Sustainability Goals	Short term	1. Compliance with RBA regulations for supply chain assessment/audit/management requirements 2. Annual supplier conference	1. Received QC 080000: 2017 Hazardous Substance Process Management System Certification 2. Promote the implementation of the 2019 RoHS requirement one year ahead
	Mid term	1. RBA VAP regulations have no major missing requirements for supply chain assessment/audit/management 2. Annual supplier conference (conduct communication and education training)	1. Update customer service process system 2. Shorten customer service response time
	Long term	1. Increase customer satisfaction by 5% 2. Revise customer service / after-sales service system	1. Work with partners 2. Reorganize FAE team to better address customer needs

3.1

Sustainable Supplier Management



We received a Silver Certification by implementing the Responsible Business Alliance (RBA) guidelines.

Apacer's global operations are in compliance with RBA's five behavior-oriented practices. Our operations are based on ethics and transparency, creating a good working environment for our employees. Moreover, through supplier management, we establish partnerships with suppliers by implementing environmental policies and thus reduce the environmental impact of operations and demonstrate the determination to fulfill CSR.

In 2018, Apacer received a Silver Certification from VAP (Validated Audit Process). All of the employees completed the RBA education training course, which helps them implement Electronic Industry Code of Conduct (EICC) in their day-to-day operations.



Supplier Policy

Since Apacer values purchasing from local supplies, local suppliers account for 76.5% of all our suppliers. We hope to retain the economic benefits of our business operations in Taiwan and to reduce carbon emissions caused by the transportation of raw materials. At the same time, we evaluate risks based on suppliers' overall production quality, regions, delivery timeliness, price, and green product capability to ensure the consistent quality of Apacer's products and to satisfy customer requirements as well as the HSF standards.

Supplier and RBA Regulations

Since 2017, Apacer has implemented the RBA regulations to the first-tier suppliers. Labor-intensive suppliers such as standardized raw material manufacturers, outsourcing vendors, intermediaries, and waste management

Region	Types of Suppliers	Number of Suppliers	Ratio by Type
Taiwan	Licensed Agent	54	76.5%
	Outsourcing Vendor	6	
	Trading Company	31	
	Manufacturer	115	
	Subcontractor	9	
Non-Taiwan Region	Licensed Agent	6	23.5%
	Outsourcing Vendor	11	
	Trading Company	16	
	Manufacturer	15	
	Subcontractor	18	
Total		281	100%

companies should provide Letter of Declaration for RBA and work with suppliers to value labor safety, environmental protection, and ethical and transparent management. In 2018, we expanded the categories of suppliers to include raw material manufacturers. Suppliers providing Letter of Declaration for RBA increased by 31%.

	Number of Suppliers	Number of Suppliers Providing Letter of Declaration for RBA
2017	246	40
2018	281	60

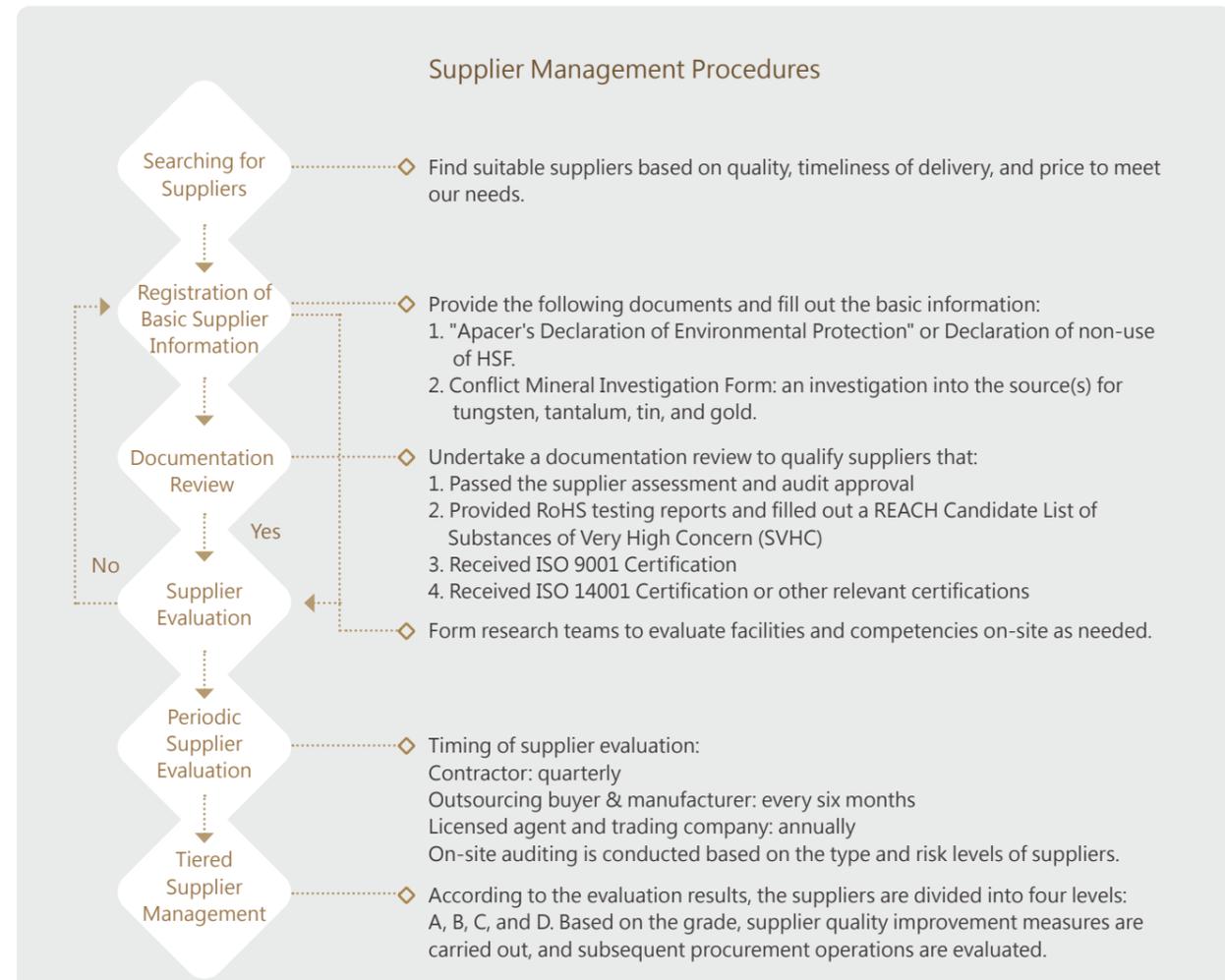
Suppliers providing Letter of Declaration for RBA increased by 31%.

Material Topic Supplier and Hazardous Substance Management

Apacer has introduced the QC 080000 Hazardous Substance Process Management System. We ensure that the quality, stability, and non-hazardous substance (HSF) management of our products meet international standards and customer needs through our supplier management processes.

Raw materials provided by suppliers need to comply with the EU RoHS and environmental hazardous substance and chemical substance prohibition and restriction standards from REACH. At the same time, suppliers are also required to sign the Declaration of Environmental Protection, provide a raw material test report and complete material surveys to be qualified.

Apacer observes the quality and HSF policy and achieves the goal of "delivering hazardous substance-free, highly effective products and services on time to satisfy our customers" through its Supplier Management Procedures and Supplier Environmental Standards.



◆ Regulation for Sustainable Suppliers

◆ Introduction Phase

Apacer's suppliers are subject to review and approval during the introduction phase. In addition to assessing the suppliers' quality, manufacturing, delivery timeliness, and other capabilities, we also include environmental and social standards in the assessment items.

Through the Supplier Assessment, the supply chain partners are encouraged to value and implement the sustainable operations. At the same time, we undertake on-site auditing based on the type and risk levels of suppliers. We convene relevant departments such as management, engineering, and quality assurance departments to set up an on-site investigation team to evaluate suppliers' equipment and capabilities.

◆ Assessment Items for Introduction to Suppliers



◆ Evaluation Phase

In 2018, all raw material suppliers are subject to annual evaluation. The evaluation was held quarterly, semi-annually or annually according to the category of suppliers. For outsourcing manufacturers or domestic manufacturers that did not pass the requirement of Class A in the periodic assessment, Apacer must conduct an on-site audit every year.

In 2018, we began to incorporate the five major RBA specifications: labor, health and safety, environmental protection, ethics, and management systems into the annual evaluation. The first phase is to introduce large-scaled suppliers that have factories and are willing to implement the RBA requirements. In the future, we will continue to extend the procedure to more suppliers, make joint effort with suppliers to catch up with international standards, and gradually improve the sustainability management competency of suppliers.

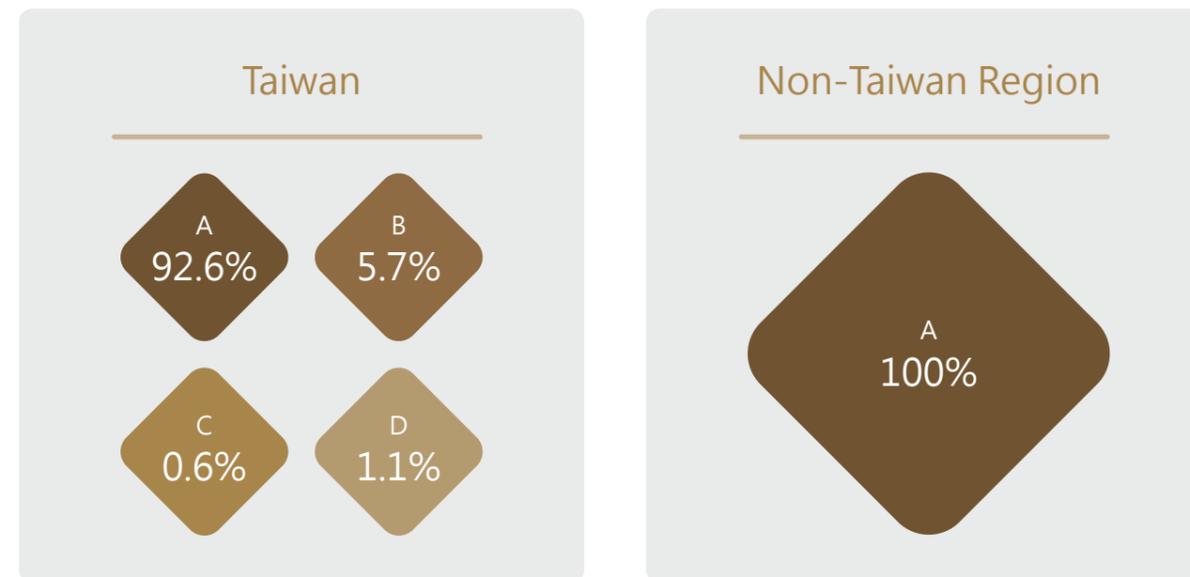
Items of Apacer's Annual Supplier Evaluation



◆ Supplier Tiered Management Procedures

Supplier Ranking	Evaluation Standard	Management System
A	90 – 100 points	Increase the quantity of order(s) or give incentives where appropriate
B	80 – 89 points	No incentives or disincentives will be given
C	70 – 79 points	Reduce quantity of order(s) and require timely improvement
D	Below 69 points	Supplier will be relieved of their HSF-qualified supplier status

◆ 2018 Supplier Evaluation and Ranking Results



◆ Green Supplier Ranking System

To further evaluate suppliers' management competency with hazardous substances, Apacer launched the "Green Supplier Ranking System" in 2016 based on the existing Supplier Management Procedures. The "approval rate" and "timely update" of the RoHS test report uploaded by the supplier are used as reference for score calculation. Procurement personnel can use this ranking to evaluate the suppliers' HSF management competency and to require them to improve, or to eliminate inferior suppliers based on supplier rankings during the supplier annual audit. This will help us better meet the international and customer's latest requirements and specifications.

Green Supplier Ranking in Recent Years

Ranking	Points	Number of suppliers in 2016	Number of suppliers in 2017	Number of suppliers in 2018
A	90 points or above	49	47	187
B	75~89 points	115	162	26
C	60~74 points	19	16	9
D	Below 59 points	81	45	32
Total		264	264	254

Level A suppliers increased 55.8%

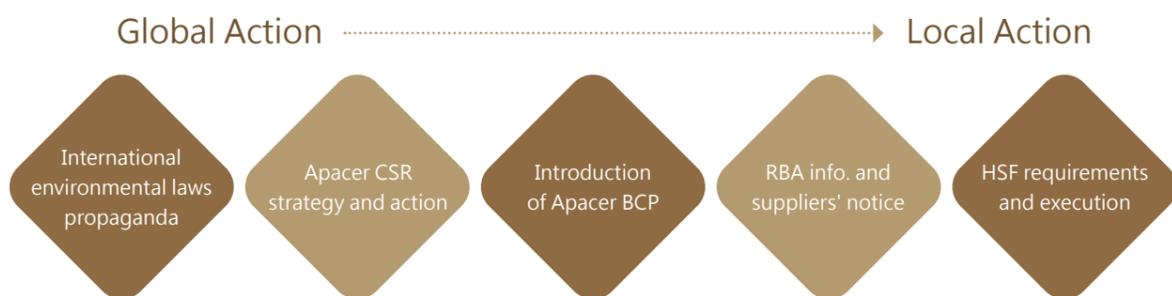
Note: Certain suppliers of key components were not included in the calculations since they were not required to upload their testing reports.

