Create and Share Warm Memories

Apacer

Technology Inc.

2020

Sustainability Report

Table of Contents

About this Report

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 the 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. At the same time, 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 AccountAbility Principal 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, 2020, to December 31, 2020 (Apacer is not a company regulated by the FSC, thus the report was renamed as Sustainability Report in advance this year). This is the eighth CSR Report that Apacer has published, and the date of publication for the most recent report was in August 2020. Apacer publishes CSR Reports annually and discloses the 2020 Sustainability Report on the company website to continue communicating with external parties on Apacer's sustainable actions. The scope of information disclosure for this Report focuses on Apacer's operating headquarters and production sites in Taiwan. Overseas sites are not included. 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, as well as enhance performance compatibility and report credibility, this Report has commissioned the independent and credible British Standards Institution (BSI) for external assurance in accordance with AA1000 AS (2008), 2018 Addendum for the AA1000AS v3: 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
Mei Lin, Senior Project Supervisor
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 President**

C.K. Chang, President

Despite the slight adverse effect on Apacer's operational effectiveness, we are still battling against adversity resulting from COVID-19. In addition to providing timely assistance to our partners and stakeholders, we echoed the Sustainable Development Goals (SDGs) of the United Nations and committed to the core value of "Becoming Better Partners".

Reviewing the key performance in the past year, the three major aspects of environmental, social and governance (ESG) are summarized as follows:

Continuously Development of Environmental Sustainability

Apacer pledges to contribute its corporate efforts to consistently promote environmental sustainability, with top priority on energy saving and carbon reduction. Therefore, in 2020, Apacer will completely replace the air conditioning equipment in its office plants from air-cooled to water-cooled air conditioners, which is expected to reduce energy use by about 30%. Apacer hasalso introduced QC 080000:2017 Harmful Substance Process Management System and will implement it in 2020 after internal planning with the revision. In addition, Apacer will hold regular supplier conference to promote the RoHS requirements and HSF management regulations for suppliers, conducting RBA requirements for first-tier suppliers, and provide guidance to suppliers for improvement. Apacer also advocates to its supplier partners to emphasize labor rights, environmental protection, honest and transparent management, making a contribution to the industry chain by promoting the importance of environmental sustainability issues with its partners to achieve multiplier benefits.

Continuously Promoting Social Care

Apacer not only takes care of its employees, but also attaches great importance to the local community, customers and other stakeholders. We continue to promote the "Apacer A$^+$ EAPs (Employee Assistance Programs)" for employees, providing a comprehensive benefits system and incentives to maintain a balance among work, family, and health; and planning Apacer's education and training system to retain talents and accumulate a positive employer reputation by creating quality promotion programs. For the local communities, Apacer sponsors art communities to promote and inherit traditional skills, echoing the spirit of Apacer's CSR: "Create and Share, Memory with Temperature", an endeavor to create sustainable flame.Customer satisfaction surveys are conducted by Apacer in six areas, including service, quality, delivery, price, design, and environmental protection, utilizing customer feedback as a reference for improvement, not only to meet customer needs, but also to create additional value for both parties.

Continuously Strengthening Corporate Governance

While companies pursue profit and growth, it is necessary to comply with regulations to ensure sustainable operation. Apacer (8271) has been ranked in the top 5% of corporate governance for two consecutive years, which shows our efforts in this regard are evident to all. In the memory module industry, which is subject to severe shocks, how to reduce the impact of external environmental changes on the company's operation and achieve sustainable operation is a topic that has not stopped since its establishment. Apacer adopts a dual-track balancing strategy for both industrial solutions and consumer product lines to balance the overall operating efficiency in a timely manner when prices fluctuate. Therefore, despite the impact of the COVID-19 last year, the gross margin still reached double-digit compared to 2019, which is a demonstration of this strategy. Apacer has more than 20 years of experience in digital storage research and development. In addition to its existing operation areas, Apacer is also actively laying out new market areas along with the trend wave, expecting to become the energy for the future growth of the enterprise, enabling its medium- and long-term operation goals to not only pursue profitability but also respond positively to the needs of stakeholders.

Apacer has been promoting CSR (Corporate Social Responsibility) for many years, and the CSR report has won the "Gold Award" in the TCSA Taiwan Corporate Sustainability Report Award - IT & IC manufacturing category for three consecutive years. I would like to thank all of our employees, suppliers and partners for their assistance during this period of time, which has helped Apacer to achieve such a remarkable result. In view of the increasing international emphasis on ESG (Environment, Social, Governance and Governance), Apacer has renamed the report to "Sustainability Report" this year, which not only conforms to the trend, but also hopes to join hands with our partners with the strength of the enterprise itself in the pursuit of sustainable co-benefits, and "Becoming" a "Better Partners" for all stakeholders.

Sustainability Strategy Development (SSD)

● A blueprint of sustainability strategies

Originally "Reliability and Innovation", Apacer's brand core value was transformed to "Becoming Better Partners," which means: "Delivering on Our Promise, Constant Improvement and Mutually Beneficial." In addition, the Company has planned long-term business strategies to respond to the United Nations Sustainable Development Goals (SDGs) with practical actions.

做好米

Becoming Better Partners

Delivering on Our Promise

Based on transparency and honesty, we aim to pursue stable business operations, respond to local needs, and pass down Taiwanese culture.

United Nations Sustainable Development Goals	8 Decent work and economic growth	11 Sustainable cities and communities	16 Peace, justice, and strong institutions
Target Items	8.2	11.6	16.5 / 16.6
Material Issues	R&D Innovation	Communications and Giving Back to the Local Community	Ethical Management
Apacer's Commitment	With our core in digital storage, Apacer is committed to training and recruiting talent. Apacer hopes to translate R&D innovation into profit, drive R&D growth, and maintain a sustainable business operation.	Apacer continues to strengthen corporate governance to enhance information transparency and respect the rights of shareholders and stakeholders.	With sustainable management as the set goal, Apacer expects to make profit within five years and give back to the local community. Apacer is devoted to creating a synergistic hometown.
Operation 2020	Company management: -Deepening the culture of sustainable company management -Establish internal auditing and reporting system -Protecting shareholders' rights and equality -To enhance the functionality of the board of directors to promote sustainable corporate value -Enhance information transparency to promote sustainable management	R&D Innovation: -Provide R&D and customization services -Professional software, hardware, firmware, industrial design, and institutional design teams -Establishing five major patents, themes and regularly reviewing progress -Clearly establish the relevant incentives to encourage patent commercialization	

Constant Improvement

Comply with regul-ations and continue to reduce the environ-mental impact of our products and manufacturing processes in working towards a green enterprise.

	6 Clean water and sanitation	12 Responsible consumption and production	13 Climate action
United Nations Sustainable Development Goals			
Target Items	6.3	12.2	13.3
Material Issues	Green Products and Services	Hazardous Substance Management	Green Products and Services
Apacer's Commitment	Lean manufacturing process helps to reduce power consumption. We are also working on reducing the environmental pollution in production operations by enhancing power-saving designs to create a smart green factory.	We are devoted to complying with RBA regulations and implementing HSF management standards for suppliers. Moreover, we hold a supplier conference every year to promote smart green management.	We promote green product design, implement internal environmental education, and internalize environmental protection concept into the Company's value chain to build a smart green factory.

Operation 2020

Environmental sustainability and green products:
- Introduction of QC 080000:2017 Hazardous Substance Process Management System to implement supplier's Hazardous Substance Free (HSF) management standard
- Annual calculation of greenhouse gas emissions, according to ISO 14064-1:2006 standard

- Green product design and process energy saving improvement
- Implement employee education and training on environmental protection
- Quarterly review of electricity consumption at CSR committee quarterly meetings

Mutually Beneficial

Create a friendly workplace, manage a sustainable supply chain, and grow together with our business partners.

	3 Good health and well-being	4 Quality education	5 Gender equality	17 Partnerships for The Goals
United Nations Sustainable Development Goals				
Target Items	3.9	4.4	5.c.	17.16
Material Issues	Occupational Health and Safety	Employee Benefits, Talent Cultivation	Employee Benefits	Sustainable Supplier Management, Customer Relationship Management
Apacer's Commitment	We build a sound work-place in accordance with occupational safety regulations and obtain certification to establish a trustworthy employer brand.	We review training and development based on five phases of PDDRO (Plan, Design, Do, Review, and Outcome) to create a trustworthy employer brand.	Combining A$^+$ Health, A$^+$ Family, A$^+$ Work with CSR & RBA as the vertical axis; food, clothing, housing, accessibility, education, recreation and exercise as the horizontal axis, we provide 28-program A$^+$ EAEP (Employee Assistance Programs) for our employees, thereby creating a trustworthy employer brand.	We update the customer service process, establish a global after-sales service system, and optimize product customization services to become a value-generating business partner for our customers.

Operation 2020

Staff Caring and Training:
- Disaster prevention measures health education programs
- Automatic inspection mechanism
- Apacer A$^+$ EAPs Employee Assistance Program
- Apacer's dual-track talent development system
- Apacer's education and training system (Apacer Academy, Learning Blueprint, Learning Map)

- Employee Health Management

- Apacer's talent supply chain structure

Supplier Sustainability Management:
- Suppliers signing environmental protection pledges
- Suppliers provide raw material test reports and complete substance surveys to ensure that raw materials comply with international hazardous substance-free (HSF) regulations
- Organize annual supplier meetings

Key CSR Performance in 2020

Economic and corporate governance

The annual revenue in 2020 reached NT$ **7.15** billion, with gross margin increased to **15.7**%

In 2020, Apacer ranked top **5**% (top 45 companies) in the sixth Corporate Governance Evaluation

Apacer ranked No. **35** in the Best Global Taiwan Brands and was listed as one of the "Emerging Brands" for 4 consecutive years.

Apacer was honored with the Taiwan Excellence Awards for **12** consecutive years. As of now, **54** of our products have received the award.

Environmental

All products are lead-free.

All raw materials comply with EU RoHS standards.

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

Apacer renewed water-cooled air conditioners to save approximately **30**% of electricity.

Social

- In 2020, Apacer will continue to promote the "Corporate Employment Sports Instructor" and introduce "Exerciese Day" to encourage employees to walk 4,000 steps a day to create a healthy workplace.

- The 2019 CSR Report was awarded the "Gold Award" in the category of Sustainability Report - IT & IC manufacturing category in the TCSA Taiwan Corporate Sustainability Awards.

- Promoted the **Apacer A⁺EAPs** employee Assistance **Programs** to plan various benefits activities in three major areas: A⁺ Health, A⁺ Family, and A⁺ Work.

- Sponsored and supported the Tainan City Daguang Elementary School for three consecutive years to support the development of local traditional culture and to preserve the "skills" and "memories" of Taiwan.

- Participate in the "Do One Thing for Tamsui River" initiative to encourage colleagues to conserve water and friendly environment.

Supplier management

- By 2020, 100% of qualified suppliers will reply to the RBA statement.

- By 2020, 100% of qualified suppliers will have signed the "No Conflict Minerals Pledge" or provided the original supplier with a statement of no conflict minerals.

- Establish a supplier sustainability management system and include ESG-oriented aspects in the supplier selection, evaluation and grading, auditing, counseling and commendation system to implement the spirit of sustainability.

● CSR Internal Management Measures

CSR Committee – Organizational Structure

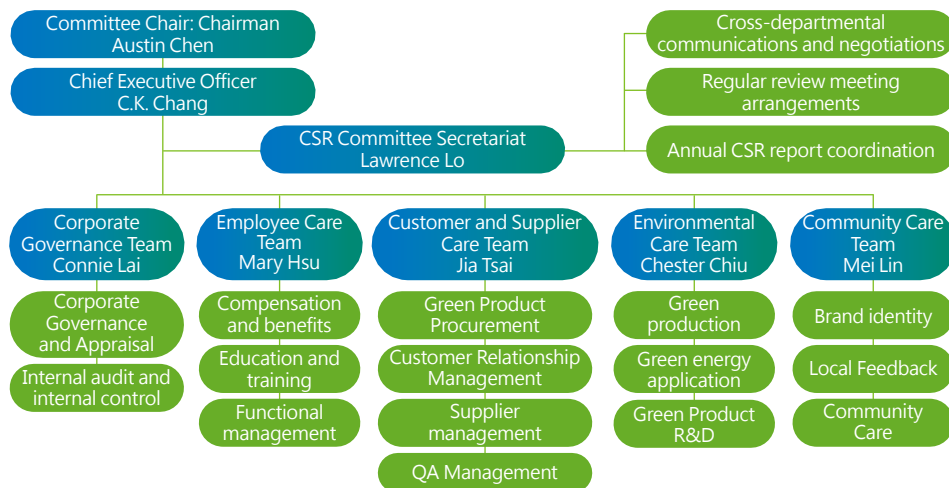Apacer integrates sustainability into its business operations. We established a CSR Committee that is chaired by our chairman, while the President serves as the Head Secretary. Based on the Company's overall operational objectives, the CSR Committee establishes the overall direction of approach for Apacer's 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 as the heads of each team. Together with dedicated personnel, they integrate CSR objectives into daily businesses and sustainable development of each department.