◆ Annual Supplier Conference: Communications and Mentoring

Suppliers are important partners to Apacer in becoming a green business. Therefore, we organize Supplier Conference once a year to explain the company's important quality and environmental policies, communicate the latest international legal requirements and standards. At the same time, we invite professional consultants or auditors from accreditation companies to deliver the latest trends and status of management system.

A total of 50 suppliers and 54 representatives attended Apacer's 2018 Supplier Conference. Besides explaining Apacer's CSR strategic objectives, we also described the latest technical standards and requirements for green products. In response to the revision of QC 080000, we communicate Apacer's requirements for the restricted substances and advocate the latest international Environmental Protection Law. We continue to learn and grow with our supply chain partners on the issues of environmental sustainability, fostering the supply chain's management competency regarding green and environmental protection issues. We take actions locally to echo to the global trend of environmental sustainability.

The Topics of Supplier Conference in 2018



Feedback from Our Supplier Partner

Phison Electronics Corps.
Sales Department 1
Assistant Manager Wan-Ju Chen



Since its establishment in 2000, Phison Electronics Corps. has been supported by Apacer. Till today, the two companies have been working together for 19 years and also developed into inseparable business partners. As an important supplier of Apacer, we appreciate the support of Apacer. Thanks to the supplier conferences held regularly, we benefited a lot and received professional knowledge.

Supplier conferences are not only about product quality requirements and supplier management, but also include the sharing and planning of corporate social responsibility. Apacer work with suppliers to give back to the society, address environmental issues, and best fulfill its responsibility as a company! We hope Phison Electronics Corps and Apacer can grow together in the future. We will work hard to protect the earth and create a sustainable business at the same time!

Thank you!

3.2 Material Topic

Customer Relationship Management

◆ Niche of customer service provides the best service experience



We actively construct global marketing channels taking into consideration the characteristics of the local market to grasp the market dynamics. We set up operations in the United States, the Netherlands, Japan, Hong Kong, China and India to market our own brand and deepen the local market.

With the growing memory demand for mobile devices and equipments, Apacer is committed to providing customers with customized products and services to take care of their needs and, in doing so, get ahead in the market.

In response to the diversity and compatibility of different platforms and applications, the technical analysis is provided under customers' requirements. In addition to the existing customer service system, we further cooperate with customers to develop a new generation platform, which helps with product development and customer communication.

◆ Remains considerate to customers from R&D to after-sales processes

"Access the best" is the promise we make as a brand. To reach perfection, we focus on the user experience, pay attention to every detail of product design, and view feedback from each customer as an important cornerstone of progress. Apacer also specifies the quality and HSF (Hazardous Substance-Free) policy as "delivering hazardous substance-free, highly effective products and services on time to satisfy our customers" and provides customers with the best experience.

R&D and Design

Listening to customers



We plan and facilitate the best-selling product mix from a user-experience-oriented standpoint. We provide 24/7 services to help consumers create a convenient, high quality, and enriched digital storage lifestyle.

Insight into new technologies



We attain insights into the advancement of the latest technology, industry movement, and customer needs through our forward-thinking mind-set. Moreover, we assist customers to develop customized, optimized solutions, and provide effective, highly-stable products and services so that Apacer can enhance our market competitiveness together with our customers.

After-sales Service

Global After-sales service



Through providing localized, instantaneous sales and technical services from local sales agents and FAE, Apacer works to ensure 100% satisfaction and user experience from our customers.

Global logistics system



We integrate technologies from all aspects of logistics and transportation to provide customers with instant updates on shipping status, providing the fastest and most beneficial logistics service to our customers.

◆ Global After-Sales Service System



◆ Annual Customer Satisfaction Survey

We conduct Customer Satisfaction Surveys every year. Over the years, the results of Annual Customer Satisfaction Survey have reached our target, 85 points. Compared to the previous year, customer satisfaction in 2018 was significantly increased by 3.27 points.

For feedback with lower scores, the Sales department actively conducts reviews, analysis and improvement to better provide products and services that meet customer needs.

Note: Customer satisfaction rate in 2018 is calculated based on the arithmetic mean of the results of each business unit.



Chengdu Weidao Tiandi Technology Co., Ltd.
Representative
Nan-Hsia Feng

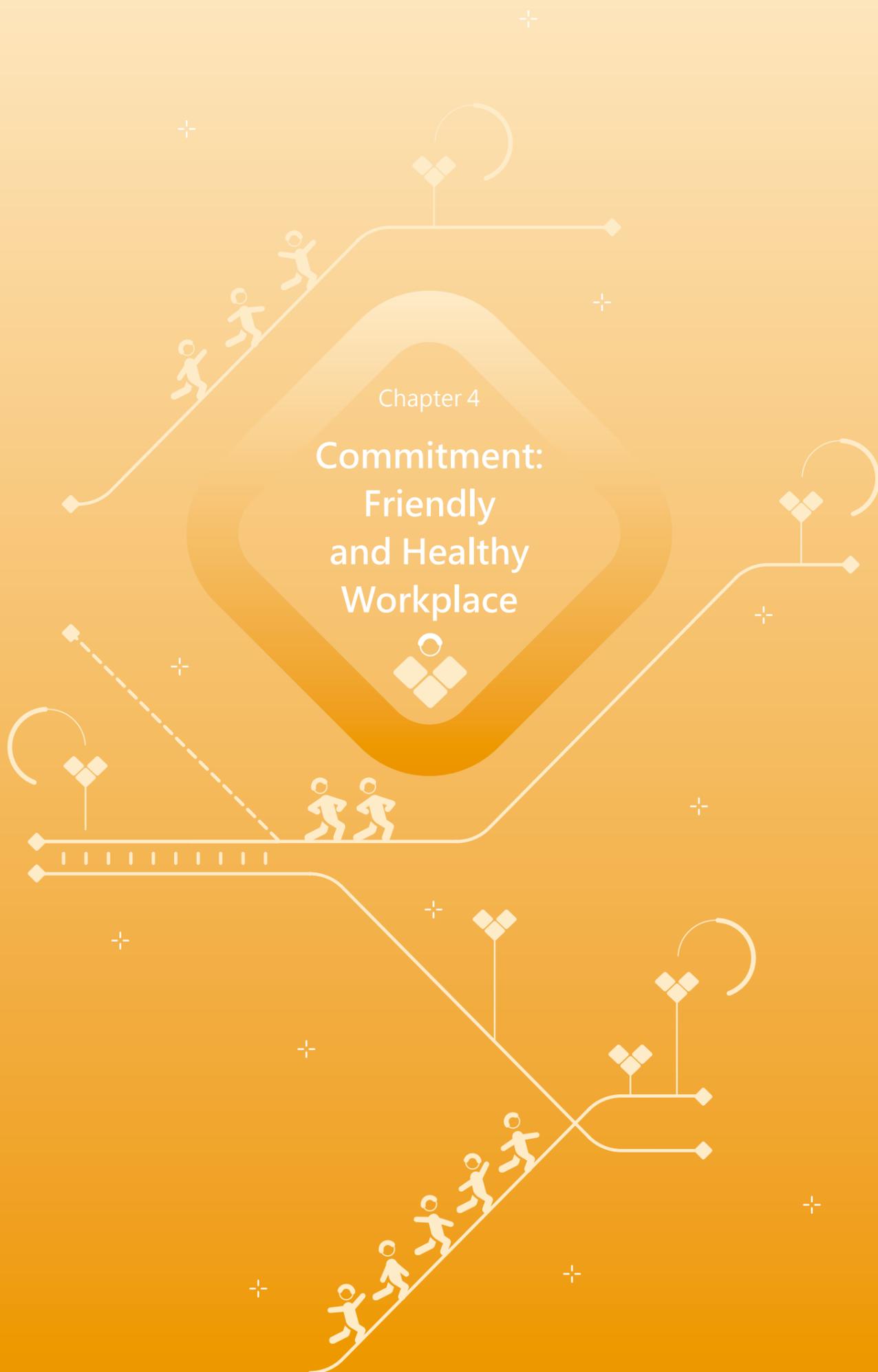
◆ Affirmation from Customers

Chengdu Weidao Tiandi Technology Co., Ltd. has cooperated with Apacer for more than ten years. We are business partners with mutual trust. During our long-term cooperation, Apacer has been providing us with sufficient and reliable products in the system integration industry.

Apacer regularly holds new product demonstrations and shares scientific and technological achievements with distributors. Apacer encourages distributors to strive for excellence by cooperating in the system integration industry. As a leader in industrial memory solutions, Apacer always makes breakthroughs with innovations utilizing a vision in development, providing value-added solutions and technologies for extreme environments to ensure product reliability, stability and durability.

The products that Apacer provided to Chengdu Weidao Tiandi Technology are fully in line with international standards and are famous for their advanced technology and quality. Apacer offers the most comprehensive, state-of-the-art, suitable memory and storage solutions. The solutions they offered for Chengdu Weidao Tiandi Technology are with outstanding operational performance, reliability, durability and comprehensive security. In terms of the development of distributors, Apacer provides timely advice and ideas. As for distributors' requirements for the products, Apacer always provides technical support in a timely manner.

Apacer pays full attention to products from the step of production to after-sales, even to the development path of the distributors. Apacer carries industry responsibility for the system integration industry and the responsibility as a manufacturer. As a long-term distributors partner, Chengdu Weidao Tiandi Technology is more than willing to work, grow and share corporate and industry responsibilities with Apacer. Together we shall achieve industry advancements. Thank you!



Corresponds to the Sustainable Development Goals (SDGs) set by the UN



Vision

We have built a comprehensive caring system by introducing management system, education and training as well as A+ EAEP (Employee Assistance & Exercise Programs) to help employees have work-life balance in a friendly workplace. We aim to reduce operational risks and achieve zero injury.

Policy and Commitment

Employees are one of Apacer's most important stakeholders. We are devoted to providing competitive wages, comprehensive education and training, diverse benefits and comfortable recreational space. Apacer views employees as our good partners.

	Material Topics	Occupational Health and Safety	Employee Benefits	Talent Cultivation
	Responsibility	Occupational Health and Safety Office	HR and Administration Department	HR and Administration Department
	Resources	Manpower: Occupational Health and Safety Committee Budget: Budget will be allocated annually by Corporate Social Responsibility Committee and Occupational Health and Safety Committee	Manpower: HR and Administration Department Budget: Budget will be allocated annually by Corporate Social Responsibility Committee, Employee Welfare Committee and Responsible Business Alliance	Manpower: HR and Administration Department Budget: Budget will be allocated annually by Corporate Social Responsibility Committee and Strategy and Management Committee
	Actions	1. Disaster prevention measures 2. Safety and health education programs 3. Automatic inspection mechanism 4. Employee health management 5. Monitor and improve working environment, plan for gradual return to work	1. Provide a welfare system that exceeds the Labor Standard Laws 2. Promote Apacer A+ EAEP Employee Assistance & Exercise Programs (See 4.3 Employee Benefits and Communications) 3. A sport-supporting and gender-friendly workplace	1. Talent supply chain mechanism 2. A blueprint for education and training 3. Annual training program 4. TTQS (Taiwan Training Quality System)
	Channels of Communication	1. Convene Corporate Social Responsibility Committee and Occupational Health and Safety Committee 2. Promote relevant knowledge and events via the official website and emails	1. Convene Corporate Social Responsibility Committee and Employee Welfare Committee 2. Promote relevant knowledge and events via the official website and emails	1. Convene Corporate Social Responsibility Committee and Strategy and Management Committee 2. Promote relevant knowledge and events via the official website and emails
	Evaluation Method and Results	1. Received OHSAS 18001 Occupational Health and Safety Assessment Series Certification 2. Received the certification of Accredited Healthy Workplace from Health Promotion Administration	1. Honored with Ministry of Labor's the Work-Life Balance Award 2. Honored with the RBA Silver Award 3. Employees turnover rate remains below 3% in 2018 4. Employee engagement survey scores 77 points in 2018	1. Honored with the TTQS Bronze Medal from Ministry of Labor 2. 53 people attended the talent supply chain course in 2018
Sustainability Goals	Short term	Build a comprehensive workplace in accordance with relevant occupational safety laws	With A+ Work, A+ Family, A+ Work combing CSR & RBA as vertical axis, food, clothing, living, transportation, education and recreation as horizontal axis, we provide A+ EAEP Employee Assistance & Exercise Programs with 24 items for employees.	Use five aspects in PDDRO (Plan, Design, Do, Review and Outcome) for management to implement the core value and goal of training
	Mid term	1. Received OHSAS 18001 Occupational Health and Safety Assessment Series Certification in 2018 2. Received the certificate of Accredited Healthy Workplace from Health Promotion Administration in 2018 3. Plan to get ISO 45001 Occupational Safety and Health Management Certification in 2020	1. Honored with Ministry of Labor's the Work-Life Balance Award in 2018 2. Honored with the RBA Silver Award in 2018 3. Plan to be certified by the "i Sports" program by Sports Administration Ministry of Education in 2019	Honored with the TTQS Bronze Medal from Ministry of Labor in 2018
	Long term	Build a trust-worthy employer brand		

Employee Overview

Employee Policy and Declaration of Rights

Declaration of Apacer's Employees' Rights



Ensuring employee rights

- All employees are entitled to the same human rights protection. We do not discriminate on the grounds of an employee's race, gender, educational background, marital status, or other such conditions.
- To protect employees' rights, all employees will sign a recruitment contract on the date of their being hired.
- No discrimination or forced labor occurred in 2018.



Protecting freedom of association

- Apacer protects the right of freedom of association. Employees can freely form clubs and freely establish or participate in labor unions.



Prohibiting unlawful child labor

- We have never hired an employee under the age of 16, and we strictly prohibit our minor employees from participating in hazardous work.



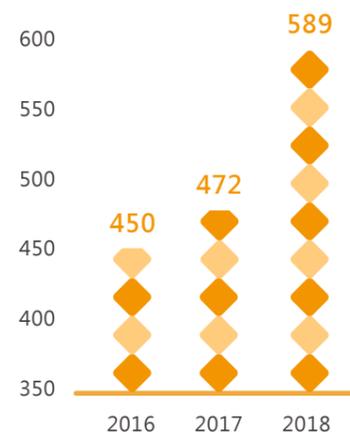
Diverse communication channels

- We have clearly defined our employee grievance reporting methods to solve incidents related to employees' rights and unfair treatment.
- Regularly organizes employment relations conferences to strengthen mutual trust between employers and employees.
- Employees' creative opinion channel - the "Idea Garden"

Overview of Employees' Composition

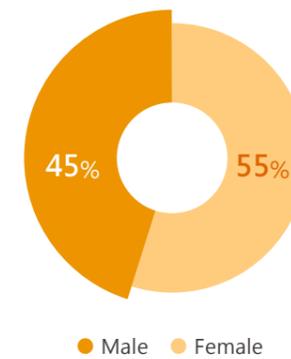
As the business continues to expand, the number of Apacer employees has grown significantly compared to 2017. In 2018, Apacer has 589 employees. Among them, 12% are in the management. In terms of the type of employees, direct employees in the production line account for 37% of all employees, which are 186 persons. As for sex distribution, a total of 322 female employees account for 55% of all employees. Regarding educational background and age distribution, most employees are college graduates, accounting for 61%; most employees are under the age of 30, accounting for 78%.

Number of employees

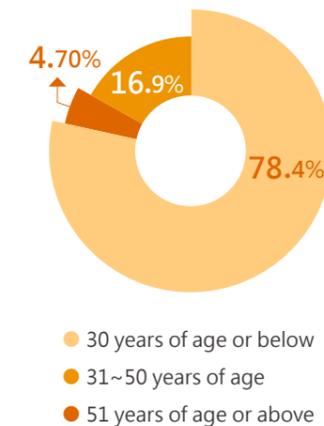


Apacer values the cultivation of local talents. In 2018, Apacer's local employees accounted for 87% of its total employees. In addition, members of the company's internal Strategy and Management Committee include the Chairman's and Chief Strategy Officer, President, Vice President, Special Assistant and two managers from BUs. All six senior managers are local employees in Taiwan.

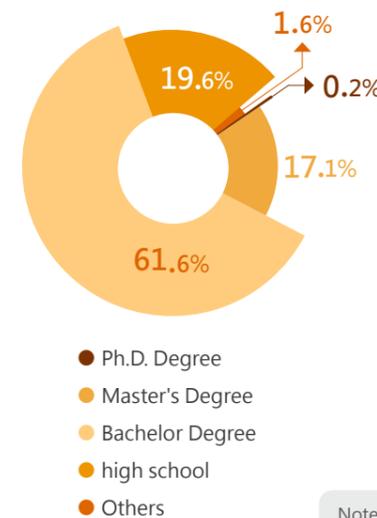
Percentage based on gender



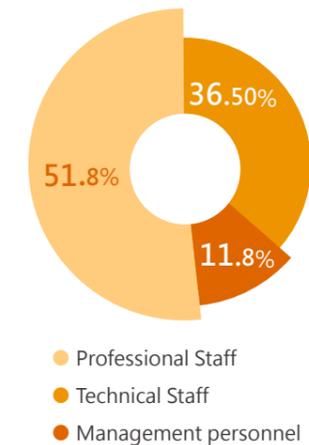
Age distribution



Distribution of educational background



Job title



Note 1: Technical staff refers to direct employees in the production line.
Note 2: All roles other than management staff and technical staff are professional staff.

2018 Global Distribution of Employees

Item	Category	Male		Female		Group Subtotal and Percentage	
		Number	Percentage	Number	Percentage	Number	% of total
Taiwan	Full-time	222	97.8%	267	94.3%	489	95.9%
	Part-time	5	2.2%	16	5.7%	21	4.1%
Overseas	Full-time	40	17.6%	39	13.8%	79	15.5%
	Part-time	0	0.0%	0	0.0%	0	0.0%

Note 1: Overseas areas include the U.S.A, the Netherlands, India, China and Japan.

◆ 2018 Statistical Data on Employees in Taiwan

Item	Category	Male		Female		Group Subtotal and Percentage	
		Number	Percentage	Number	Percentage	Number	% of total
Type of Contract	Full-time	222	97.8%	267	94.3%	489	95.9%
	Part-time	5	2.2%	16	5.7%	21	4.1%
Type of Employee	Direct	55	24.2%	131	46.3%	186	36.5%
	Indirect	172	75.8%	152	53.7%	324	63.5%
Type of Position	Management Staff	41	18.1%	19	6.7%	60	11.8%
	Professional Staff	131	57.7%	133	47.0%	264	51.8%
	Technical Staff	55	24.2%	131	46.3%	186	36.5%
Educational Background	Ph.D.	1	0.4%	0	0.0%	1	0.2%
	Master's Degree	54	23.8%	33	11.7%	87	17.1%
	College	150	66.1%	164	58.0%	314	61.6%
	General and Vocational High School	22	9.7%	78	27.6%	100	19.6%
	Others	0	0.0%	8	2.8%	8	1.6%
Age Distribution	30 years old or below	183	80.6%	217	76.7%	400	78.4%
	31-50 years old	33	14.5%	53	18.7%	86	16.9%
	Above 51 years old	11	4.8%	13	4.6%	24	4.7%
Physically and/or Mentally Handicapped		0	0.0%	2	100.0%	2	100.0%
Indigenous People		0	0.0%	0	0.0%	0	0.0%
Sex		227	44.5%	283	55.0%		
Total						510	

◆ 2018 Structure of New Employees and Outgoing Employees

Type	Division	2018 New Employees		2018 Employee Turnover	
		Persons	% of Employees in the category	Persons	% of Employees in the category
Sex	Male	96	49.0%	67	40.4%
	Female	100	51.0%	99	59.6%
Age	30 years old or below	141	71.9%	132	79.5%
	31-50 years old	53	27.0%	30	18.1%
	Above 51 years old	2	1.0%	4	2.4%
Total		196		166	
The percentage of people to the total number		38%		33%	

◆ Turnover of Employees

For 5 consecutive years, Apacer has a turnover rate below 3%. This will remain our goal, as we continue to maintain a stable supply of manpower and talent development in the future.

Year	a	b	c			d	e
	Number of Original Employees	Number of New Employees	Number of departing employees			Number of persons at the end of the year	Turnover rate
			Manager	Non-manager	Subtotal	d=a+b-c	c/((a+d)*12)
2016	416	173	13	131	144	445	2.8%
2017	445	165	10	120	130	480	2.3%
2018	480	196	7	159	166	510	2.8%

Note 1: The calculation of turnover rate is based on the statistics of employees from Minister of Labor.
See <https://statdb.mol.gov.tw/html/com/st0104.htm>

4.2 Material Topic

Employee Safety and Health

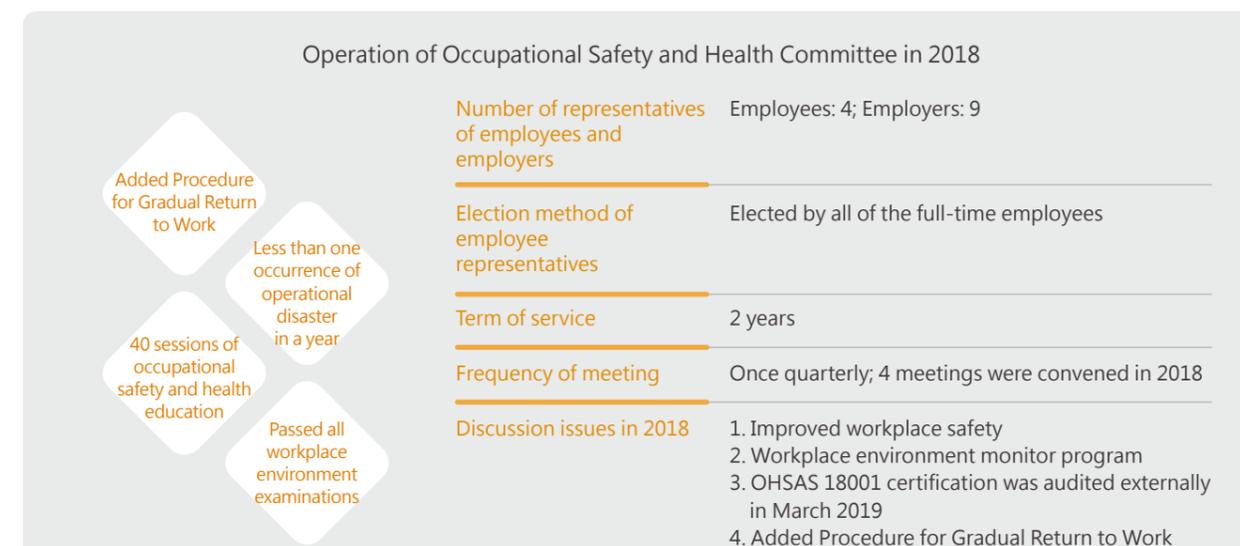
◆ Occupational Safety and Health

Apacer received the OHSAS 18001 Occupational Health and Safety Assessment Series Management Systems certification in 2013. The certification has been renewed in 2017 and re-certificated in 2018. Based on the PDCA principle, we achieve occupational safety and health management by impeding measures including risk evaluation, risk control, and regular improvements. In accordance with the Occupational Safety and Health Act, we have also established Occupational Safety and Health Committee which is responsible for reviewing, negotiating, and proposing advice related to safety and health.



◆ Occupational Safety and Health Committee

In order to provide a more friendly and healthy workplace and reduce occupational disasters, Apacer has established the Occupational Safety and Health Committee in accordance with the law. The committee is directly under the supervision of the President and convenes meetings quarterly to review issues regarding occupational safety and health.



Note 1: Representatives from employees account for more than 1/3 in Occupational Safety and Health Committee in accordance with the law.
Note 2: The level of Occupational Safety and Health Committee is raised. It is directly under the supervision of the President.

◆ 2018 Management Performance of Occupational Safety and Health

We have implemented occupational safety and health management through four specific measures. To minimize operational risk for employees, we conduct operational control for high-risk operating procedures through disaster prevention, safety and health education programs, implementation of automatic inspections, and employee health management. Over the years, no labor-hours have been lost due to an occupational disease.



◆ Disaster Prevention and Handling

To prevent occupational hazards, Apacer has established the Safety and Health Management Plan and Risk Control Measures. Also, we have implemented safety and health educational training program as well as irregularly inspected the workplace environment in our production facilities. In addition, all injury, non-injury, and false-alarm incidents are reported and tracked to eliminate potential hazards. By implanting the above measures, we hope to achieve the management objectives of less than one occurrence of operational disaster in a year.

If there is an occupational accident, an emergency response team will be immediately formed, and relevant response measures as well as procedures will be established to contain the hazard. At the meantime, the cause of the hazard will be investigated and preventive measures will be reviewed to avoid the recurrence of related accidents.

2018 Statistical Data on Occupational Safety and Health Education Training

Courses	Total Participants	Total Hours
Safety and Health Education Training for New Employees	164	492
General Employee Safety and Health Education Training*	438	657
Radiation Protection	1	39
On-the-job Training for Safety and Health Personnel	1	6
On-the-job Retraining for Solvent Operations Managers	33	865

Note*: General Employee Safety and Health Education Training as well as Ethical Management and RBA Training are included.

◆ Working Environment Inspection

Apacer regularly commissions qualified operating environment inspection institutions to conduct working environment inspection. Items to be measured include dust, organic solvents, carbon dioxide, and lighting. Once abnormalities are found in the measurement results, improvements and corrections will be undertaken immediately to protect employees' health.

◆ Workplace Safety Control

In accordance with the Occupational Safety and Health Act and the results of Safety Risk Assessment, Apacer has implemented special operations controls and work permits for overhead operations, hot work and equipment capable of producing ionizing radiation to maintain a safe workplace environment. At the same time, automatic inspection is carried out and all machinery equipment is inspected regularly in accordance with the law. Machinery operators should obtain professional qualification and undergo regular on-the-job retraining.

In terms of personal safety protection, operators need to wear protective gear based on the nature of their operations in accordance with the law. Furthermore, to ensure that operators are not exposed to radiation hazards, regular equipment inspections are carried out. We also require operators to wear radiation dosimeter badges and undergo radiation health checkups to properly monitor the radiation dose they received as well as their health status.