CSR Committee – Organizational Structure

Committee Chair: Chairman Austin Chen
Chief Executive Officer C.K. Chang
CSR Committee Secretariat Lawrence Lo

- Cross-departmental communications and negotiations
- Regular review meeting arrangements
- Annual CSR report coordination

Corporate Governance Team Connie Lai
- Corporate Governance and Appraisal
- Internal audit and internal control

Employee Care Team Mary Hsu
- Compensation and benefits
- Education and training
- Functional management

Customer and Supplier Care Team Jia Tsai
- Green Product Procurement
- Customer Relationship Management
- Supplier management
- QA Management

Environmental Care Team Chester Chiu
- Green production
- Green energy application
- Green Product R&D

Community Care Team Mei Lin
- Brand identity
- Local Feedback
- Community Care

● Apacer's CSR Milestones

2015 — Established CSR Committee and set up organizational division of labor to implement CSR; acquired ISO 14001, QC080000, ISO 50001 certifications.

2016 — Promoted Apacer One Day Volunteering acquired ISO 14001 2015 new version certification.

2017 — Joined the Responsible Business Alliance (RBA) and received silver certification; the CSR report received the TCSA Taiwan Sustainability Report Award - Silver Award for the first time in 2016.

2018 — Continued to respond to the United Nations Sustainable Development Goals (SDGs) with sustainable actions.

2019 — Set up a sustainability strategy in line with the brand's core value "Becoming Better Partners".

2020 — Received ISO 45001 certification and RBA Silver certification for the second time.

2021 — In response to the international trend, the CSR Committee was restructured to incorporate more cross-departmental cooperation to enhance operational performance.

Stakeholder Engagement
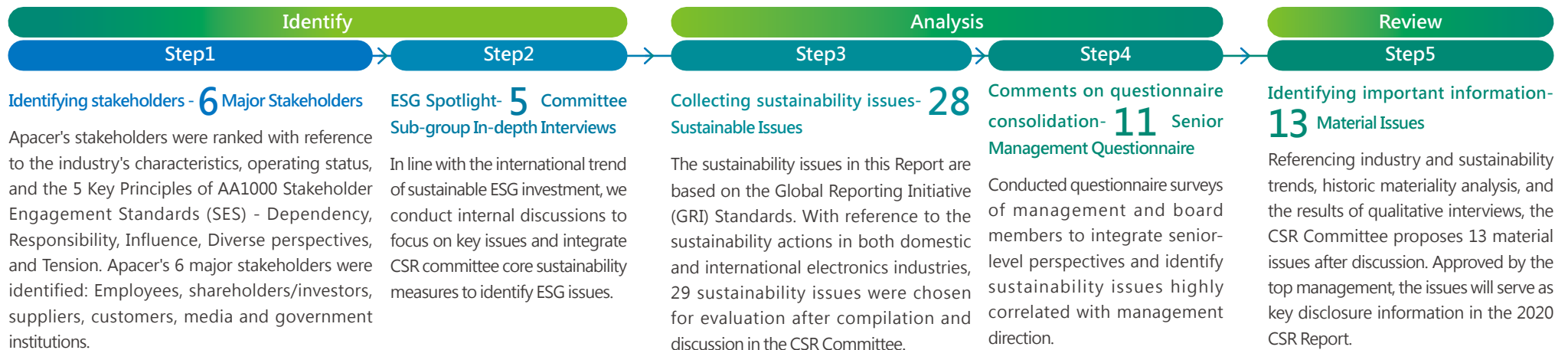
● Stakeholders'communication channels and issues

Stakeholder	The importance and meaning for Apacer	Achievement of communication	Channels and frequency of communications	Issues of concern	Apacer's response
Employee	Employees are Apacer's most valuable stakeholders. The creativity and high retention rate of employees are important foundations for Apacer to maintain its leading position in the industry.	-Convened 4 Occupational Safety Meetings -Convened 4 labor-management meetings -22 opinions from new employees in 2020, all received and adjusted -No employee grievances in 2020 -No employee injury resulting in property loss in 2020	**Quarterly** -Regularly hold Labor-Management Conference -Regularly convene an Employee Benefits Committee meeting -Occupational Health and Safety Committee **Irregular** -Orientation training -Promote the Code of Conduct **At any time** -An internal employee grievance channel	-Employee benefits -Occupational health and safety -Talent cultivation	-Launch the Apacer A$^+$ EAPs (Employee Assistance Programs) -Reorganize the organizational structure, build Apacer Academy, and develop a dual-track talent system
Client	We develop new products and services based on customers' needs to provide the best product experience. Customers'requirements on the environment and social responsibilities prompt Apacer to continuously improve its own regulations.	-Satisfaction survey scored 85 points, annual improvement for satisfaction survey	**Quarterly** -Regular business reviews with key customers -Customer satisfaction survey and improvement measures **Irregular** -Monitor customers' requirements and product status by CRM system	-R&D innovation -Customer relations management	-We optimize after-sales services through system integration. We also pay close attention to customers' needs and improve process capability. With customer satisfaction survey, we improve deficiencies
Shareholders / Investors	The capital investment represents the trust and support of shareholders/investors to the Company, enabling Apacer to continue to innovate toward sustainable operations.	-35 telephone calls from shareholders in 2020, with no significant issues -Held 2 public seminars with 50 attendees	**Annually** -Shareholders' Meeting -Investor Conferenc	-Ethical management -R&D innovation	-Hold Shareholders' Meeting -Hold Investor Conference -Information transparency (Market Observation Post System and official website) -Strengthen the information disclosure in Mandarin and English on the official website
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.	-61 suppliers participated in the 2020 Supplier Conference -All RBA declarations signed by suppliers have been received	**Annually** -Convene a Supplier Conference **Quarterly, every six months or every year** -Supplier coaching and auditing **Irregular** -AGP (Apacer Green Product Web System) Supplier Platform -Uppliers are required to sign the Declaration on Environmental Protection	-Hazardous substance management -Green products and services	-Carry out supplier evaluation (existing system coupled with RBA audit), hold Supplier Conference and coach suppliers -In compliance with ISO 9001 and QC 080000

Stakeholder	The importance and meaning for Apacer	Achievement of communication	Channels and frequency of communications		Issues of concern	Apacer's response
Media	Media reports influence Apacer's image and the public's opinion. We convey our brand image through public relations management and communication with the media.	-A total of 26 press releases were issued, with a total of 384 media exposures -Ranked in the top 35 best international brands in Taiwan in 2020	Annually	-Media gathering	-R&D innovation -Employee benefits	-Continue to encourage the development of patents -Continue to provide brand/product information -Continue to maintain media relations
			Irregular	-Press release -Press conference -Interview -Product review		
Government Institutions	Global sustainability trends and government regulations are our ongoing focus, allowing us to better plan blueprints and strategies for corporate sustainability.	-Top 5% of the 6th Corporate Governance Rating -500 hours of internal ethical training	Annually	-Disclosing and reporting on Market Observation Post Systemc	-Ethical management -Occupational health and safety	-Corporate information is published on Market Observation Post System and official websites based on its importance -Internal promotion of compliance
			Irregular	-Participate in meetings and advocacy programs promoting questionnaire held by competent authorities		
			At any time	-Company website		

Materiality Analysis

● Materiality Analysis Methods and Procedures

To allow information disclosure to better meet the expectations of stakeholders, · In 2020, we adopted the interview approach after identifying stakeholders, and based on the CSR committee, we analyzed and examined the situation in depth by interviewing each group of committee. As the basis for compiling the report, Apacer provides provides stakeholders with a clear understanding of Apacer's various sustainability actions regarding governance, environmental protection, and contributions to society.

Identify		Analysis		Review
Step1	Step2	Step3	Step4	Step5

Identifying stakeholders - 6 Major Stakeholders

Apacer's stakeholders were ranked with reference to the industry's characteristics, operating status, and the 5 Key Principles of AA1000 Stakeholder Engagement Standards (SES) - Dependency, Responsibility, Influence, Diverse perspectives, and Tension. Apacer's 6 major stakeholders were identified: Employees, shareholders/investors, suppliers, customers, media and government institutions.

ESG Spotlight- 5 Committee Sub-group In-depth Interviews

In line with the international trend of sustainable ESG investment, we conduct internal discussions to focus on key issues and integrate CSR committee core sustainability measures to identify ESG issues.

Collecting sustainability issues- 28 Sustainable Issues

The sustainability issues in this Report are based on the Global Reporting Initiative (GRI) Standards. With reference to the sustainability actions in both domestic and international electronics industries, 29 sustainability issues were chosen for evaluation after compilation and discussion in the CSR Committee.

Comments on questionnaire consolidation- 11 Senior Management Questionnaire

Conducted questionnaire surveys of management and board members to integrate senior-level perspectives and identify sustainability issues highly correlated with management direction.

Identifying important information- 13 Material Issues

Referencing industry and sustainability trends, historic materiality analysis, and the results of qualitative interviews, the CSR Committee proposes 13 material issues after discussion. Approved by the top management, the issues will serve as key disclosure information in the 2020 CSR Report.
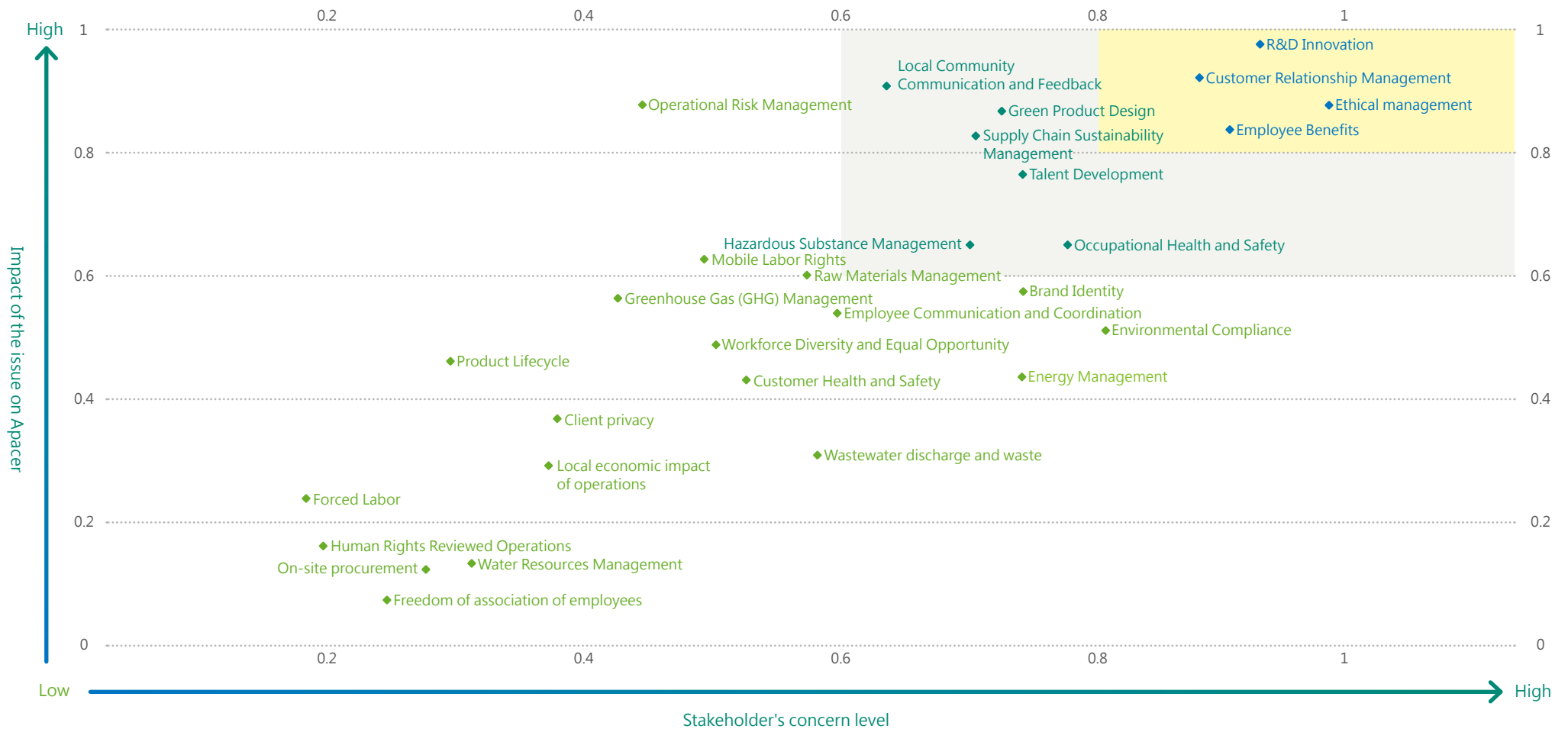
● Materiality Analysis Matrix

This year's material analysis adopts qualitative interviews with CSR Committee to understand the level of concern of stakeholders and top management regarding sustainability issues and the impact of issues on the Company. 13 material issues were deemed as key disclosure information for this year's Report.