◆ Health Control

In order to fully understand employees' health conditions and to prevent occupational diseases, Apacer regularly conducts health checkups for operators. Checkups are divided into "general operations" and "special hazard operations" inspection items based on the types of operations.

For employees who come into contact with potential health hazards such as ionizing radiation or organic solvents, special checkup items are carried out. Also, we implemented classified management to evaluate and handle health abnormalities' correlation to work. At the same time, the company has commissioned onsite nurses to fill out "personnel health risk evaluation charts" to help individual employees pay attention to their health conditions. We have also implemented a "workplace health promotional plan" and carried out health promotion seminars and activities to actively provide employees with information on how to live a healthy life.

2018 Apacer A+ EAEP (Employee Assistance & Exercise Programs) – Health+

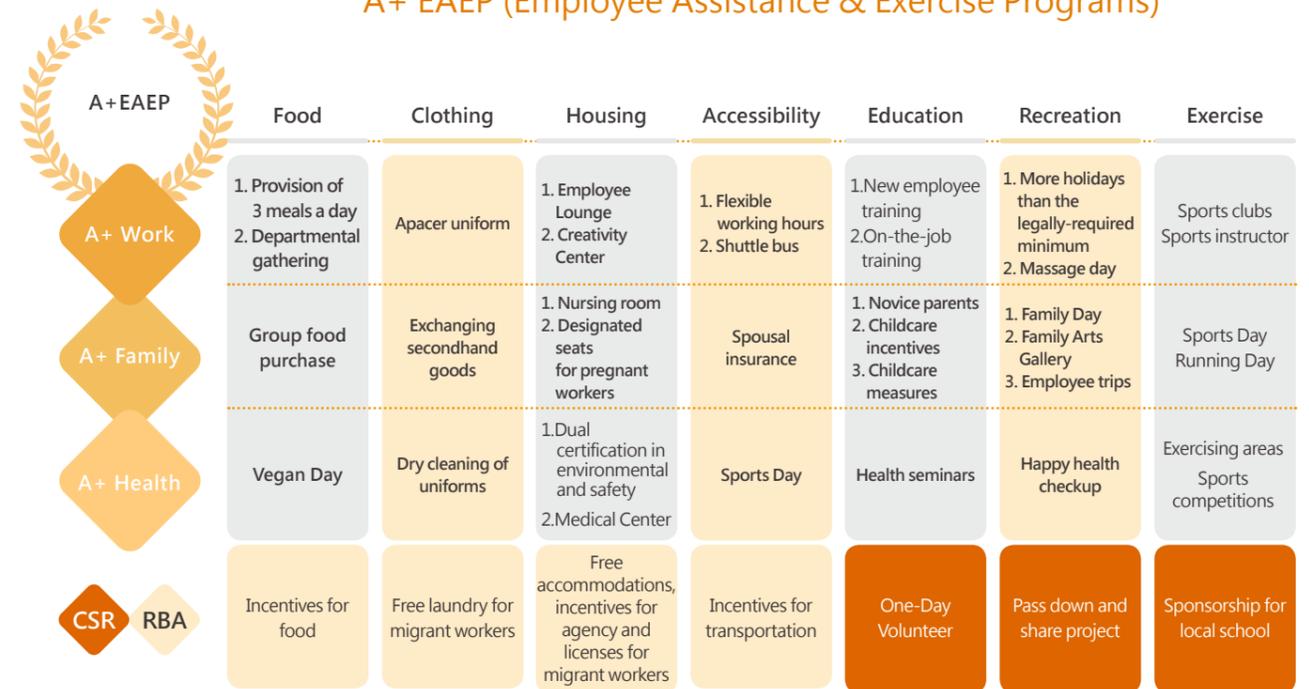
Activity	Number of Participants
Courses and lectures on body, mind and spirit 1 course on EQ 1 course on sports 1 course on relaxation 2 courses on health	206 persons
Healthy Vegan Day	47 persons
Health Checkup (In addition to standard items from the Ministry of Labor, items such as liver cancer screening and abdominal ultrasound, hepatitis B test, and free T4 test are included.)	424 persons

◆ Statistics on Occupational Disease Rate, Lost Time Rate, Absent Rate, and Work-Related Injury Rate over the Years

Year	2017		2018	
	Male	Female	Male	Female
Total Hours of Work	369,101	547,111	466,840	602,766
Total Workdays	46,138	68,389	55,849	69,377
Number of injuries	0	0	8	3
Number of deaths	0	0	0	0

In 2018, we even brought it to a higher a level. Based on the cohesiveness of employees and organizational development, we combine the core ideas of CSR and RBA to create "Apacer A+ EAEP Employee Assistance & Exercise Programs". We re-examined various welfare mechanisms within the company, hoping that employees can be well taken care of both at work and in life. Aside from devoting to their professional career, employees can enjoy a healthy and happy family life at the same time.

A+ EAEP (Employee Assistance & Exercise Programs)



Honored with Ministry of Labor's Work-Life Balance Award and received the certificate of Accredited Healthy Workplace from Health Promotion Administration in 2018

We take good care of our employees in food, clothing, living, transportation, education and recreation by providing activities, courses and assistance under Apacer A+ EAEP Employee Assistance & Exercise Programs. In 2018, we were honored with the Work-Life Balance Award from Ministry of Labor.

A + EAEP achievements



2018

Work-Life Balance Award (awarded by Ministry of Labor)



2017
2018



Certificated as the healthy workplace by Health Promotion Administration

Enjoy Job



Enjoy Life

Year	2017		2018	
	Male	Female	Male	Female
Sex				
Sick leave due to occupational diseases (days)	0	0	0	0
Occupational Disease Rate (ODR)	0	0	0	0
Number of days lost	0	0	3	0
Lost Day Rate (LDR)	0	0	1.29	0
Total Absent Days	145	820	141	531
Absence Rate (AR)	78.6	299.8	60.4	176.2
Total work-related injuries	0	0	1	0
Injury Rate (IR)	0	0	0.43	0

Note 1: Type of injury: temporary total disability
 Note 2: Occupational Disease Rate (ODR) = (total number of occupational diseases/total workdays) x200,000*
 Note 3: Lost Day Rate (LDR) = (number of days lost/total hours of work) *200,000*
 Note 4: Absent Rate (total absent days/total workdays) x 200,000*
 Note 5: The definition of absence: Employees are absent from work due to loss of their ability to work, including but not limited to occupational injuries or illnesses (occupational diseases, sick leave, menstrual leave). Traffic accidents are not included.
 Note 6: Injury Rate (IR) = (total injuries/total hours of work) x 200,000*
 Note 7: *50 weeks per year, 40 working hours per week, for every 100 employees
 Note 8: The number of people injured in traffic accidents and occupational injuries

2018 Injury Type, Injury Rate, the Number of Line-of-Duty Deaths of Workers (Employees Excluded)

Year	2018	
	Male	Female
Sex		
The number of people injured	0	0
The number of deaths	0	0
Total number of work-related injuries	0	0
Injury Rate (IR)	0	0

Note 1: The type of work-related injuries: temporary total disability
 Note 2: Injury Rate (IR) = (total injuries/total hours of work) x 200,000*

4.3 Material Topic

Employee Benefits and Communications

Employee Benefits

Apacer A+ EAEP (Employee Assistance & Exercise Programs)

Creating a healthy and friendly workplace for every employee is the promise we make to them. In 2017, we started with the "A+ Happy Workplace Plan" and planned various welfare activities from three aspects, namely Health+, Family+, and Work+.

2018 A+ EAEP - Pregnant Employee Assistance Program

Highlights

- ◆ We grant maternity allowance NT\$ 6,000 per month before the child is 6 months old.
- ◆ Temporary child care area
- ◆ Pregnant employee assistance project
- ◆ Reinstated after Unpaid Parental Leave project
- ◆ Award-winning nursing room



In 2018, Apacer provided a full range of care for employees' children with its "family and children supporting" program. To support employees to take care of their children, we grant a monthly allowance of NT\$ 6,000 to employees giving birth until the baby is 6 months old. If both parents are our employees or they have twins, they will get 50% more to reduce their financial burden in childcare.

We provide designated seats for pregnant employees and also arrange nurses to conduct risk assessment and risk control. We arrange doctors to give health guidance and health education to alleviate pregnant employees' physical stress during their pregnancy. Pregnant employees can request for adjustments or reduction of workload or even changing the duties according to their physical and mental conditions. Nursing rooms with comprehensive facilities and equipment have also been set up in our offices.

For employees who take unpaid parental leave, Apacer provides care and assistance before they return to work. We also provide suggestions on returning to work, helping new parents return to the workplace successfully. We have built a temporary childcare area in the company. During unexpected school closures, employees can take their children to the company without the need to seek childcare or take a day off.

Apart from providing childbirth and childcare allowances, the company also implements unpaid parental leave system in accordance with the "Regulations for Implementing Unpaid Parental Leave for Raising Children". Regardless of their sex, all employees that have worked at Apacer for more than 6 months are eligible to apply for unpaid parental leave to strike a balance between work and family life.



Statistics on 2018 Unpaid Parental Leave

	Male	Female
A: Number of Employees Eligible to Apply for Unpaid Parental Leave	4	27
B: Actual Number of Applications for Unpaid Parental Leave	1	8
C: Number of Employees to Be Reinstated After Unpaid Parental Leave	0	6
D: Actual Number of Employees Reinstated After Unpaid Parental Leave	0	5
E: Number of Employees Reinstated After Unpaid Parental Leave in the Previous Year	0	1
F: Number of Employees Reinstated in the Previous Year and Who Have Worked for More than 1 Year	0	1
Application Rate (B/A)	50%	30%
Reinstatement Rate (D/C)	0%	83%
Retention Rate (F/E)	0%	100%

2018 Activities under Apacer A+ EAEP (Employee Assistance & Exercise Programs)



Encouraging employees to exercise and monitor their health by APP



Arranging events and games for employees and their family to have a great day



Employees can release stress by making an appointment of massage

Feedback from Employees

Jane | Apacer was there for me when I got married and gave birth to my baby. Apacer provides designated seats when I was pregnant, and grant childcare allowance after giving birth. Apacer offers generous benefits. Thank you for giving me so much happiness.

Joyce | Thank you for providing designated seats for pregnant employees to alleviate our physical discomfort during pregnancy. Even my supervisor envies me for having such a comfortable seat!

EAEP A+ Family: New Parents, childcare allowance and childcare measures

EAEP A+ Family: Gender friendly workplace

Tina | I really appreciate Apacer for providing such a wonderful childcare area, allowing us to take care of children in the workplace when unexpected situations occur. This is really thoughtful!

Stacy | Apacer provides a well-equipped and independent nursing room, allowing me to continue breastfeeding at work to give my child the best nutrition. In addition, there are full-time nurses for consultation within the company, making me a professional career woman as well as a happy mom!

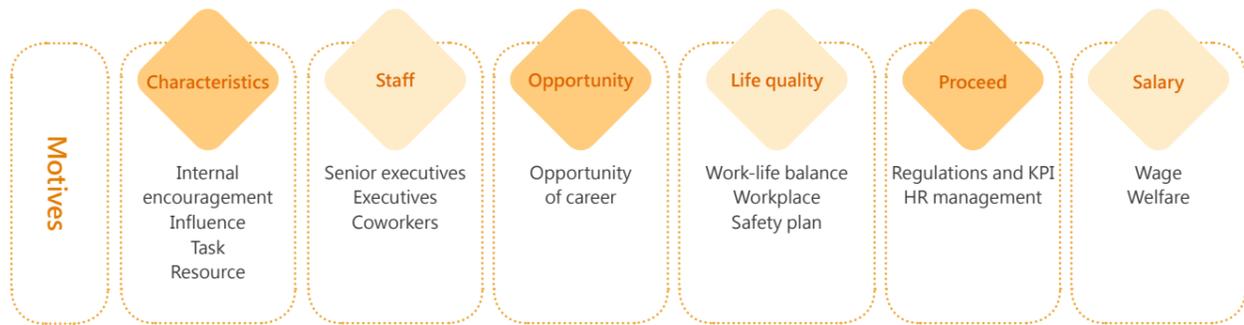
Amy | In Apacer, I can work and take care of my children at the same time. How wonderful!

Employee Engagement Survey

Apacer started conducting employee engagement survey in 2018. We conduct the survey based on six major drivers, namely work characteristics, people, opportunities, quality of life, procedures, and compensation. There are 62 questions in total.

For the first survey conducted, the result was 77 points, which is between "slight identification to identification". The higher scores and low scores in the survey have been reported in the Strategy and Management Committee meeting and provided to the relevant supervisors to be used as the basis for future improvement of the company.