Highly significant issues

Moderately significant issues

High ↑ — Impact of the issue on Apacer

- ◆ R&D Innovation
- Local Community Communication and Feedback
- ◆ Customer Relationship Management
- ◆ Operational Risk Management
- ◆ Green Product Design
- ◆ Ethical management
- ◆ Supply Chain Sustainability Management
- ◆ Employee Benefits
- ◆ Talent Development
- Hazardous Substance Management ◆
- ◆ Occupational Health and Safety
- ◆ Mobile Labor Rights
- ◆ Raw Materials Management
- ◆ Brand Identity
- ◆ Greenhouse Gas (GHG) Management
- ◆ Employee Communication and Coordination
- ◆ Environmental Compliance
- ◆ Workforce Diversity and Equal Opportunity
- ◆ Product Lifecycle
- ◆ Energy Management
- ◆ Customer Health and Safety
- ◆ Client privacy
- ◆ Wastewater discharge and waste
- ◆ Local economic impact of operations
- ◆ Forced Labor
- ◆ Human Rights Reviewed Operations
- On-site procurement ◆
- ◆ Water Resources Management
- ◆ Freedom of association of employees

Low → High

Stakeholder's concern level

List of Material Issues

Issue Aspect	Material Issues	Material Topics	Importance to Apacer Technology Co., Ltd.	Corresponding Chapter	Page Number
Economic	R&D and Innovation	GRI 201 Economic performance	In face of the fast-changing industry, Apacer must maintain R&D acumen at all times to earn trust from customers with innovative products and services.	1.4 Innovative R&D	P.35
	Corporate Governance	GRI 205 Anti-corruption	Apacer adheres to laws and regulations, ensures open and transparent information, operates the business with integrity, and is accountable to all stakeholders.	1.2 Ethical Management and Corporate Governance	P.23
	Brand Identity	-	Maintaining a consistent and positive brand identity helps to maintain customer/supplier relationships.	1.1 About Apacer	P.19
	Operational Risk Management	-	Due to the rapid changes in the environment and industry, early planning and response to possible risks will affect the sustainability of business operations.	1.2 Ethical Management and Corporate Governance	P.23
	Sustainable Supplier Management	GRI 308 Supplier environmental assessment GRI 414 Supplier social assessment	Apacer helps partners strengthen their competitiveness and provides competitive purchasing conditions to drive the sustainable development of the supply chain.	3.1 Sustainable Supplier Management	P.56
Environmental	Green Products and Services	GRI 302 Energy	The sustainable green concept is put into practice from product design to manufacturing. With the goal of producing environmentally friendly products, Apacer hopes to create a green industrial chain.	2.2 Energy and Resource Management	P.43
	Hazardous Substance Management	GRI 308 Supplier environmental assessment	With a strong emphasis on the management of hazardous substances, Apacer carefully manages supplier management, storage, production line operations, and waste disposal processes to prevent harm on the people and the local environment.	3.1 Sustainable Supplier Management	P.56
	GHG Management	GRI 305. Emissions	GHG affects the global climate and may lead to the risk of climate change, it is necessary to implement carbon reduction measures and create a sustainable home together with partners.	2.2 Climate change risk management	P.43
Social	Employee Benefits	GRI 401 Employer/ Employee Relations	Focusing on the needs of our employees, we establish multiple communication channels and provide competitive compensation as well as professional development opportunities to build a happy workplace for our employees.	4.3 Employee Benefits and Communications	P.82
	Occupational Health and Safety	GRI 403 Occupational health and safety	Apacer provides a safe and healthy workplace environment in accordance with laws and regulations and regularly carries out inspections and improvements so that employees have peace of mind while working.	4.2 Employee Safety and Health	P.78
	Talent Cultivation	GRI 404 Training and education	Talent cultivation is the driving force behind Apacer's growth. Therefore, we have set a comprehensive blueprint for learning and a systematic approach to career development so that employees are motivated to learn. As a result, they become our competitive advantage.	4.4 Talent cultivation and compensation system	P.90
	Employee Coordination and Communication	GRI 407 Freedom of association and group consultation	Apacer attaches importance to the expression of opinions and feedback from employees, and therefore establishes multiple communication channels, such as in-person and online, to fully understand the voices and needs.	4.3 Employee Benefits and Communication	P.82
	Customer Relationship Management	GRI 416 Customer health and safety	Apacer is committed to practicing the brand core value, "Delivering on Our Promise, Constant Improvement, and work together." By exerting the spirit of "Becoming Better Partners," we provide products and services that meet customer needs.	3.2 Customer Relationship Management	P.64

Material Issues	2020 Materiality	2019 Materiality	Ranking Change	Change Reason	Page Number
GHG Management	Moderately Significant Issues	Keep in track issues	Increase ↑	Apacer's attention to climate change and risk management issues has been raised and responded actively.	P.47
Brand Identity	Moderately Significant Issues	Keep in track issues	Increase ↑	Actively communicate Apacer's brand identity with customers/consumers/supplier partners to facilitate the expansion of corporate operations.	P.19
Employee communication and coordination	Moderately Significant Issues	Keep in track issues	Increase ↑	As a dual-track talent development system will be implemented in 2020, Apacer actively communicates with employees about the company's policies to create a workplace environment of mutual trust.	P.82
Operational Risk Management	Moderately Significant Issues	Keep in track issues	Increase ↑	In light of the COVID-19, climate changes and ESG issues, the company must improve its response capability by managing operational risks.	P.23
Local community communication and feedback	Keep in track issues	Moderately Significant Issues	Decrease ↓	In response to the new pneumonia, the 2020 volunteering campaign has been suspended. In the future, we will re-plan community feedback actions to expand our footprints.	P.101

Note: The following standards were added due to the adjustment of materiality: GRI 407 (Employee Coordination and Communication), GRI 305 (Emissions).

● 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 both within and outside the organization.

Note: Different 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.

Category	Material Issues	Value chain					Relevant Stakeholder	Impact Description	Corresponding Chapter
		R&D and Improvement	Raw Material Procurement	Production	Product sales	After-sales service			
Economics	Corresponding Chapter	●	●	●	●	●	- Shareholders / investors - Suppliers	Apacer strictly abides by the laws and regulations, conducts business and sales in a fair and transparent manner to prevent fraud and protect the rights of stakeholders.	1.2 Cornerstone of Corporate Sustainability - Ethical Management
	R&D Innovation	▲		▲	▲	▲	- Employees - Customers - Media	Continuously develop innovative products and valuable technologies, communicate with potential customers through the media, and thus link up partnerships.	1.4 Innovative R&D

Note: Different 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.

Category	Material Issues	Value chain					Relevant Stakeholder	Impact Description	Corresponding Chapter
		R&D and Improvement	Raw Material Procurement	Production	Product sales	After-sales service			
Economics	Brand Identity (New)	●	■	●	●	●	-Employee -Supplier -Customer	Potential risk to operations by affecting partner relationships and corporate identity.	1.1 About Apacer
	Operational Risk Management (new)	●	●	●	●		-Shareholders/ Investors -Employee	Separate management organizations for ESG risk management to reduce the damage to shareholders/ investors' interests and the consequential financial impact on employees.	1.2 Cornerstone of Corporate Sustainability - Ethical Management
	Supplier Sustainability Management		■	●	●		- Supplier	Apacer progressively strengthens the sustainability management of suppliers to reduce the impact of suppliers on product quality and corporate identity.	3.1 Supplier Sustainability Management
Environmental	Green Products and Services	▲		▲			- Employees	The best green products contribute to environmental sustainability and help enterprises/suppliers enhance the green international competitiveness of their products.	2.4 Green Products
			■		■		- Suppliers		
	Hazardous Substance Management		■	▲			- Employee - Supplier	Introduce QC 080000 hazardous substance process management system to reduce the impact of operational and procurement on the environment and enterprises.	2.4 Green Products
	GHG Management	●	●	●	●		- Employee - Customer - Government Agencies	Apacer actively carries out operational energy saving improvement and introduces risk and opportunity assessment to reduce the risk of climate change on business operation.	2.2 Climate Change Risk Management
Social	Employee Benefits	●	●	●	●	●	- Employee	Employee benefits will affect employee motivation and retention rate. A$^+$ EAPs employee assistance program to create a friendly and healthy workplace for employees.	4.3 Employee Benefits and Communication

Note: Different 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.

Category	Material Issues	Value chain					Relevant Stakeholder	Impact Description	Corresponding Chapter
		R&D and Improvement	Raw Material Procurement	Production	Product sales	After-sales service			
Social	Occupational Health and Safety			▲			- Employee	Introduction of ISO 45001:2018 occupational safety and health management certification to reduce employee turnover and negative impacts on manufacturing.	4.2 Employee Safety and Health
	Customer Relationship Management	■			■	■	- Customer	Excellent customer relationship management to help customers get the most suitable solutions and costs, we continue to optimize customer service processes and systems to create a win-win situation with customers.	3.2 Customer Relationship Management
	Talent Development/ Talent Cultivation	▲	▲	▲	▲	▲	- Employee	The perfect talent cultivation system can build a solid foundation for enterprise operation. We have established a talent management development framework and a dual-track talent training system to build a trustworthy employer reputation.	4.4 Talent cultivation and compensation system
	Employee Communication and Coordination (new)	●	●	●	●	●	- Employee	Apace establishes a transparent and diversified communication channel to understand employees' requirements, and further assists employees in solving problems and creating a better working environment.	4.3 Employee Benefits and Communication

Apacer's Contingency Plan in Response to COVID-19

Apacer revised its "Epidemic Prevention and Response Plan" in early 2020 in response to the COVID-19 epidemic and announced its global subsidiaries to follow it simultaneously. With the epidemic under control in Taiwan, our epidemic prevention policy has been adjusted.

● Apacer's operating headquarters/

Early stage of the epidemic:
Strict temperature measurement, travel, history management, office space management, etc. Overseas subsidiaries work at home in accordance with local government requirements.

Epidemic is alleviated:
After the government regulates the epidemic prevention, Apacer headquarters adjusts the epidemic prevention policy and conducts advocacy, according to the situation, except for the overseas subsidiaries, which still work from home according to the local government's demand as the epidemic is not yet under control.

● Supply chain/

-Close to 80% of Apacer's suppliers are in Taiwan, while the rest of them are located overseas. In response to the pandemic, material backup and multi-site supply chains have been launched in January to mitigate geographical risks and increase supply chain flexibility.

-In the future, we shall establish a database for second source suppliers in advance, to reduce the risks of factors beyond our control.

● Client/

-In February, Apacer informed its customers that its operations and production capacity are back to normal since suppliers have resumed operations.

-In March, the President personally drafted a letter to our customers at home and abroad. We want to make sure that they feel valued in these difficult times and want to ensure them that we are here to provide any services they need.

-In order to meet the needs of our clients, we will immediately adjust our production lines to meet special circumstances, such as urgent orders for medical products, and to perform our role as a corporation in a timely manner.

-Reference News: Medical Equipment Customers' Rush Orders Inbound   Apacer Goes All Out with Supplies

-News Source: https://tw.appledaily.com/property/20200402/HDHJYX7YZV2RP2CDUDXG5VOEUA

● Community Policies for Combating COVID-19/

In alignment with the policies of our headquarters located at the Yong-Ning Science Park, Apacer has established measures to control visitors and employees, such as reducing visiting times and limiting the spaces for visitors.
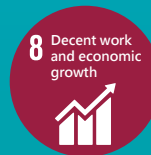
Chapter 1

Your Ideal Innovation Partner

Vision

Apacer creates a fast, stable, and reliable, intelligent storage application environment by upholding the vision"To become the leader in integrated information services centering on digital storage." We hope to become a trusted value-added service integrator to provide customers with excellent products and services.