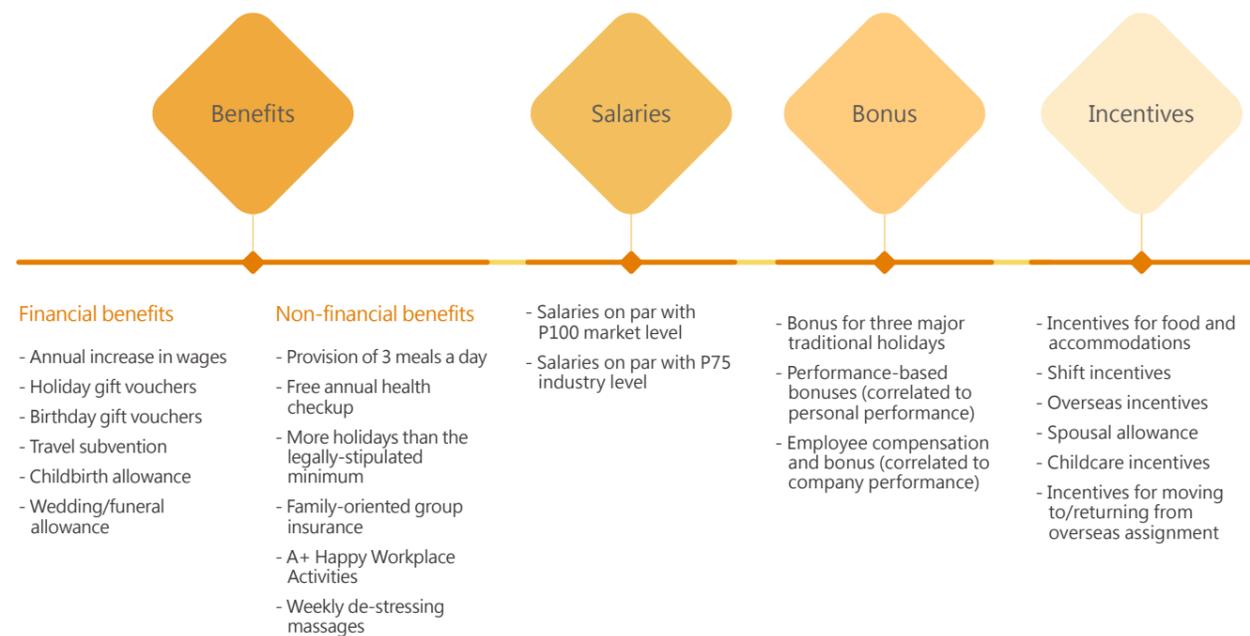
4.4

Compensation System

More competitive than legal requirements

- More holidays than the legally-stipulated minimum and flexible working hours for indirect personnel
- Support and encourage childbirth: provide paternity leave, pregnancy hospitalization leave, unpaid parental leave, childcare incentives
- All employees can enjoy a free annual health checkup and weekly stress relief massage

◆ Apacer's Compensation and Benefits of Employees



Apacer established a Compensations Committee in 2011 in accordance with the law. Consisting of Independent Directors, Compensations Committee regularly reviews the policies, systems, standards, and structures of the performance and compensations of directors, supervisors, and managers. The committee also reviews the performance of the management team and the employees' compensation policy. Over the years, we also have

adopted compensation reports from professional consulting firm as references to the compensation standard of the industry to ensure the competitiveness of our compensation packages. Based on the operational status, we allocate approximately 10% to 20% of our surplus each year to our employees in order to attract outstanding talents to make contribution in the long-term.

In addition to fixed wages, we have also established a bonus system including sales bonuses, performance bonuses, R&D bonuses, and team bonuses to encourage employees to continuously pursue excellence and surpass themselves at work. We have also established employee stock options and profit-sharing systems to strengthen employees' dedication and cohesion.

◆ 2018 Annual Total Compensation Ratio by Sex

Position	Male	Female
	Percentage	Percentage
Management staff	1.04	1.00
Professional staff	1.24	1.00
Operating staff	1.04	1.00

◆ Male and Female Entry-Level Staff in Comparison to Local Minimum Wage

Gender	Apacer's compensation	Local minimum wage	Male/female wage ratio
Male	1.07	1.00	1 : 1
Female	1.07	1.00	

Note: Local minimum wage is calculated based on a NT\$22,000 monthly salary that was stipulated on January 1, 2018.

◆ 2018 Benefits Expenditure

Benefit Item	Amount (NT\$)	The number of employees benefited
Childbirth allowance	\$237,000	13
Group insurance	\$1,321,937	6218
Holiday bonus	\$34,181,395	920
Performance bonus	\$64,449,583	463
Wage	\$37,990,900	407
Pension	\$531,810	1
Massage service	\$17,000	850
Spring party	\$2,739,053	442
Family event	\$2,294,049	1,046
Total	\$143,762,727	10,360

Employee Welfare Committee Item	Amount (NT\$)	The number of employees benefited
Marriage subsidy	\$28,200	13
Funeral subsidy	\$22,900	11
Childbirth subsidy	\$15,200	7
Hospitalization subsidy	\$22,000	10
Travel subsidy	\$2,445,853	448
Club subsidy	\$53,824	109
Total	\$2,587,977	598

◆ Retirement System

Apacer has established an Employee Retirement Plan in accordance with the Labor Standards Act, specifying the allocation of pensions, retirement conditions for employees, and pension paying. At the same time, the "Employee Retirement Reserve Supervision Committee" has also been established in accordance with the law. The employee retirement reserve is deposited in the statutory financial institution in the name of the committee. In response to the government's new retirement system in July 2005, employees who opt for the new system are required to allocate 6% of their pension into the Labor Insurance Bureau's personal pension reserve account. On the other hand, for those who choose the old system, their pension reserve is allocated in accordance with the original method. The retired life of every employee will be well protected.

◆ Diverse and Healthy Workplace

◆ Comfortable Resting Area

Apacer views employees as important work partners and family members. We hope that employees can feel at home while working hard in the company.

Therefore, we set up an employee resting and reading area on the first floor of the operational headquarters to provide a multi-functional recreational space. In addition, an assortment of books and magazines are also provided.

There are also a number of independent and stylish resting areas in the office for employees to utilize freely. We hope to reduce the sense of restraint in the office, and to create a diverse space to inspire unlimited creativity from employees.



◆ Sports Area

Apacer has set up a sports area in the first-floor lobby of our headquarters, giving employees opportunities to exercise during busy work days.

We provide equipment, such as spinning bikes, horse riding machines, foosball tables, XBOX 360 among others and encourage employees to use them freely so that they can have healthy workout every day in the company.



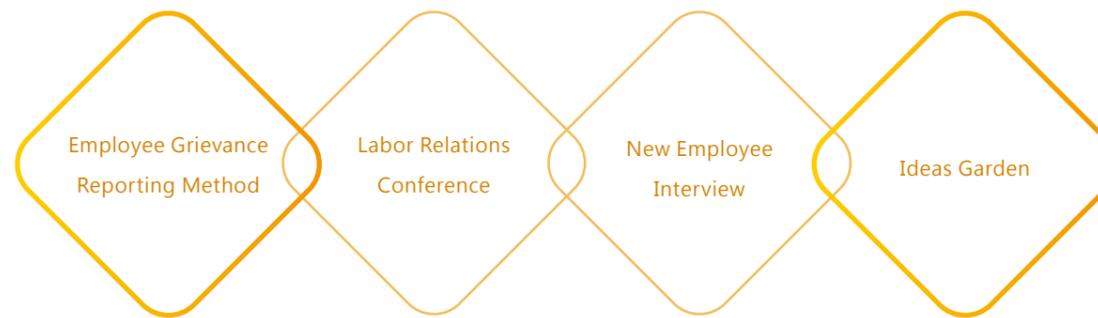
◆ Diverse Sports Clubs

Apacer hopes employees to actively participate in recreational activities besides working. Therefore, we encourage employees to freely organize clubs. At the same time, we provide club-organizing grants and subsidies for activities to support the operation and development of the clubs. Currently, Apacer has a number of sports clubs, including basketball club, cycling club, boxing club and golf club. These clubs promote the friendship between employees from different departments. We hope every employee can enjoy a healthy and colorful life.



◆ Diverse and Fluent Employee Communications

Apacer values employees' opinions and has established diverse communications channels. We have also established "Employee Grievance Handling Procedures" and "Workplace Sexual Harassment Grievance and Punitive Measures". In addition, we regularly convene employment relations conferences so that employees can express their thoughts and opinions. We also interview new employees to understand their working conditions and to assist them to rapidly adapt to the environment. For general employees, Apacer has established an Ideas Garden online platform to stimulate their creativity and form innovative momentum.



◆ Employee Grievance Reporting Procedures

Apacer clearly defines the handling of employee complaints that applies to all employees in the company.

This allows employees to access an open and unimpeded channel to report unfair labor incidents or illegal activities that affect the company.

Employees can file a written grievance to the HR Department and the Auditing Office. After receiving the grievance, the receiving units will conduct a preliminary document review. They will interview the relevant personnel for an incident investigation. The identity of the grievant will be kept confidential, if necessary. The result of the investigation shall be replied to the grievant in written form within 30 days. If there is any objection, the grievant may re-appeal within 10 days after receiving the result. No employee has filed a grievance by the end of 2018.



◆ Labor Relations Conference

Although Apacer has not formed a labor union, we hold employment relations conferences every quarter. In the conferences, we communicate issues regarding the company's various systems, policies, workplace environment, and safety and health with the employees to strengthen mutual trust between employers and employees.

2018 Operations of Labor Relations Conference	Number of representatives of employees and employers	5 representatives from employees, and 5 from employers
	Election method of employee representatives:	Elected by all of the full-time employees
	Term of service for board members	3 years
	Frequency of meeting	Once quarterly; 4 meetings were convened in 2018
	Discussion issues in 2018	<ol style="list-style-type: none"> 1. Company operating status and profitability 2. Discussion on labor law revisions 3. Annual new product planning 4. Discussion on CSR activities and employees' benefit activities



Planting the seed of creativity

The "Ideas Garden" online platform has been built in the company's Intranet, allowing employees to propose their creative ideas. Proposals are classified into five categories, "product", "lifestyle", "process", "technical", and "others". This gives employees more chances to express their thoughts on production and lifestyle. In 2018, we received a total of 181 creative proposals from employees.



Fostering creativity to grow

Employees can "like" or make comments on idea proposals at any time, making Apacer more creative. To encourage employees to participate, an award and lucky draw will be given to the proposer of the most popular idea at the end of each month!



Creative Star

At the end of the year, the annual "Golden Creativity Award" is given based on four aspects, which are "Novelty", "Comprehensiveness", "Marketability" and "Executability". After approved by more than 2/3 of the senior managers from the company, a project team will be formed. Thus, employees' creative ideas can be supported and put into practice.

Sexual Harassment Prevention and Grievance Method

Apacer has established the "Workplace Sexual Harassment Grievance and Punitive Measures". We prohibit any sexual harassment behavior to protect employees' rights. The HR Department will be the point of contact for sexual harassment incidents. The incident-reporters can ask to maintain anonymity. In terms of dealing with such incidents, the point of contact will convene a special "sexual harassment grievance handling team" based on the incident, and female representatives shall account for more than 1/2 of the team members. The team will be responsible for investigating and proposing punitive suggestions and the President will make the final decision.

If the sexual harassment incident is found to be true, an oral/written warning, demerits, job transfer, reduction/termination of bonuses will be given based on the severity of the incident. The HR Department or the handling team will refer the victim to a professional institution for psychological counselling or therapy if needed. Furthermore, Apacer also provides gender equality promotions and magazines for our employees in accordance with government policies. No sexual grievance incident has occurred by the end of 2018.

New Employees Interview

In order to better understand the needs of employees and to help new employees blend in the workplace environment, Apacer conducts newcomer employee interviews every year.

Employees can make suggestions on various aspects, such as the workplace environment, company welfare, education and training. The company will also respond to their suggestions and make improvement based on these suggestions. We hope to establish positive and transparent communication channels and workplace atmosphere through face-to-face interviews. In 2018, a total of 29 suggestions were provided by new employees, and the company responded to 29 comments. The response rate is 100%.



Support your ideas - Ideas Garden

To encourage employees to be more creative, Apacer has launched the Ideas Garden project since 2015. Employees can propose creative ideas and actions on the company's Intranet at any time. They can also "like" other people's ideas and leave a comment. Highly feasible creative proposals have more chances to be carried out. We hope to stimulate thoughts among employees and allow for more channels to express their opinions.