Policy and Commitment

Upholding "Access the best" as its commitment to its customers, Apacer continuously engages in innovation and 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.

Contribution to the United Nations Sustainable Development Goals (SDGs)

8 Decent work and economic growth

16 Peace, justice, and strong institutions

13 Climate Change Countermeasures

Issues of the Chapter

Material Issue：Corporate Governance — Corresponding Material Topic GRI 205 Anti-corruption

How to Manage

Responsibility	- Board of Directors - Corporate Governance Team, CSR Committee
Resources	- Manpower: The Chief Financial Officer is the person in charge, with 5 members from the Finance and Risk Management Division, Internal Auditing Office, and Administration Division
Channels of Communication	- Report annual planning and implementation of corporate governance in CSR Committee meetings - Once a year, report the status of training on ethical corporate management and any reported cases to the Board of Directors

Action

- Establish internal audit and reporting system
- Protecting shareholders' interests and ensuring equal treatment
- Strengthen the functions of the board of directors to enhance sustainable corporate value
- Enhance information transparency and sustainable management
- Deepen the culture of sustainable corporate governance and provide diversified products
- Implementing corporate social responsibility and bringing additional credit to the company

Sustainable Goal

Short-term Goal (2021)	- Maintain a top 5% corporate governance rating
Mid-term Goal (2022~2024)	- Maintain a top 5% corporate governance rating by improving corporate risk management and information transparency based on the Corporate Governance 3.0 blueprint
Long-term Goal (After 2025)	- In addition to maintaining a top 5% corporate governance rating, continue to enhance corporate governance performance, regularly review our governance system, and improve information transparency and protect the rights of shareholders

Evaluation Method

- Annual corporate governance assessment through internal corporate self-assessment questionnaire and external SEC

Achievements and results in 2020

Achieved Goals :

1. Enhanced disclosure of information in English and Chinese: The notice of the meeting, agenda, and supplementary information in English and Chinese are uploaded 30 days before the regular shareholders' meeting, and the annual report in English is uploaded 7 days in advance and relevant information updates on the Company's English website.

2. Stakeholder communication: Disclosure of the identity stakeholders, issues of concern, communication channels and response methods on the Company's website, and reporting the communication details to the Board of Directors.

Contribution to the United Nations Sustainable Development Goals (SDGs)

SDG 8: Decent Work and Economic Growth   SDG 16: Peace, justice and Strong Institutions

Material Issue：R&D Innovation — Corresponding Material Topic GRI 201 Economic Performance

How to Manage

Responsibility	- R&D and Technology Center
Resources	- Manpower: 68 staff in the R&D Division - Budget: Compile and review budget based on research and development needs - Technology: Continue to carry out a patent and R&D development
Channels of Communication	- Patent Development Committee and a Patent Review Team are established to undertake an internal patent review and business opportunities planning

Action

- Offer R&D and customization services
- Professional software, hardware, and firmware design teams
- Establish five major patent themes and periodically review progress
- Clearly establish relevant regulations governing rewards and encourage patent commercialization

Sustainable Goal

Short-term Goal (2021)	- R&D innovative products, deepen technology development, accumulate patent quality and expand innovation depth
Mid-term Goal (2022~2024)	- R&D innovation technologies are translated into substantial business benefits
Long-term Goal (After 2025)	- Drive R&D momentum and maintain sustainable operations

Evaluation Method

- The number of patents issued in Taiwan, China and the United States in FY2020

Achievements and results in 2020

Achieved Goals :

1. Number of patents issued in Taiwan, China and the U.S. in 2020: 29.

2. Patent Development - M.2 Series Multi-Size: The M.2 patent developed with the concept of modularization, according to the application area and customer requirements, the length of the specification can be flexibly changed to meet various application situations, and through the modular design, the heat dissipation area can be extended, and the heat dissipation efficiency can be improved. The CoreSnap® is a patented technology that can be used in a variety of applications.

3. Patent Development - CoreSnapshot Firmware Technology: In case of data errors, corruptions, or unanticipated power outages in corporate equipment, backup data can be immediately and easily restored to full operation in seconds, either locally or remotely, through software or hardware triggers. When the status of industrial computer equipment detects a blue screen of darkness (BSOD) condition without warning, CoreSnapshot can be triggered in one second to restore system operation.

Contribution to the United Nation's Sustainable Development Goals (SDGs)

SDG 8: Decent Work and Economic Growth

Issues of the Chapter

Material Issue : Brand Identity

Corresponding Material Topic
-

How to Manage

Responsibility	- Corporate Marketing Division
	- Sales & Marketing Division
Resources	- Manpower: Corporate branding is carried out by the Corporate Marketing Division in accordance with the needs of the branding project and in cooperation with other units; the Product Marketing Division promotes the brand identity by matching the exposure of products/technology
	- Budget: Each division prepares and reviews the budget according to the annual strategic requirements
Channels of Communication	- Virtually: e.g., social media channels, press releases, online events, etc.
	- Physically: e.g., forums, exhibitions, product DMs, etc.
	- Internally: Establishing an internal communication network and holding activities from time to time to promote employees' identity with the brand

Action

- Re-examine and adjust brand consistency, and have a dedicated division to serve as a gatekeeper for brand image and accumulate long-term brand value

- Set a singular message spine and actively communicate internally and externally through multiple channels to convey brand value

Sustainable Goal

Short-term Goal (2021)	- Dedicated to value enhancement, creating additional value in service together
Mid-term Goal (2022~2024)	- A leading brand in providing integrated services and innovative value
Long-term Goal (After 2025)	- Leading brand in integrated value ecosystem

Evaluation Method

- Consistent Top 35 Finalists in Taiwan's Best International Brands Awards

- Reference DRAMeXchange ranking

Contribution to the United Nations Sustainable Development Goals (SDGs)

SDG 8: Decent Work and Economic Growth   SDG 12: Responsible Production, Consumption Cycle

Material Issue : Operational Risk Management

Corresponding Material Topic
-

How to Manage

Responsibility	- The risk issues shall be reviewed by the Board of Directors and the Management Board and contingency measures shall be formulated if major operation strategy adjustment is involved
Resources	- The relevant divisions are assigned manpower and budgets according to the risk category and conduct according to the risk level
Channels of Communication	- The relevant divisions communicate with each other according to the risk category through individual channels, such as internal meetings, intranet, etc.

Action

Management measures and contingency measures are prepared by the relevant divisions according to the risk categories:

1. Irregular cross- division audit mechanism

2. Regular internal audits

3. Management of risk control based on risk category, risk level and risk impact

Sustainable Goal

Short-term Goal (2021)	- In 2021, the risk scope will be expanded and information on possible operational risks in international and related industries will be collected to ensure the controllability of operational risks
Mid-term Goal (2022~2024)	- Ensure proper operation without financial, supply chain, legal and internal control problems
Long-term Goal (After 2025)	- To manage the three major aspects of ESG to enhance the competitiveness of enterprises, ensure long-term operational sustainability, and create an integrated service ecosystem

Evaluation Method

- Audit deficiencies can be corrected and improved every year

Contribution to the United Nation's Sustainable Development Goals (SDGs)

SDG 8: Decent Work and Economic Growth   SDG 13: Climate Change Countermeasures
SDG 16: Peace, justice and Strong Institutions
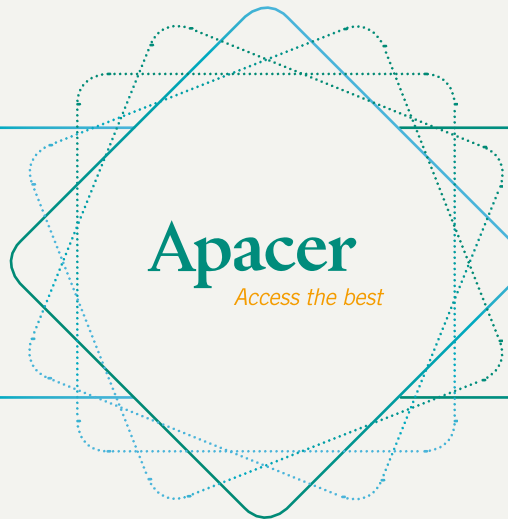
1.1 About **Apacer**

Founded in 1997, Apacer has been a company listed on the Taiwan Stock Exchange Corporation (TWSE) since 2010 (Stock Code: 8271). Apacer's products include consumer memory products and industrial memory modules. In recent years, Apacer sought development in emerging application and gaming markets.

The 29th Taiwan Excellence Award

Top 35 Best International Brands in Taiwan for 4 consecutive years

Apacer
Access the best

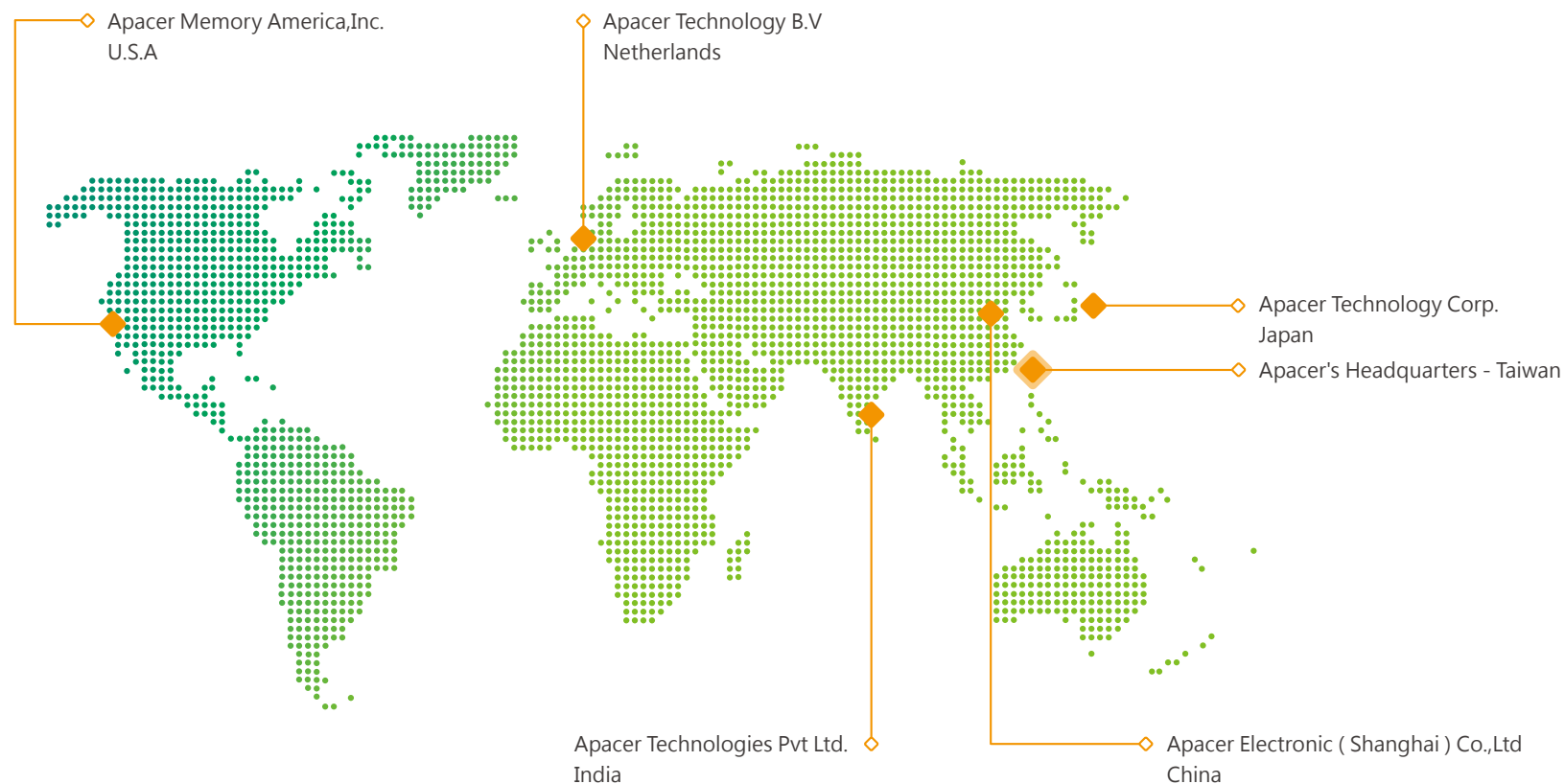2019 CSR Report achieved Gold Award from TCSA Taiwan Sustainability Report Awards

Ranked 9th in global DRAM module revenue

More information on previous awards

Apacer integrates R&D, design, manufacturing and marketing capabilities. With its global operations headquarters in New Taipei City, Taiwan, and subsidiaries in China, the United States, the Netherlands, Japan and India, Apacer has a global presence and a wide range of customers, ranging from benchmark distributors, equipment manufacturers, system integrators and retail customers.

Apacer Memory America,Inc.
U.S.A

Apacer Technology B.V
Netherlands

Apacer Technology Corp.
Japan

Apacer's Headquarters - Taiwan

Apacer Technologies Pvt Ltd.
India

Apacer Electronic (Shanghai) Co.,Ltd
China

Name of the Company	Apacer Technology, Inc.	Main Products	- Industrial solid-state drives (SSD)	- Flash drives/External hard drives
Company Address	1F., No.32, Zhongcheng Rd., Tucheng Dist., New Taipei City 236		- Memory modules	- Emerging application solutions
Date of establishment	April 16, 1997		- Consumer digital products	- Optical inspection applications
Stock Information	Taiwan Stock Exchange Corporation (stock code: 8271)	Total Employees[1]	539	
Capital	NT$ 1.008 billion			

Note 1: Data taken global operational locations as of December 31, 2020

Material Issue **Brand Spirit**

With the vision of "To become the leader in integrated information services centering on digital storage" Apacer upholds "Access the best" is our brand promise. We aim to use storage technology as foundation in as commitment to its customers with quality and services. "Delivering on Our Promise. Constant Improvement. Mutually Beneficial. " Are our brand's core value. Transformed "Becoming Better Partners" into a corporate culture and become the core motivation to promote sustainable management.

In order to raise employees' awareness of the significance of "Becoming Better Partners", in addition to setting up relevant displays in the office environment and promoting it at internal and external events such as supplier conferences, newcomer training and family days, as well as holding educational training for production line employees and "Apacer Appreciation Day", we expect to encourage employees and partners to commit to "Becoming Better Partners" with the delivery of a series and complete message.

Brand promise

Apacer
Access the best

Brand core value

做好伴
Becoming Better Partners

2020 Supplier Conference

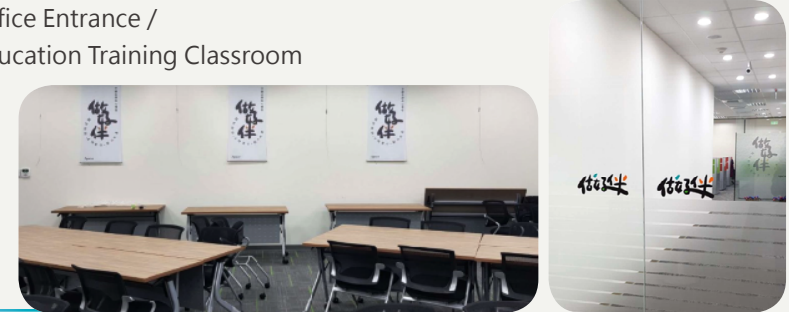**Production Line Employee Training**

2020 Family Day

Apacer Appreciation Day
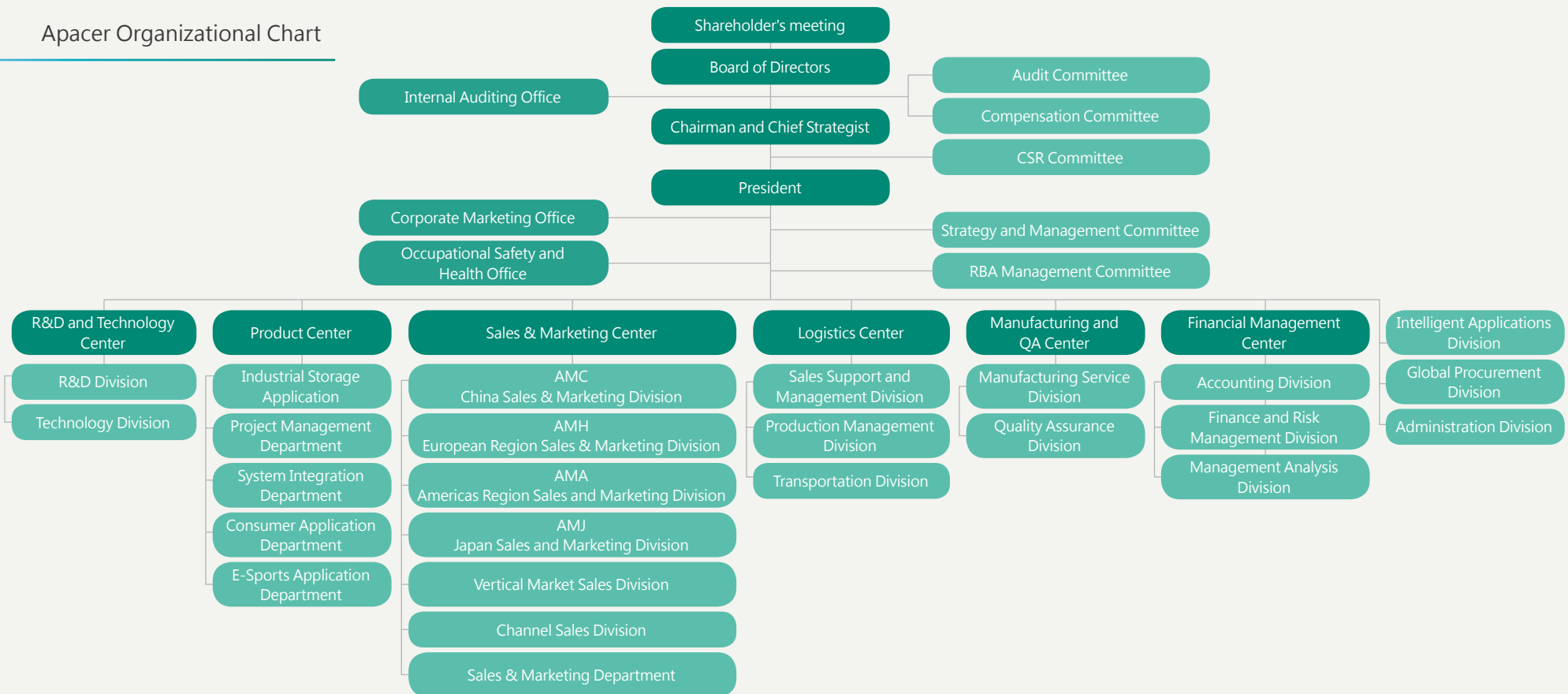

Office Entrance / Education Training Classroom

● Corporate Organization and Culture - People-Oriented and Building a Friendly and Healthy Workplace

To embrace the era of speed economy, Apacer harnesses various business innovation models and brings into full play the operational efficiency to pursue the company's performance growth.

In 2020, Apacer was reorganized into a functional organization and currently has six functional centers, three new business/support divisions and a marketing division under the President.

Apacer Organizational Chart

- Shareholder's meeting
- Board of Directors
  - Audit Committee
  - Compensation Committee
- Internal Auditing Office
- Chairman and Chief Strategist
  - CSR Committee
- President
- Corporate Marketing Office
  - Strategy and Management Committee
- Occupational Safety and Health Office
  - RBA Management Committee

R&D and Technology Center
- R&D Division
- Technology Division

Product Center
- Industrial Storage Application
- Project Management Department
- System Integration Department
- Consumer Application Department
- E-Sports Application Department

Sales & Marketing Center
- AMC China Sales & Marketing Division
- AMH European Region Sales & Marketing Division
- AMA Americas Region Sales and Marketing Division
- AMJ Japan Sales and Marketing Division
- Vertical Market Sales Division
- Channel Sales Division
- Sales & Marketing Department

Logistics Center
- Sales Support and Management Division
- Production Management Division
- Transportation Division

Manufacturing and QA Center
- Manufacturing Service Division
- Quality Assurance Division

Financial Management Center
- Accounting Division
- Finance and Risk Management Division
- Management Analysis Division

Intelligent Applications Division
- Global Procurement Division
- Administration Division

● Apacer puts a strong focus on the "Apacer" brand

Apacer's own brands account for as much as 90% of the total revenue. Over the past 23 years, Apacer has accumulated rich experience in the digital storage industry and provided innovative products with solid R&D capabilities. In order to diversify our business and lay out a long-term business plan, we provide not only consumer digital storage products, but also e-sports products and continue to develop vertical application markets. In the intelligent Internet of Things (IoT) industry, we are looking at the future technology trends and therefore established a related business divisions as early as 2017 to implement a long-term plan for sustainable innovation.

Vertical Market Applications
Industrial solutions such as SSDs, memory modules, and storage devices for network communication, military, medical, vehicular, and so on.

Consumer Product Applications
SSDs, memory modules, memory cards, USB flash drives, portable hard drives and other computer and mobile peripherals.

Smart IOT Applications
Industrial solutions such as SSDs, memory modules, and storage devices for network communication, military, medical, vehicular, and so on.

E-sports applications
High-end custom water-cooled PC case, AIO CPU liquid cooler, gaming memory and SSD. ZADAK hopes that you will get as much fun out of building your own fantasy PC as we do.
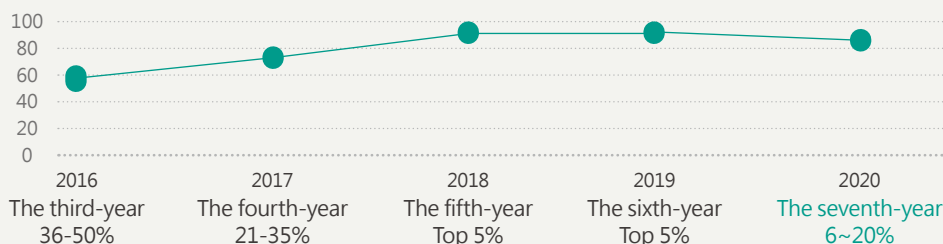

Material Issues 1.2

Cornerstone of Corporate Sustainability - **Ethical Management**

Reinforcing corporate governance as Apacer's core value and has seen progress in the Corporate Governance Evaluation in recent years. In 2016, Apacer ranked 36~50% in the third Corporate Governance Evaluation.

As for the fourth Corporate Governance Evaluation in 2017, Apacer ranked 21~35%. Then in 2018 and 2019, we made giant strides and ranked top 5% for two consecutive years.

Corporate Governance Results Over the Years

	2016	2017	2018	2019	2020
	The third-year 36-50%	The fourth-year 21-35%	The fifth-year Top 5%	The sixth-year Top 5%	The seventh-year 6~20%

Apacer continues to make corporate governance improvements in 2020 through the following actions

1

The Annual Report discloses the reasons for the discussion and resolution of the Compensation and Benefits Committee, as well as the Company's handling of the Committee's suggestions.

2

The Board of Directors passed the "Performance Evaluation of Board of Directors" and completed the self-evaluation of the Board of Directors and the Functional Committees. The results of the self-evaluation were simultaneously disclosed on the Company's official website.

3

Strengthened information security management and formulated specific management policies.

4

Continue to improve the transparency of information and strengthen information disclosure in Mandarin and English on the official website to protect shareholders' equity.

Corporate Governance Structure Board of Directors

Elections and Nominations

Apacer's Board of Directors is nominated by candidates and is elected by the shareholders from a list of candidates.

The Board of Directors is composed of nine directors with extensive experience in various professional fields and three independent directors (33.33%), with the number of independent directors exceeding regulatory requirements and one independent director who is female.

Board of Directors Functions

In addition to overseeing the company's operations and providing operational advice, the CSR Committee Secretariat is responsible for discussing and implementing issues related to corporate sustainability.

Diverse background

The members of the Board of Directors possess professional backgrounds in business management, accounting and finance, and engineering technology, and each of them has accounting and financial analysis, business management, venture capital, engineering technology, and leadership and decision-making skills based on their different professional backgrounds, demonstrating their diverse and complementary effectiveness.

With the professional background and industry experience of the directors, the Company is able to implement its business and future development strategies.

Principle of Interest Avoidance

The Board of Directors met seven times in 2020, with an average attendance rate of 92%. Apacer values the transparency, professionalism and efficiency of the Board of Directors' operations to strengthen the effectiveness of corporate governance. The Board of Directors integrates the international circumstances, market observation, and financial evaluation to oversee the major decisions of the company, and uses professional judgment to protect shareholders' rights and interests, enhance operational performance, function as independent directors, strengthen risk management, and ensure information transparency, while taking into account the principle of interest avoidance to effectively protect the interests of all stakeholders of the company.