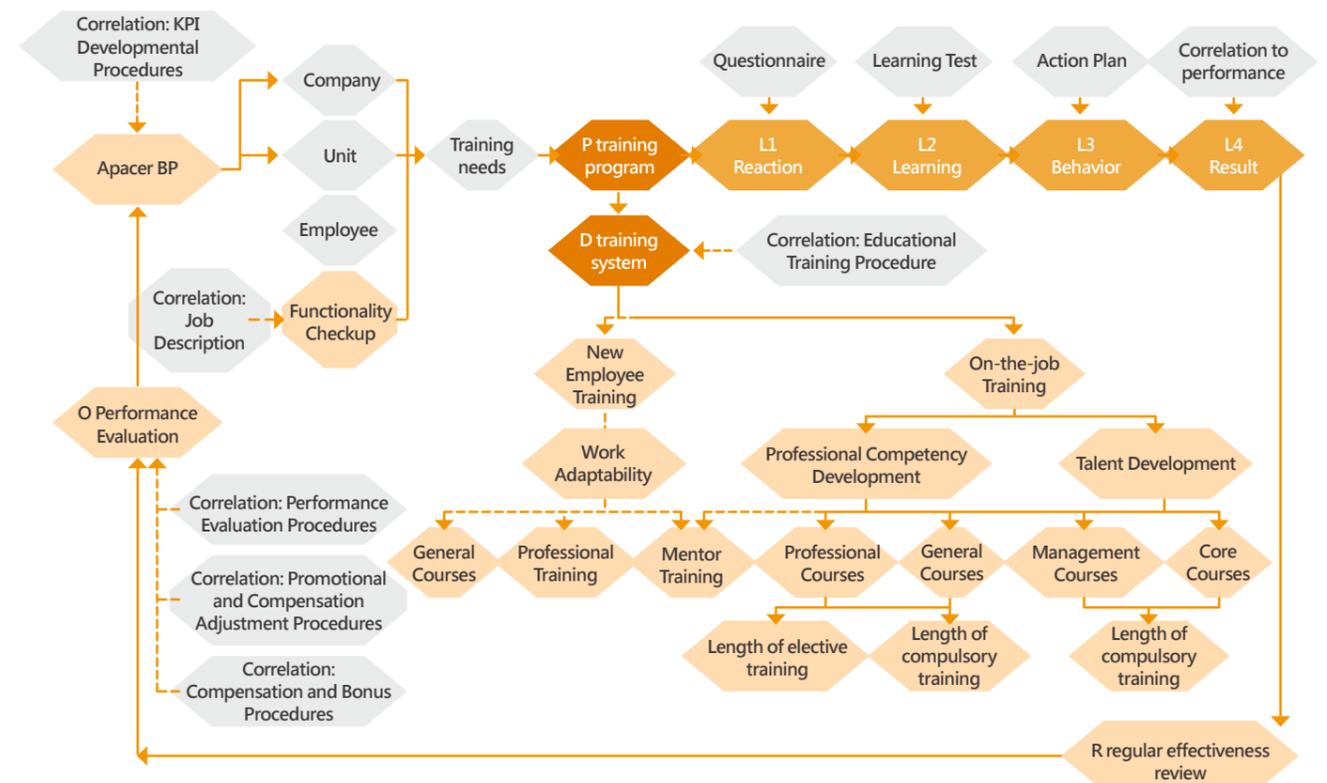


4.5 Material Topic

Talent Cultivation and Development

Educational Training and Learning Blueprint

Apacer has established a blueprint for education and learning, linking the needs of various units and KPIs to design "new employee training" and "on-the-job training" sessions. Besides regularly undertaking learning effectiveness evaluation and review, we also link individual performance with bonuses to systematically enhance employees' capability development, while raising the effectiveness and their willingness to learn.

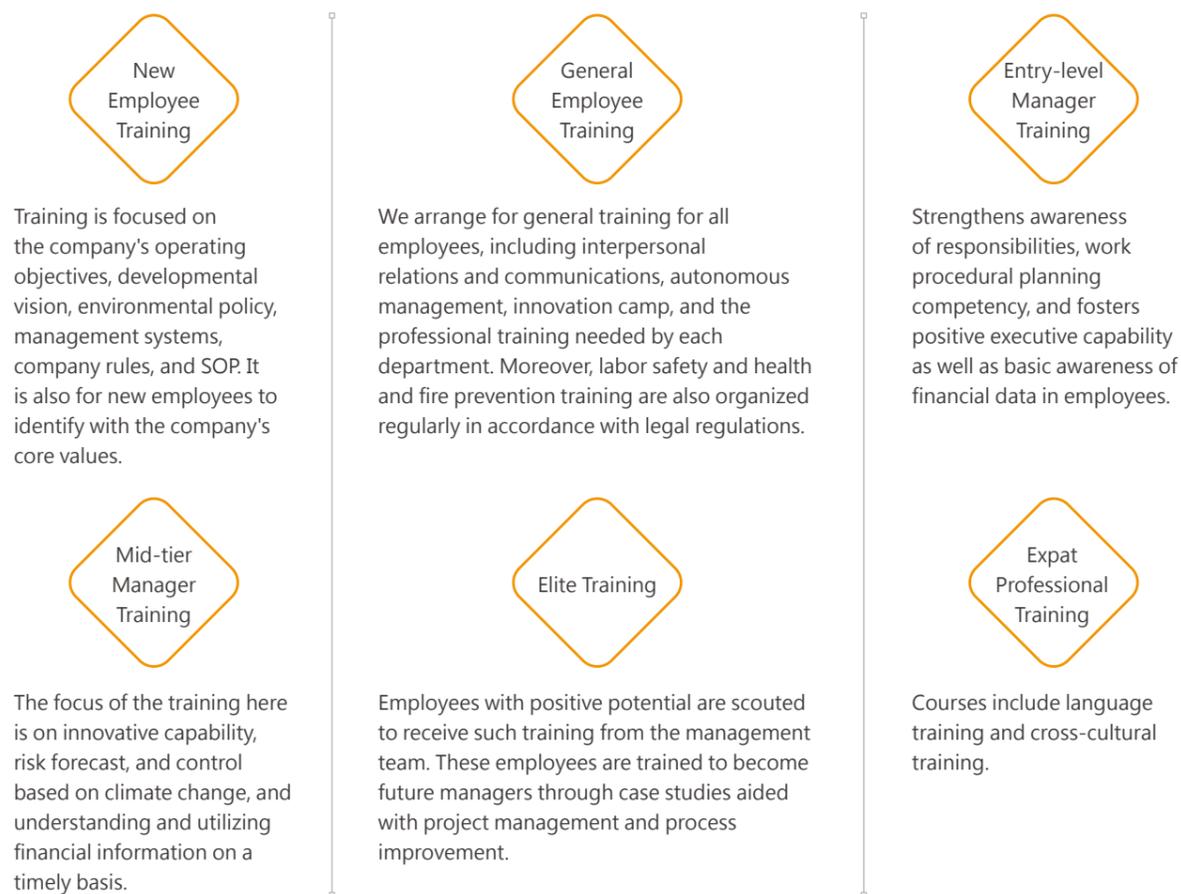


◆ Education and Training Courses

Apacer understands that our employees are the source of our growth and competitiveness. We provide diverse educational training to enhance employees' professional competencies, enabling them to face challenges from the rapidly changing external industry environment.

To provide courses that better meet the needs of employees, HR and Administrative Service Department conduct interview with managers and staff from each department. Also, after-course satisfaction survey is conducted. During annual training survey, managers from each department can propose on needs for education and training. This can help employees achieve the developmental objectives of the company and make sure that the courses fulfill the needs.

The structure of the educational training curriculum is classified into new employee training, general employee training, manager training, and manager candidate training. Apart from hiring external lecturers, we also invite internal experts to serve as lecturers to pass on experience.



Type of Courses	Total participants	Total training hours	Budget proportion	Total expenditure (NT\$)
New Employee Training	330	865	1.7%	2,500,222
General Employee Training	2,520	8,906	57.0%	
Manager Training	96	560	2.8%	
Manager Candidate Training	310	1569	29.4%	
Expat Professional Training	116	841	9.2%	
RBA & Ethical Management Training	438 (Chapter 1)	657 (Chapter 2)	0.0% (Chapter 3)	

Average hours of training received by an employee in 2018

Position	Average hours of training received(male)	Average hours of training received(female)
Management Staff	47.8	55.8
Professional Staff	45.3	36
Technical Staff	1.5	1.5

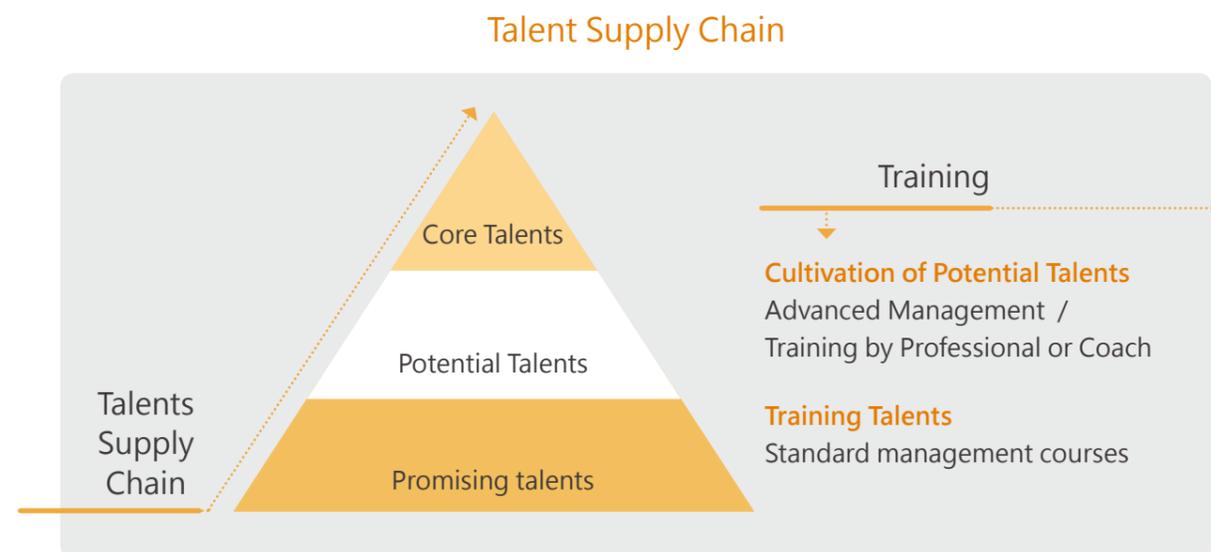
◆ Diverse Learning and Development

In addition to the education and training courses, there are also other ways for employees to enhance their professional skills. Apacer encourages employees to undertake work or departmental rotations, develop multidisciplinary expertise, or hone their skills by taking part in the company's study groups. Employees can participate in certification training courses outside the company, or apply for short-term training courses from professional agencies, training institutions, or colleges. Apacer will fully subsidize the training if the course is necessary for the employee's work.

◆ Cultivation of Potential Talents – Talent Supply Chain

In order to continue to provide and train talents, Apacer has built a "talent supply chain" mechanism in response to market competition and various operational challenges. We have explored promising talents, nurtured them into potential talents, and eventually turned them into long-term core talents of the company. HR Department is responsible for the overall planning and launching of the talent supply chain mechanism. Talents of every stage are recommended by managers from Departments. Managers of BUs are responsible for the initial review and the Strategy and Management Committee composed by senior directors is responsible for the final review.

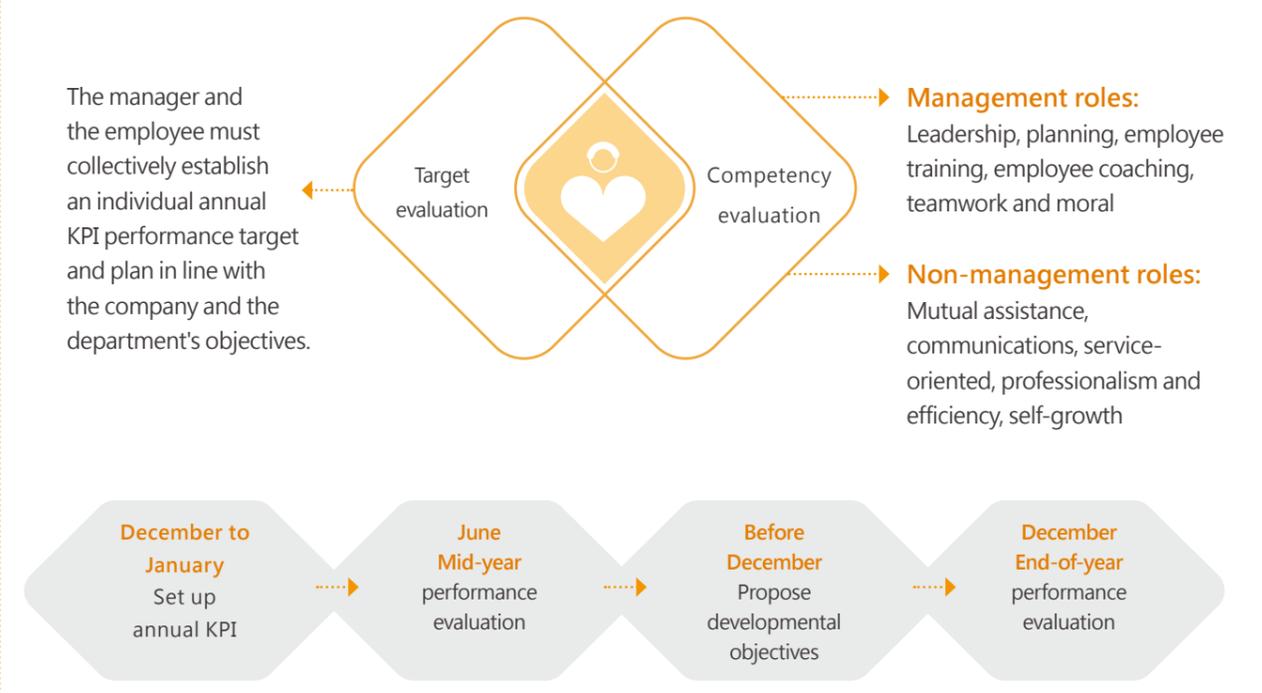
After the list of talents of every stage is confirmed, HR Department provides Coaches according to the needs of talents. Then, HR Department arranges development courses for talents at each stage based on professional assessment. Strategy and Management Committee will assess rotation mechanism in view of the operational strategy. Apacer gives corresponding rewards to talents based on their development.