Title	Name	Gender	Professional Background	Industry Experience					Actual Attendance	Actual attendance ratio (%)
				Accounting and Financial Analysis	Business Management	Venture Investment	Engineering Technology	Leadership & Decision Making		
Chairperson	Austin Chen	Male	Management		V		V	V	7	100%
Director	Li-Da Lu	Male	Management, Engineering		V	V	V	V	7	100%
Director	C.K. Chang	Male	Management, Engineering		V		V	V	7	100%
Director	Hung-Po Hsieh	Male	Management, Engineering		V		V	V	7	100%
Director	Shao-Hua Huang	Male	Engineering, Finance	V	V		V	V	7	100%
Director	Representative of Phison Electronics Corp. Wen-Chieh Weng	Male	Accounting	V			V	V	4	57%
Independent Director	Kuang-Yi Wu	Male	Engineering		V	V	V	V	7	100%
Independent Director	Chin-Pin Peng	Male	Management, Finance	V	V	V	V	V	7	100%
Independent Director	Hui-Chuan Hsieh	Female	Finance	V	V		V	V	5	71%

● Functional Committee

Compensation and Benefits Committee

Established / in August 2011

Function / The main duties of the Compensation Committee are to faithfully perform the following duties and responsibilities with the attention of good stewards and to submit its recommendations to the Board of Directors for discussion.
- To establish and periodically review the organizational procedures of the Compensation Committee and propose amendments thereto.
- To establish and regularly review the annual and long-term performance objectives of directors and managers, as well as the policies, systems, standards and structures of remuneration.
- To regularly evaluate the achievement of the performance goals of directors and managers and to determine the content and the amount of their individual remuneration.

Attendance rate for the Committee /

Title	Name	Actual attendance	Actual attendance ratio (%)
Convenor	Kuang-Yi Wu	5	100%
Member	Chin-Pin Peng	5	100%
Member	Hui-Chuan Hsieh	5	100%

Audit Committee

Established / in May 2018

Function / Audit and supervise the following matters
- Fair financial statements
- The election (dismissal) of certified public accountant and relevant compensation
- The independence of a certified public accountant
- 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	5	100%
Member	Chin-Pin Peng	5	100%
Member	Hui-Chuan Hsieh	4	80%

Cornerstone of Corporate Sustainability - Ethical Management

Apacer Ethical Management Policy	Principles of ethical management, prohibition of illegal profits, openness and transparency of information, respect for intellectual properties, fairly trading and competition, identity confidentiality preventing reprisals.

Apacer takes compliance with laws as the primary principle of ethical management. In order to ensure legal compliance and avoidance of interests, Apacer has established an ethical management policy and associated programs, including the " Ethical Management Policy" and the " Ethical Management Procedures and Conduct Guidelines" approved by the Board of Directors to strictly require employees to avoid personal interests or conflicts that may interfere with the overall interests of the company, by reporting annually to the Board on the operation of ethical management.

Furthermore, Apacer has set up an internal auditing office with dedicated personnel to evaluate the effectiveness and rationality of compliance with the internal regulations.

In order to proactively prevent unethical practices in operations, Apacer has established a reporting system to uncover violations of company finances, laws and regulations, policies, ethical standards, and any form of fraudulent behavior.

Please refer to Apacer Company Regulations for ethical standards.

Ethics in Education and Training

The code of conduct related to ethical management is also published on the company's intranet to promote and educate employees, and annual ethical management education training is held in 2020, including topics related to the RBA Responsible Business Alliance, such as labor, health and safety, environmental hygiene, ethics, and management systems. With a total of 500 employees, 100% of employees are trained.

Recent executive results:

Number of people trained in ethical management

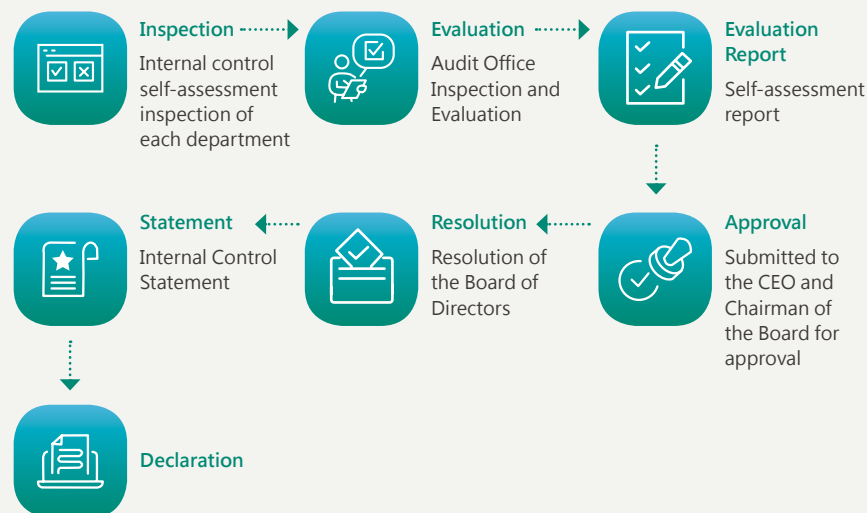| Year	2018	2019	2020
Number of people	**438**	**491**	**500**
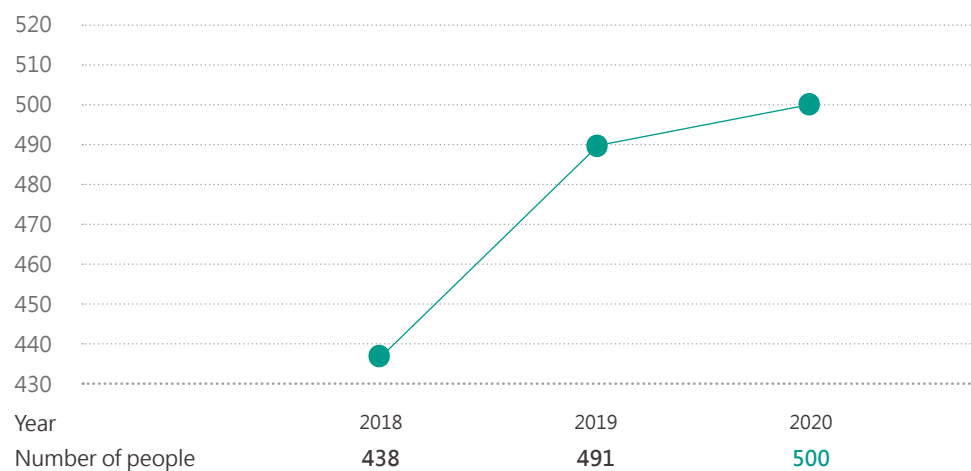
Internal Audit

Apacer establishes internal auditing system in accordance with the law. Set under the Board of Directors, the Internal Auditing Office consists of two full-time personnel responsible for internal auditing. The internal auditors formulate an annual auditing plan (including self-assessment) based on risk assessment and relevant laws and regulations.

Through the implementation of the auditing plan and the self-inspection, Apacer continues to audit the risk items and regularly reports the results to the Audit Committee and the Board of Directors.

Apacer develops 7 internal control procedures to comply with all laws and to effectively strengthen internal risk control:

Inspection
Internal control self-assessment inspection of each department

Evaluation
Audit Office Inspection and Evaluation

Evaluation Report
Self-assessment report

Statement
Internal Control Statement

Resolution
Resolution of the Board of Directors

Approval
Submitted to the CEO and Chairman of the Board for approval

Declaration

Note: Organization and operation of the internal audit: Click here for further details.

Reporting System

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

Apacer will keep the identity of the informer and the contents of their report confidential. The Company also protects informers and persons in charge of investigation, ensuring that they are free of unfair treatment. The "Reporting Committee" is the contact window for all reporting affairs. No relevant matters have occurred during this CSR Report's disclosure period of 2020.

Contact information for reporting ethical violations

- Reporting contact window / Ms. Xu
- Reporting hotline / (02)2267-8000#5980
- Reporting e-mail / whistleblower@apacer.com
- Reporting address / 6F, No. 32, Zhongcheng Road, Tucheng District, New Taipei City 236, Taiwan

Note: Reporting system: Click here for further details.

Material Issue ## Organizational Risk Management Objectives

Corporate Sustainability Plan

Apacer classifies the responsible management organization according to the possible operational risk categories and divides the responsibilities into three ESG (E for Environmental, S for Social, and G for Corporate Governance) categories as listed below and expects to expand the risk scope in 2021 to ensure that operational risks are under control. In addition, we will collect information on potential operational risks in the international and related industries and propose a meeting to review the risk issues for immediate response to global and local risk issues. In accordance with the identified probability of occurrence, the degree of impact, and contingency measures, the risk is evaluated regularly (quarterly, semi-annually, or annually, depending on the management style) and reported to the head of the responsible division. The "Risk Management Policy and Procedures" are expected to be approved by the Board of Directors in 2021 and will be made public on Apacer's official website.

Identification of operational risk management

ESG	Types of Operational Risks	Risk's issue	Responsible unit	Explanation of responsibilities	Responsive Action
G	Internal control risks	Operation error	Internal Auditing Office	Examine and evaluate the internal control of the Company's operating procedures, and report whether the design and routine practice of such controls are appropriate, as well as their effectiveness and efficiency.	Regularly or irregularly carry out audits on operation processes with high risks based on risk assessment. Inform handling unit based on audit findings. Request handling unit to propose an improvement plan and track the improvement to tackle deficiencies.
G	Legal risks	Trademark, intellectual property rights awareness and patent control	Legal Division	Responsible for legal risk management, contract review and handling litigation disputes to reduce relevant risks.	The EU General Data Protection Regulation (GDPR) went into effect on May 25, 2018. The Legal Division cooperates with Apacer's subsidiary in the Netherlands to establish relevant safety and management measures that meet the GDPR regulations and protect personal information. GDPR training courses are provided for relevant personnel.
G	Financial risks	Exchange rate fluctuations	Financial and Risk Management Division	Responsible for financing, funding, as well as planning and execution of financial hedging.	Fluctuations in the exchange rate can lead to losses. Regularly evaluate foreign exchange assets that are exposed to risk and submit a hedging strategy to relevant supervisors for approval.
G	Strategic operational risk	Operating performance of subsidies	Accounting Division	Grasp in-depth understanding of the reinvestment performance and provide management with timely and adequate information to better plan the use of Company funds.	Regularly carry out performance reviews and report relevant issues to top management, as appropriate.
SG	Supply chain risks	Sustainable supplier management	Manufacturing and QA Center	Compliance with RBA regulations and review the safety of suppliers' working environments and the human rights of their employees, thereby reducing supply chain risks.	1.Hold annual supplier conferences to communicate RBA regulations to suppliers. 2.Establish audit mechanisms to review suppliers' implementation of RBA regulations.
S	Information Security Risks	Internet and Information Security Protection	Information Services Division	Responsible for protecting information assets from unsustainable risks and providing related hedge planning and execution.	1.Conduct disaster drills every year to ensure the implementation of response plans. 2.Conduct annual scanning for security weaknesses and propose corresponding improvement plans based on the results. 3.Establish security measures and management methods to ensure the confidentiality, integrity, and availability of critical information assets.

ESG	Types of Operational Risks	Risk's issue	Responsible unit	Explanation of responsibilities	Responsive Action
E	Environment and climate change risks	GHG emissions and the impact of climate change	HR & Administration Division	Responsible for avoiding risks related to environment and climate change.	Implement energy-saving and carbon-reduction measures, such as replacing the old, air-cooled chiller on the seventh floor with a more efficient water-cooled chiller to achieve energy conservation and carbon reduction.
E	Natural Disaster Risk	Risks due to non-human-disasters such as earthquakes and typhoons	HR & Administration Division	The Environmental Safety Team is the first line of responsibility for providing information, updates and reports.	Based on the relevant information, we will identify the level of disaster and immediately refer it to the emergency group for corresponding processing and response.

Information Security Risk Management

Apacer Information Security Policy

In order to ensure the confidentiality and integrity of the Company's important information assets such as data, information, equipment, personnel, and network, and to consider the Company operational needs, Apacer has established the "Information Security Policy". 2020 no service interruptions caused by customer downtime due to any information security issues have occurred.

Information Security Goals
Ensure correct, complete, and available information operations on an ongoing basis

Information Security Management Unit
Establish an information security team to confirm the effectiveness of information security management operations

Information security control measures

Privilege Management — Personnel account management and audit

Access Control — Personnel access control management, data leakage management, personnel remote access behavior restrictions, external storage device control

External Threats — Regular virus scanning and malware detection, network firewall setup
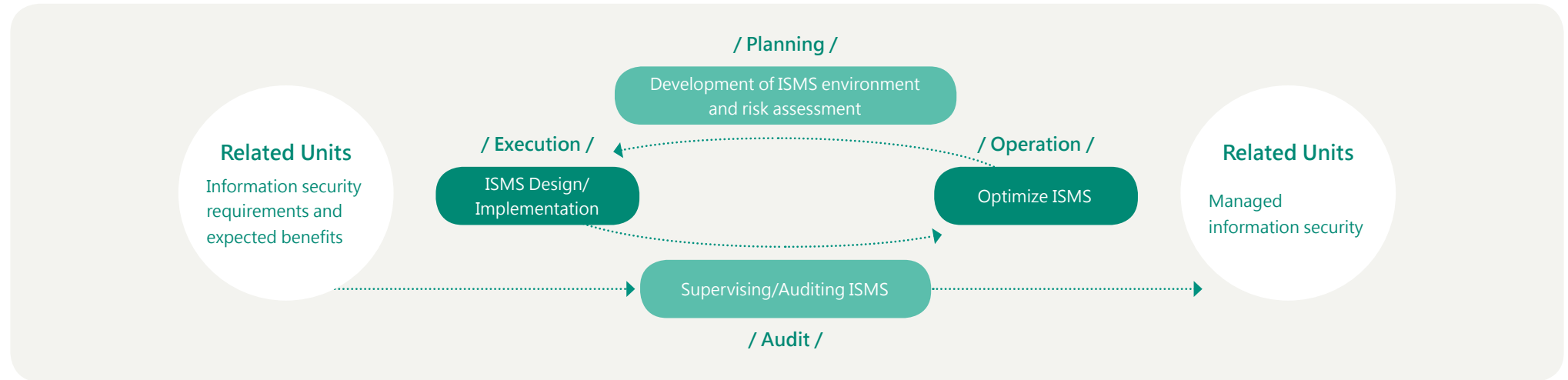
Operation Maintenance — System operation monitoring and abnormal warning, regular data backup and tape off-site storage, off-site server backup, regular disaster recovery drills

Information Security Education — Newcomer education and training courses, occasional announcements of security-related information

Information Security Management System (ISMS)

The information security management system (ISMS) is used to plan, act, check, and implement to strengthen the defense capability and avoid the risk of outdated defense technology, to build a comprehensive information security system.

/ Planning /

Development of ISMS environment and risk assessment

/ Execution /

/ Operation /

ISMS Design/ Implementation

Optimize ISMS

Related Units

Information security requirements and expected benefits

Related Units

Managed information security

Supervising/Auditing ISMS

/ Audit /

## 1.3 Diversified Products and Operational Performance

● Operating Strategy Planning

Apacer is one of the few memories module manufactures in the industry that develop both consumer and industrial products. The main purpose of this operating strategy is to balance operations and offer branding benefits that will contribute to the Company's sustainable operation. The memory industry is greatly affected by the external environment, which is why the industry experiences great price fluctuation.

Therefore, having both industrial product lines (which are resilient to price fluctuations) and consumer product lines (which quickly respond to price changes), Apacer can adjust the price difference as appropriate to achieve a business balance. In addition, the promotion of consumer products helps expand the brand's variation, increasing market share, and contributing to the accumulation of brand value in the long-term.

Short-term Business Strategy

### Focusing on core industry and developing the IoT market
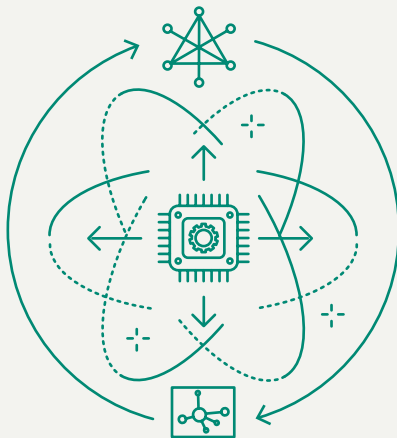
Apacer continues to focus on its core business - the trend development of digital storage.

By deepening its core products and R&D technologies, Apacer cultivates key markets and continues to develop smart IoT application fields, grasps the trend in an instant, further brings valuable benefits to customers and partners, and contributes to operational performance.

Long-Term Business Strategy

"Focusing on digital storage and becoming the leader in the integration of technology based information services " towards sustainable management
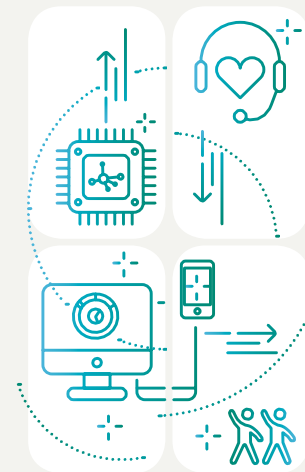
-Continuously invest in ESG sustainable development and fulfill corporate social responsibility

-Actively enhance our R&D capabilities and strengthen our technical expertise

-Make good use of marketing tools to expand brand benefits

-Lay out the digital transformation and give full play to the benefits of data integration and analysis

-Improve retention rates and build personnel supply chain system

● Products and Services

With our core in digital storage, Apacer's products can be divided into four main categories: "B2B industrial solutions," "B2C consumer products," "e-sports products," and "IoT applications."

B2B Industrial Solutions

A range of stable and durable digital storage solutions designed for industrial, cloud data center, automotive, military, gaming, healthcare, and other vertical markets.

Provide integrated solutions to solve problems

With rich experiences in industrial solutions products and R&D, Apacer solves customers' problems with its integration and technical capabilities. Furthermore, Apacer has built a profound partnership with our customers by providing reliable products and services. Not only are we the No. 1 supplier of industrial SSDs worldwide for five consecutive years.

B2C Consumer Products

We design a full range of digital storage and mobile peripheral products such as SSDs and memory modules to meet the needs of information storage and protection with consumers' life experience.

Fulfill consumers'needs

With cutting-edge technology enhancing product specifications, Apacer is devoted to fulfilling consumers' needs with years of experience in storage technology. For decades, we have made advancements in our products, such as laptop memory modules, co-branded USB flash drives, fingerprint USB dongles, memory cards, SSDs, military-grade external storage devices, and mobile peripherals, which allowed us to maintain a reputable brand image among consumers.

Smart IoT Application

We provide IoT environmental control system design, integration and implementation, as well as optical inspection services to accompany you on the first mile of IoT innovation.

Smart IOT Landing Partner

Apacer integrates hardware and software technology with optical inspection technology to provide.

We also provides the best solution for small and medium-sized enterprises to deploy the IoT, significantly reducing the time and labor cost for system installation, lowering the threshold of transformation, accelerating the upgrade of intelligence, and realizing the implementation of the IoT.

E-sports products

High-end custom water-cooled chassis, integrated water-cooled cooler, gaming memory and SSD; consumers can get unlimited enjoyment from building their dream PC.
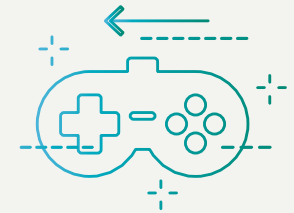
Create the Best Experience

Apacer is actively seeking development in the gaming market. In addition to the existing product lines, Apacer has launched its eSports brand, ZADAK. Furthermore, we have partnered up with several modders to create striking products that are recognized by the market. Our system components and lighting controls are popular among customers overseas, a testament to our competitiveness in the gaming market.

Products

Case 1 /

Apacer Teamed Up with AOPEN to Enhance Intelligent Remote Management Solution,To Create Intelligent Remote Device Management Solution to Break into Renowned Electric Vehicle Charging Pile Supply Chain

Case 2 /

Together with Origin Wireless, Apacer Technology Uses AIoT to Read Vital Signs, Improving Safety of Seniors Living Alone

Given the vigorous development of the electric vehicle market, driving the demand for remote device management, Apacer in collaboration with AOPEN, has created a smart remote device management that has entered the leading e-vehicle charging station supply chain in North America. Through technical cooperation, both parties can provide device abnormality alerts and remote BIOS/OS/Firmware updates, as well as troubleshooting, backup-restoration or reboot through remote management to solve problems immediately, saving the time spent on sending staff to the site and reducing management costs.

Apacer joins hands with Gentronics to integrate the two patented " LINE Direct Incident Alerts " and "Wi-Fi wireless sensing". The former can instantly push Line messages to family groups and make emergency calls, while the latter can achieve non-intrusive management and understand the activities and sleep records of the elderly living alone. The combination of the two can help government welfare agencies, senior care service providers and family members to detect abnormalities in the lives of the elderly and respond to them in a timely manner, thus improving the safety of the elderly living alone.
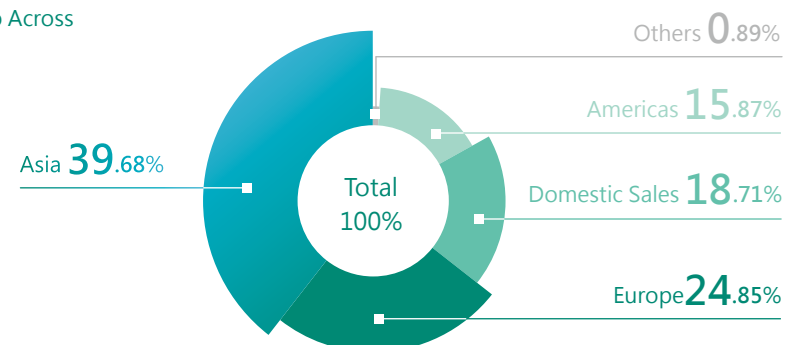
Financial Performance

Striving for long-term operational performance, stable profits and growth, Apacer continues 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	2018	2019	2020
Revenue	9,441,618	7,485,821	7,152,222
Operating Cost	(8,132,329)	(6,085,578)	(6,026,320)
Gross Profit	1,309,289	1,400,243	1,125,902
Operating Profit	437,883	483,595	345,419
Net Profit After Tax	358,830	376,629	290,460
EPS (NT$)	3.56	3.73	2.88

Unit: NT$ 1,000

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

Cultivation in Taiwan with focus 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 in different markets, we provide digital storage applications that offer high performance, high stability, and high value, as well as offer integration services in striving for perfection.

Product Sales Ratio Across Different Regions

Others 0.89%

Americas 15.87%

Domestic Sales 18.71%

Europe 24.85%

Asia 39.68%

Total 100%

Product Quality Assurance

Product Quality Assurance

Basic Function Test	Long time Test	Uninterrupted On/Off Test	Power Failure Test	Environmental Reliability Test	EMC Test (Electromagnetic Magnetic Compatibility Test)	Safety Test	Compatibility test	Data Storage Test	RDT (Reliability Demonstration Test)	ORT (On-Going Reliability Test)
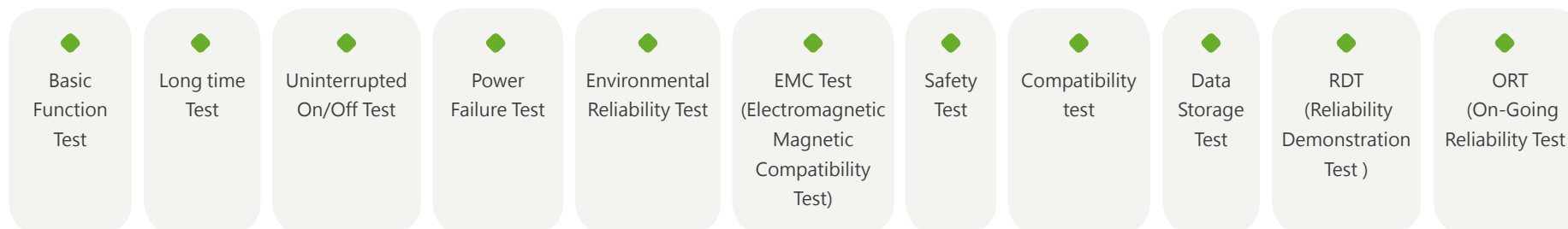
We believe that quality assurance is our most fundamental promise to our customers. Apacer implements the highest level of safety requirements for the quality of our products. From product R&D, design, usage safety, product lifespan to after-sale services, Apacer adopts rigorous designs and the strictest 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.

Complete Design Inspection and Verification

- Design verification during the R&D stage
- Design verification during the mass production stage

Quality Policies

Deliver competitive, defect-free and hazardous substance-free products and services on time to satisfy customers

International Quality Certification

In compliance with ISO 9001, ISO14001, and IECQ QC 080000

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, labeled in accordance with EU WEEE regulations. To ensure the consistency of materials and production standards during 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.