Performance Evaluation of Indirect Employees

Annual performance evaluation items for indirect employees are classified into "target evaluation" and "competency evaluation." In terms of "target evaluation", managers will interview employees from their departments to jointly establish it before January. The establishment of employee's annual KPI performance shall be in line with the company and the department's objectives. The "competency evaluation" refers to the company's competency and skills chart to assess the employee's performance on core abilities including communication and teamwork, efficiency, self-growth, and leadership. The overall evaluation will be based on these two categories.

The annual performance evaluation will be undertaken in mid-year and at the end of the year to evaluate the work of employees. It will also be used to examine the employees' performance and whether their individual development plan is appropriate.

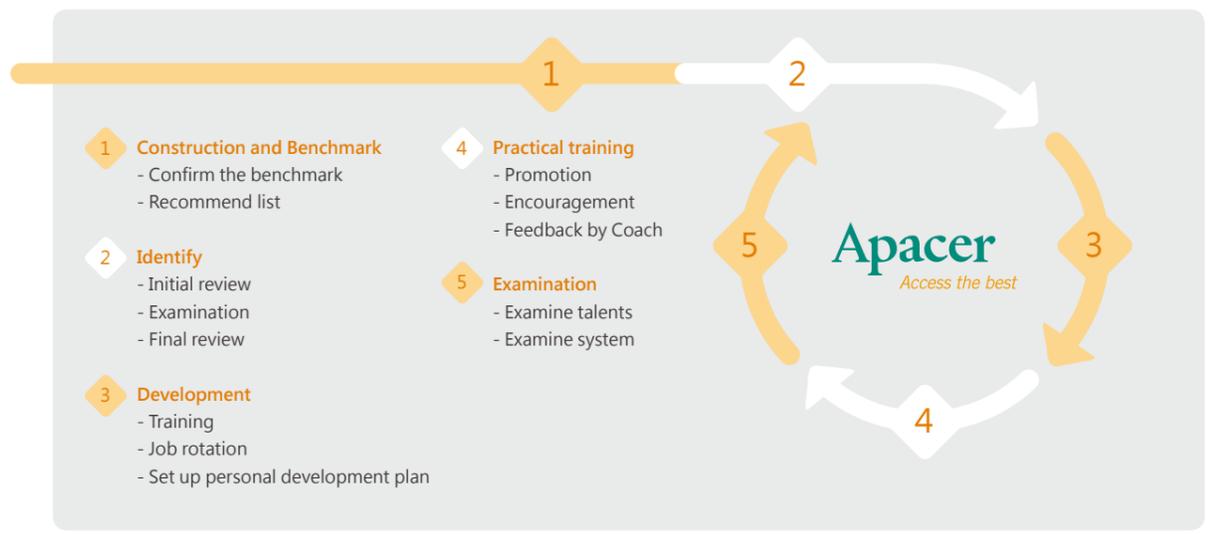


About Employee Performance Evaluation

All Apacer employees, including direct and indirect personnel, are subject to annual performance evaluations. Apacer's incentives and punitive measures as well as a promotional system are also designed based on the results of the performance evaluation, allowing the performance evaluations to be effectively connected to the bonus system and future development plans.

Performance Evaluation of Direct Employees

Performance evaluation of direct employees from production line include five major categories, which are material rules, work conditions, discipline, professional knowledge, and attendance. Performance evaluation will be undertaken every month to evaluate the level of performance, and performance-based bonuses will be awarded to employees to enhance their efficiency and productivity.



Chapter 5 Commitment: A Livable and Synergistic Hometown



Corresponds to the Sustainable Development Goals (SDGs) set by the UN



Vision

We hope to maintain positive interaction with neighborhoods and local groups. We encourage employees to give back to the neighborhoods and together build a wonderful livable homeland. We aim to exert to the greatest, respect local development and create a sustainable and synergistic environment.

Policy and Commitment

We not only support local education through actions but also promote traditional culture and be friendly to the environment of the neighborhoods. In addition, we encourage employees to work with us to expand our influence and to establish long-term cooperation with local groups.

Material Topics

Communications and Giving Back to Our Local Community

Responsibility	In the charge of the Corporate Marketing Department, linking with bonus system
Resources	Manpower: Mainly consist of members from the Corporate Marketing Department, and external agencies are entrusted for the planning and execution of events when appropriate. Budget: Allocate budget based on annual target
Actions	1.Green Cultivation Plan 2.Support local education 3.Promote culture and arts 4.Promote local care event and encourage employees to participate 5.Review if the operations have affected the environment, and make improvements accordingly
Channels of Communication	Communication window for stakeholders: Specialist Hsiao-Mei, Lin (02)2267-8000 Ext. 5519 mei_lin@apacer.com 1F., No. 32, Zhongcheng Rd., Tucheng Dist., New Taipei City 236
Evaluation Method and Results	1.Feedback from stakeholders 2.Event satisfaction survey - 97.6% of people are satisfied with One-Day Volunteer Event
Sustainability Goals	Short term Assist development of the local environment and traditional culture with 2 to 3 projects (planned) in 1 year.
	Mid term Encourage employees to make a contribution to the neighborhoods. We hope that within 3 year, 50% of employees can be actively engaged in these events.
	Long term Aiming at sustainable operation, we hope to keep making profits and giving back to the society in the coming five years. We promise to build a livable and synergistic hometown.

5.1 Material Topic

Local Participation

Upholding its brand's promise of "Access the best", Apacer has invested in sustainable projects, such as "Green Cultivation Plan" and "Supporting Local Education". In addition, we hold a series of CSR activities with NPOs/ NGOs, communities, schools, and our neighborhoods. We hope our employees can get closer to our local ecology, culture and the environment while participating in these projects, gaining physical, mental and even spiritual rewards.

Looking to the future, Apacer will continue to integrate our internal and external resources and upstream and downstream partners to realize an energy-saving, environmentally-friendly, and healthy lifestyle. This is how we will fulfill our corporate social responsibility and achieve sustainable goals for our employees, the company, and the environment.

◆ A Livable Environment – Launch the Green Cultivation Plan

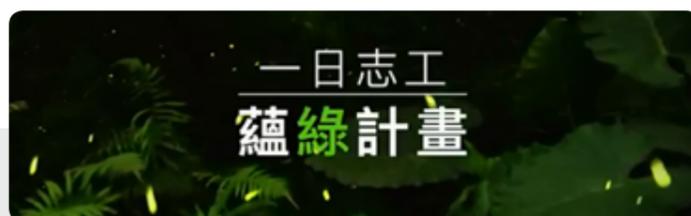


We believe that we can call for action by provoking people's in-depth understanding. With "Green Cultivation Plan", we hope to strengthen our employees' awareness of and thus connection to the ecosystem and natural resources in the local environment. Apacer has commenced the "Green Cultivation Plan" since 2015. In 2016, Apacer organized the one-day volunteer event and called on our employees to contribute toward our local environment.

In 2018, we continued our collaboration with the Tucheng District Office and Tucheng Nature Protection Association to organize the "Apacer One-Day Volunteer" mountain cleanup service. We invited our employees and their families to appreciate the beautiful Tung flowers and fireflies as well as clean up the mountain trails. A lecturer from the "Tucheng Nature Protection Association" was invited to give a speech on fireflies to increase employees' knowledge on ecological protection.

Employees participated in the event found the volunteer activities greatly meaningful and they were willing to participate again. They also gave positive feedback and encouragement to colleagues responsible for planning the event and environment conservation teachers. They looked forward to joining more activities in different forms in the future.

In addition, we have decorated our company with the theme of "Dancing with Fireflies" in combination with Tung flower-shaped designs. By doing so, employees can understand the habits of fireflies through the floor stickers, posters and real-life experiences. It makes the local ecological conservation and mountain cleaning actions even more relevant.



2018 Apacer One-Day Volunteer Event – Video of Green Cultivation Plan



Watch 2018 Apacer One-Day Volunteer Event



◆ Apacer - Results of the Green Cultivation Plan Over the Years

 Empowerment 2015	Month of Vegan Diet for Carbon Reduction , Onsite Diagnostics by Taiwan Energy-Saving Patrol	Five rounds of seminars were held and 218 employees participated. Nearly 60% of the employees stated that "the event increased my motivations to choose a vegetarian diet."
	Green Family Day	A total of 48 employees and their family members attended the event. All participants stated that "the event inspired me to have more energy-saving and environmentally-friendly habits" in the interview.
 Action 2016	Apacer One-Day Volunteer Event	A total of 34 employees and their family members participated. All participants stated that they are "willing to participate in corporate volunteer events in the future" in the interview.
	Apacer One-Day Volunteer Event	A total of 42 employees and their family members participated. Satisfaction rate from all participants is 100%.
 Strong engagement 2017	Carbon Reduction Vegetarian Day	1 session of Stamina Soup and Vegetarian Meal Experiential Workshop was hosted. A total of 60 employees participated.
	Apacer One-Day Volunteer Event	- A total of 42 employees and their family members participated. 97.6% are satisfied with the ecological tour in One-Day Volunteer Event. - We cooperated with the Nature Protection Association for 3 consecutive years to build local network. - With innovative planning, we combined the theme of Tung flowers and fireflies on the exhibition held on first floor, gaining positive feedback.
 Innovative plans 2018	Parent-Children DIY Vegetarian Spring Roll	We arranged the parent-child vegetable spring roll DIY activities to encourage employees to have a healthy diet and healthy life. 45 employees participated.

◆ Apacer assisting the track & field team of Yulin Junior High School to pursue their dream

Apacer upholds our philosophy of giving back to our local community. We have begun sponsoring the track & field team of New Taipei's Municipal Yulin Junior High School to update their equipment since 2015.



Yulin Junior High School expressed their gratitude to Apacer

In recent years, our donation has also expanded to winter break training so that all members of the team can continue to pursue their dreams. Apacer hopes to learn from the experience from sponsoring the track team of Yulin Junior High School to extend our support toward local education and increase our influence toward society.

◆ When Technology Meets the Arts - Warm Memories

Since the technology industry is often stereotyped as cold and utilitarianism-orientated, Apacer aims to create warm memories by cooperating with the arts and culture industry to infuse "soft power" into "hard technology" and break the stereotype.

Through cross-disciplinary cooperation, Apacer hopes to bring more opportunities to young artists in Taiwan. We also convey the core spirit of the brand, encourage everyone to bravely pursue their dreams, and store every piece of warm memory in life.



Apacer sponsored desk calendar to promote the performance troupe of Daguang Elementary School

◆ Thank You Letter from President Yang of Daguang Elementary School

Culture is our roots

This year, we are very lucky to cooperate with Apacer, a forward-looking team. With participants from both southern and northern Taiwan, we worked hand in hand and built a bridge for cultural exchanges within the country and internationally. Together we brought Taiwanese traditional culture to London, England. Students played instruments, performed Din Tao proceedings of "Guanjiang Shou" (Buddhist godly defenders), "pop dance of San Tai Ze" (Electric-Techno Neon Gods) and "Pat Ka Tsiong" (eight exorcist generals). Through the cross-border integration of performances, students became the most dazzling stars on the stage to pass down our culture!

These are good resources for local education and traditional PE classes. They are showcased in performance art and shared in the community as part of social education. When we bring them to the international stage, they serve as international education, cultural exchange and national diplomacy. Therefore, Din Tao is just one of the elements of the children's performances. Performing "Pat Ka Tsiong" and dancing "ballet" share the same meaning. I described it as "Renaissance of the Traditional Taiwanese Din Tao culture" and expect more people to join us. This year, with the assistance of Apacer, we were able to:

1. Replace old props.
2. Pay for face-painting and clothes cleaning.
3. Hire professional photographers and face painters to join us at the England performance for photo shooting and filming.
4. Order towels and table calendars as gifts to promote the performance troupe of Daguang Elementary School, Apacer and Taiwanese traditional "Din Tao" culture.

To pass down the results of our eight years' hard work, we have built alliance with Cheng Gong Junior High School and Kuen Shan Senior High School to form an integration mechanism among elementary school, junior high school and senior high school. Even alumni studying in colleges come back to support us. We have centered on Daguang and formed a big family, with achievements highly praised by Bureau of Cultural Affairs. I hope that Apacer and Daguang continue to move forward, hand in hand.

President Hsiu-Chih Yang
Daguang Elementary School

◆ Donations - Exerting Positive Value and Influence

Apacer believes that donations are not just about money. They can also form connections within the society and solve problems. We hope to make the fullest of each donation and exert positive influence on the society.

Year	Beneficiary	Amount of donation (NT\$)
2015	Employee donations - victims of the Formosa Fun Coast explosion incident via Sunshine Social Welfare Foundation	98,000
	2015 Songshan Cultural and Creative Park - expenses for the Original Festival	100,000
	Supporting sports - the track & field team of New Taipei's Municipal Yulin Junior High School	57,220
2016	New Taipei City Tucheng Nature Protection Association	8,000
	Supporting sports - the track & field team of New Taipei's Municipal Yulin Junior High School	60,000
2017	Zenan Homeless Social Welfare Foundation	8,760
	Eden Social Welfare Foundation	5,100
	Tucheng Nature Protection Association	8,000
	National Chiao Tung University	300,000
	Genesis Social Welfare Foundation	6,621
	Global Views Educational Foundation	230,000
	New Taipei's Municipal Yulin Junior High School	60,000
2018	New Taipei's Municipal Yulin Junior High School	60,000
	Tucheng Nature Protection Association	8,000
	Tainan Municipal Daguang Elementary School	150,000

Year Cross-Disciplinary Cooperation Warm Memory

2016	We held a series of cross-disciplinary activities named "Recall and Dream" with famous illustrator Crystal Huang. Through exhibitions, lectures, social media, and co-branded products, we shared the creative process of Crystal's persistence and the never-give-up spirit to encourage everyone to bravely pursue their dreams and store every piece of warm memory in life.	
2017	We cooperated with Taiwan's original illustrator brand "P714". We launched three co-branded products, including "Fly High", "Companion" and "Support" under the concept of "dream planet" to lead everyone roam on the colorful dream planet, feel the warmth of friendship, and work together to make your dreams come true!	
2018	We cooperated with illustrator brand Ning's to launch co-branded flash drives and hard drives as well as novel flash drives in shape of 3D figurines. With these products full of positive energy, we aim to evoke the courage deep inside people to pursue dreams, make breakthroughs, and become a better version of themselves!	

5.2 Material Topic

Social Care

◆ Pass down memory and share local experience

Apacer focuses on Taiwan's development of local art and culture, and continues to work with young Taiwanese artists to create warm memory.

In fact, we take preservation of traditional culture as one of our missions. Taiwanese temple culture originated from local people's belief. Temple architecture, worshipping rituals and Din Tao (leaders of religious parade) all have their unique meanings. However, at the intersection between old and new generations as well as industrial transformation, some traditional folk arts began to fade off.

Daguang Elementary School, located in Tainan, has established a complete inheritance system from traditional face-painting to Din Tao performances under President Hsiu-Chih Yang's many years of efforts. Through the performances of the student club, they continue this Taiwanese tradition as if to keep a flame ignited and share it to the rest of the world.

We are touched by President Yang's efforts in passing down the traditional culture. And we also hope more people understand and memorize the traditional Din Tao culture. In 2018, we sponsored and produced gifts, such as a desk calendar, reusable bags, reusable coffee sleeves and wipes. This is one of the ways Apacer made contribution to the traditional culture in hopes that folk art and memory can be passed down.



The folk performance troupe of Daguang Elementary School attended Honolulu Festival in Hawaii to perform "Pat Ka Tsiong".



The folk performance troupe of Daguang Elementary School performed in Hawaii.



President Yang of Daguang Elementary School and artists painted on children's faces.

◆ Appendix Global Reporting Initiative (GRI) Standards

The below indicators of this Report are listed within the structure given by the GRI Standards: 2016. As stated on the Declaration for External Assurance, relevant information has been reviewed and audited in accordance with the requirements from the GRI Standards for external auditing.

GRI 102: General Disclosure 2016

Disclosure Item	Description	Referenced Section	Remark	
Organizational Profile	102-1	Name of the organization	1.1 About Apacer	
	102-2	Activities, brands, products and services	1.1 About Apacer	
			1.4 Products and Services	
	102-3	Location of headquarters	1.1 About Apacer	
	102-4	Location of operation	1.1 About Apacer	
	102-5	Ownership and legal form	1.1 About Apacer	
	102-6	Markets served	1.1 About Apacer	
			1.3 Operating Performance	
	102-7	Scale of organization	1.1 About Apacer	
			1.3 Operating Performance	
	102-8	Information on employees and other workers	4.1 Employee Overview	
	102-9	Supply chain	3.1 Sustainable Supplier Management	
	102-10	Significant changes to the organization and its supply chain		No major changes in 2018
102-11	Precautionary principle or approach	1.5 Innovative R&D		
102-12	External initiatives	3.1 Sustainable Supplier Management		
102-13	Membership of associations	1.5 Innovative R&D		
Strategy	102-14	Statement from senior decision-maker	About this Report	
	102-15	Key impacts, risks, and opportunities	About this Report	
Ethics and Integrity	102-16	Values, principles, standards, and norms of behavior	1.2.Ethical Management and Corporate Governance	
Governance	102-18	Governance Structure	1.2.Ethical Management and Corporate Governance	
Stakeholder Engagement	102-40	List of stakeholder groups	SSD: Stakeholder Communication Channels	
	102-41	Collective bargaining agreements	4.3 Employee Benefits and Communications	Apacer has not formed a labor union but holds employment relations conferences every quarter.
	102-42	Identifying and selecting stakeholders	SSD: Materiality Analysis	
	102-43	Approach to stakeholder engagement	SSD: Stakeholder Communication Channels	
	102-44	Key topics and concerns raised	SSD: Stakeholder Communication Channels	
Reporting Practice	102-45	Entities included in the consolidated financial statements	About this Report	
	102-46	Defining report content and topic boundaries	SSD: Materiality Analysis	
	102-47	List of material topics	SSD: Materiality Analysis	
	102-48	Restatements of information		No restatement has occurred in Apacer's previously published Reports.
	102-49	Changes in reporting	SSD: Materiality Analysis	

Disclosure Item	Description	Referenced Section	Remark
Reporting Practice	102-50	Reporting period	About this Report
	102-51	Date of most recent report	About this Report
	102-52	Reporting cycle	About this Report
	102-53	Contacts point for questions regarding the report	About this Report
	102-54	Claims of reporting in accordance with the GRI Standards	About this Report
	102-55	GRI content index	Appendix: Global Reporting Initiative (GRI) Standards
102-56	External assurance	About this Report	

GRI 103: Management Approach 2016

Disclosure Item	Description	Referenced Section	Remark
Management Approach	103-1	Explanation of the material topic and its boundary	SSD: Materiality Analysis

GRI 200: Topic-specific Standards - Economic topics 2016

Disclosure Item	Description	Referenced Section	Remark	
Material topic: Economic Performance and Innovation and R&D				
Economic Performance	201-1	Direct economic value generated and distributed	1.3 Operating Performance	
	201-2	Financial implications and other risks and opportunities due to climate changes	1.2 Ethical Management and Corporate Governance	
	201-3	Defined benefit plan obligations and other retirement plans	4.3 Employee Benefits and Communications	
Management Approach	103-2	The management approach and its components	Chapter 1 Persistence: Creating Trust in Brand Value	
	103-3	Evaluation of the management approach	Chapter 1 Persistence: Creating Trust in Brand Value	
Market Presence	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	4.3 Employee Benefits and Communications	
	202-2	Proportion of senior management hired from the local community	4.1 Employee Overview	
Indirect Economic Impact	203-1	Infrastructure investments and services supported	5.1 Local Participation 5.2 Social Care	
Procurement Practices	204-1	Proportion of spending on local suppliers	3.1 Sustainable Supplier Management	
Material topic: Ethical Management				
Anti-corruption	205-2	Communication and training about anti-corruption policies and procedures	1.2.Ethical Management and Corporate Governance	
	205-3	Confirmed incidents of corruption and actions taken		No corruption incidents occurred in Apacer's operating locations in 2018.
Management Approach	103-2	The management approach and its components	Chapter 1 Persistence: Creating Trust in Brand Value	
	103-3	Evaluation of the management approach	Chapter 1 Persistence: Creating Trust in Brand Value	
Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior		No relevant incidents occurred in 2018.

GRI 300: Topic-specific Standards - Environmental topics 2016

Disclosure Item	Description	Referenced Section	Remark
Material topic: Green Products and Services			
Energy	302-1	Energy consumption within the organization	2.2 Energy and Resource Management
	302-3	Energy intensity	2.2 Energy and Resource Management
	302-4	Reduction of energy consumption	2.2 Energy and Resource Management
Management Approach	103-2	The management approach and its components	Chapter 2 Persistence: Green and Eco-friendly Manufacture Process
	103-3	Evaluation of the management approach	Chapter 2 Persistence: Green and Eco-friendly Manufacture Process
Water	303-1	Water withdrawal by source	2.2 Energy and Resource Management
Emissions	305-1	Direct (Scope 1) GHG emissions	2.2 Energy and Resource Management
	305-2	Energy indirect (Scope 2) GHG emissions	2.2 Energy and Resource Management
	305-4	GHG emissions intensity	2.2 Energy and Resource Management
Effluents and Waste	306-2	Waste by type and disposal method	2.2 Energy and Resource Management
	306-3	Significant spills	No relevant incidents occurred in 2018.
Material topic: in compliance with Environmental law			
Environmental Compliance	307-1	Non-compliance with environmental laws and regulations	2.1 Commitment to the Environment and Legal Compliance No relevant incidents occurred in 2018.
Management Approach	103-2	The management approach and its components	Chapter 2 Persistence: Green and Eco-friendly Manufacture Process
	103-3	Evaluation of the management approach	Chapter 2 Persistence: Green and Eco-friendly Manufacture Process
Material topic: Hazardous Substance Management and Supplier Environmental Assessment			
Supplier Environmental Assessment	308-1	New suppliers that were screened using environmental criteria	3.1 Sustainable Supplier Management
Management Approach	103-2	The management approach and its components	Chapter 3 Commitment: Improve Sustainability with Partners
	103-3	Evaluation of the management approach	Chapter 3 Commitment: Improve Sustainability with Partners

GRI 400: Topic-specific Standards-- Social topics 2016

Disclosure Item	Description	Referenced Section	Remark
Material topic: Employee Benefits			
Employment	401-1	New employee hires and employee turnover	4.1 Employee Overview
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	4.3 Employee Benefits and Communications
	401-3	Parental leave	4.3 Employee Benefits and Communications
Management Approach	103-2	The management approach and its components	Chapter 4 Commitment: Friendly and Healthy Workplace
	103-3	Evaluation of the management approach	Chapter 4 Commitment: Friendly and Healthy Workplace
Material topic: Occupational Health and Safety			
Occupational Safety and Health	403-1	Workers representation in formal joint management-worker health and safety committees	4.2 Employee Safety and Health

Disclosure Item	Description	Referenced Section	Remark
Occupational Safety and Health	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	4.2 Employee Safety and Health
	403-3	Workers with high incidence or high risk of diseases related to their occupation	4.2 Employee Safety and Health
Management Approach	103-2	The management approach and its components	Chapter 4 Commitment: Friendly and Healthy Workplace
	103-3	Evaluation of the management approach	Chapter 4 Commitment: Friendly and Healthy Workplace
Material topic: Talent Cultivation			
Training and Education	404-1	Average hours of training per year per employee	4.5 Talent Cultivation and Development
	404-3	Programs for upgrading employee skills and transition assistance programs performance and career development reviews	4.5 Talent Cultivation and Development In 2018, all employees are reviewed.
Management Approach	103-2	The management approach and its components	Chapter 4 Commitment: Friendly and Healthy Workplace
	103-3	Evaluation of the management approach	Chapter 4 Commitment: Friendly and Healthy Workplace
Diversity of Employees and Equal Opportunity	405-1	Diversity of governance bodies and employees	1.2 Ethical Management and Corporate Governance 4.1 Employee Overview
Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	4.3 Employee Benefits and Communications
Material topic: Communications and Giving Back to Our Local Community			
Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	5.1 Local Participation
Management Approach	103-2	The management approach and its components	Chapter 5 Commitment: A Livable and Synergistic Hometown
	103-3	Evaluation of the management approach	Chapter 5 Commitment: A Livable and Synergistic Hometown
Public Policy	415-1	Political contributions	No political donation expenditures were made in 2018.
Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories	1.4 Products and Services 3.1 Sustainable Supplier Management
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	No political donation expenditures were made in 2018.
Marketing and Labeling	417-1	Requirements for product and service information and labeling	1.4 Products and Services
	417-2	Incidents of non-compliance concerning product and service information and labeling	3.1 Sustainable Supplier Management No relevant incidents occurred in 2018.
	417-3	Incidents of non-compliance concerning marketing communications	No relevant incidents occurred in 2018.
Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	No relevant incidents occurred in 2018.
Socioeconomic Compliance	419-1	Non-compliance with laws and regulations in the social and economic area	No relevant incidents occurred in 2018.

INDEPENDENT ASSURANCE OPINION STATEMENT

Apacer Technology Inc. 2018 Corporate Social Responsibility Report

The British Standards Institution is independent to Apacer Technology Inc. (hereafter referred to as Apacer in this statement) and has no financial interest in the operation of Apacer 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 Apacer 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 Apacer. 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 Apacer only.

Scope

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

1. The assurance scope is consistent with the description of Apacer Technology Inc. 2018 Corporate Social Responsibility Report.
2. The evaluation of the nature and extent of the Apacer'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 Apacer 2018 Corporate Social Responsibility Report provides a fair view of the Apacer CSR programmes and performances during 2018. 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 Apacer and the sample taken. We believe that the 2018 economic, social and environmental performance information are fairly represented. The CSR performance information disclosed in the report demonstrate Apacer'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 Apacer'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 review of issues raised by external parties that could be relevant to Apacer'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.
- 7 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 Apacer 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 Apacer's inclusivity issues.

Materiality

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

Responsiveness

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

Impact

Apacer has Identified and fairly represented impacts that were measured and disclosed in probably balanced and effective way. Apacer 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 Apacer's impact issues.

GRI Sustainability Reporting Standards (GRI Standards)

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

Competency and Independence

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

For and on behalf of BSI:



Peter Pu
Managing Director BSI Taiwan
2019-06-12



AA1000
Licensed Assurance Provider
000-4

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

BSI Taiwan is a subsidiary of British Standards Institution.

Apacer
Access the best