WEEE Recycling Label

EMC Label

Taiwan BSMI	USA FCC	EU CE	Australia & New Zealand RCM	Japan VCCI

Material Issues 1.4

Innovative R&D

With "focusing on digital storage and becoming the leader in the integration of technology-based information services" as its vision, Apacer focuses on the development of the digital storage industry and is constantly strengthening its product and R&D momentum to establish competitive advantage for sustainable business operations.

In order to continuously enhance Apacer's R&D momentum, we provide rich training programs and lectures as well as set up internal reward guidelines to encourage creative thinking in the workplace. In addition, we put a lot of effort in to promoting diverse thinking and multiplying the benefits of cooperation with strategic partners.

● R&D accumulates a sustainable momentum

Possessing independent R&D and customization capabilities for software, hardware, and firmware, Apacer's professional industrial design team integrates human-machine R&D technology to provide customers with business-driving products and services.

R&D and customization capabilities

Accelerate product development, increase flexibility in product design, add value to products, and customize product specifications for customers.

A professional design team

With transboundary thinking and rich experience in materials, technology and craftsmanship, we design products that are both attractive and practical.

Innovative thinking

Develop innovative products and services based on digital storage and technology trends.

R&D expenditure is one of the important expenses, thus the annual budget is compiled according to the R&D requirements. The table below shows that the proportion of R&D expenses to operating revenue increases each year, indicating Apacer's emphasis on R&D design and future investment.

R&D Expenditure Over the Years （Unit: NT$ 1,000）

Year	Value
2020	122,801
2019	117,884
2018	120,479
2017	99,120
2016	87,530
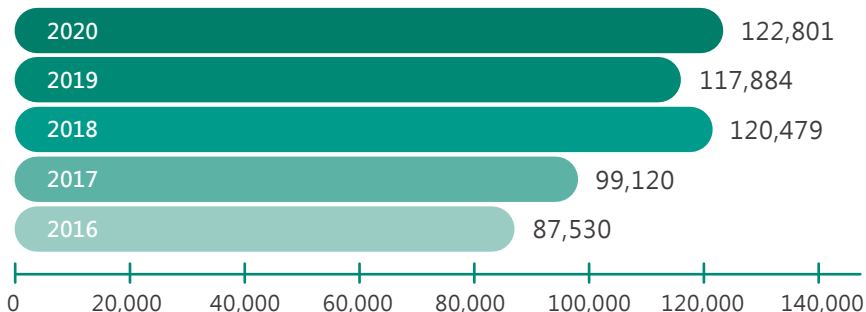
R&D Ratio Over the Years （Unit: NT$ 1,000）

Year	2016	2017	2018	2019	2020
Ratio	1.28%	0.99%	1.28%	1.57%	1.72%

Year	2018	2019	2020
R&D Expenses	120,479	117,884	122,801
Revenue	9,441,618	7,485,821	7,152,222
R&D Ratio	1.28%	1.57%	1.72%
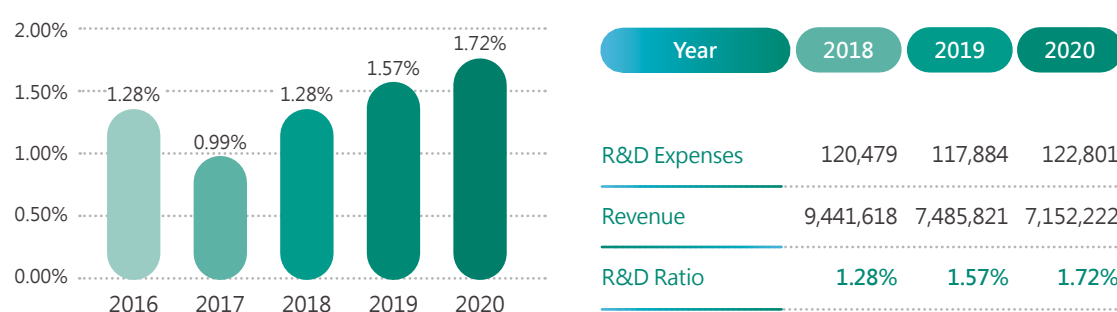
Patent Deployment and Future Technologies

To strengthen innovation and R&D momentum, Apacer formally established a Patent Development Committee in 2017. The committee is chaired by the President, and a Patent Review Team has been set up to undertake an internal patent review for future development. Relevant incentive measures have also been clearly defined to promote patent commercialization. Apacer also employs patent engineers for patent management, application and maintenance, and gives advice on infringement or non-infringement of developing products or establishes design, avoidance strategies, and establishes patent maps and provides information on competitors' patent applications to fully grasp the development of competitors' technology fields or patent application dynamics.

R&D Achievements

Statistics of Patent Applications & Licenses over the years

● Patented ● Pending

Statistics on the Classification of Patents Granted in 2020
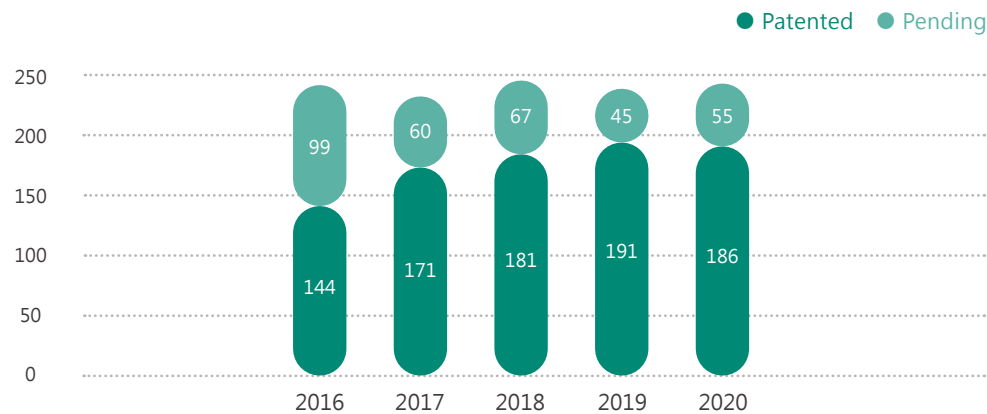
As of the end of 2020/12, Apacer's total number of patents has reached 241, of which 55 are pending and 186 have been granted and are being effectively maintained. As can be seen from the above patent application and licensing statistics, the number of patents granted by Apacer has stabilized from a slow growth in recent years. On the other hand, in 2020, among the patent categories of Apacer's country of application, Taiwan has a relatively higher number of patents granted, followed by China and the United States.

Key Commercialized Patents

Anti-Sulfuration memory storage device

In response to customers' special requirements in terms of application environment, Apacer has developed an anti-sulfuration memory storage device and obtained patents in the United States and China. Compared with other competitors without the patent, Apacer can create product differentiation and build a competitive advantage over other brands.

SSD heat dissipation device

Apacer has developed a heat dissipation device that can maintain a stable temperature and reduce product loss based on different usage situations. Apacer has obtained patents for this device in both Taiwan and China.

E-sports water-cooling module

A removable water-cooling head cooling module is designed for e-sports players and is suitable on different brands of motherboards. The patent has been patented in Taiwan and China and is commercialized under Apacer's e-sports brand "ZADAK".

Relevant Public Associations

To better monitor market trends and expand new business opportunities, we participate in relevant public associations, as illustrated in the table below.

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 - Taiwan trade	Member

Chapter 2

A Good Partner for Green Environment

Vision

In order to fulfill CSR and protect the environment, Apacer has introduced environmental systems, established supplier management regulation, promoted green product design, and carried out environmental education. We have internalized environmental protection concepts to the Company's entire value chain. Through top-down "policies" and the bottom-up "actions," we practice green sustainability within our business operations.

Policy and Commitment

In compliance with "legal compliance, pollution prevention, participation in consultation, risk control, green design, continuous improvement and environmentally friendly" EHS (environment, health, and safety) and energy policies established by Apacer, we deliver competitive, defect-free and hazardous substance-free products and services on time to satisfy the needs of our customers.

Contribution to the United Nations Sustainable Development Goals (SDGs)

6 Clean water and sanitation

12 Responsible consumption and production

13 Climate action

Issues of the Chapter

Material Topics : Green product design	Corresponding Material Topic GRI 302: Energy

How to Manage

		Action
Responsibility	- R&D and Technology Center - Global Procurement Division	- Continuous update of the management system
Resources	- Budget: Invest NT$ 90,000/year in updating management system certification	- Sustainable supplier management - Green product design
Channels of Communication	- Apacer's official website -ISO 14001 Environmental Management System -Report project planning, review achieved performance and conduct horizontal cooperation between departments in quarterly CSR Committee meetings -Release cards on EHS and energy policies to all employees	- Improve energy-saving processes - Promote education and training on environmental protection

Sustainable Goal

		Evaluation Method
Short-term goal (2021)	- Reduce the amount of packaging materials by using environmentally friendly materials - Regularly track the recycling situation of industrial waste	- Reporting the tracking effectiveness in the quarterly CSR committee review meetings
Mid-term goal (2022~2024)	- 100% in line with green product design, strengthen power-saving mode design of products	- The percentage of green product designs
Long-term goal (After 2025)	- Improve the automation of special operations - Reduce environmental pollution in production operations	- Environmental pollution assessment of production

Achievements and results in 2020

Achieved goals :	- Refine process efficiency, reduce DRAM test stations from 4 to 2, and reduce energy consumption - ISO 14001 management system completed, and new license issued

Contribution to the United Nations Sustainable Development Goals (SDGs)

SDGs 6 Clean Water and Sanitation
SDGs 12 Responsible Consumption and Production
SDGs 13 Climate Action

Material Issue : Hazardous Substance Management	Corresponding Material Topic GRI 308 Supplier environmental assessment

How to Manage

		Action
Responsibility	- R&D Division - Global Procurement Division - Customer Service Division	- Introduce QC 080000: 2017 Hazardous Substance Process Management System
Resources	- Budget: Invest NT$ 115,000/year in updating management system certification and holding supplier conference - Manpower: R&D Division, Global Procurement Division, and Customer Service Division totaling 50 people	- Implement Hazardous Substance-Free (HSF) requirements
Channels of Communication	- Apacer's official website - Manage review meetings - Internal audit process of the Company - QC 080000: 2017 Hazardous Substance Process Management System - Release EHS and energy policies cards to all employees	

Sustainable Goal

		Evaluation Method
Short-term goal (2021)	- Planning to increase the share of halogen-free electronic components	- Reporting tracking progress in the quarterly CSR committee review meetings - AGP system statistics for material composition
Mid-term goal (2022~2024)	- Annual supplier conference	- Satisfaction survey of supplier conference
Long-term goal (After 2025)	- Smart green management	- Improve the automation of special operations and reduce environmental pollution in production operations

Achievements and results in 2020

Achievement goals :	- Completed QC 080000:2017 Hazardous Substance Process Management System Tracking Audit - Completed the latest RoHS 2.0 requirements for 2019: banning four plasticizer hazards (BBP/DBP/DEHP/DIBP)

Contribution to the United Nations Sustainable Development Goals (SDGs)

SDGs 12 Responsible Consumption and Production
SDGs 13 Climate Action

Issues of the Chapter

| Material Topics：GHG Management | Corresponding Material Topic : GRI 305 Emissions |

How to Manage

Responsibility	- CSR Committee Environmental Caring Team - Human Resources and Administration Department - Document Administration Division
Resources	- Manpower: CSR Committee Environmental Caring Team, Human Resources and Administration Department, and the Document Administration Division, totaling 20 people
Channels of Communication	- Financial Supervisory Commission - CSR Committee Quarterly Review Meeting

Action

- Annual calculation of GHG emissions according to ISO 14064-1:2006 standard

- Review of electricity consumption in quarterly CSR committee meetings

Sustainable Goal

Short-term goal (2021)	- Track the expectation of the benefits of introducing water-cooled air conditioning
Mid-term goal (2022~2024)	- Reduce carbon emissions by 3% in 5 years - Reduce GHG emissions by introducing low energy-consuming production equipment
Long-term goal (After 2025)	- Promote low-carbon manufacturing to reduce GHG emissions

Evaluation Method

- Reporting the tracking effectiveness in the quarterly CSR committee review meetings

- Evaluate energy consumption of equipment

- Evaluate the effectiveness of reducing GHG emissions

Achievements and results in 2020

| Achieved goals : | - Calculate GHG emissions according to ISO 14064-1:2006 standard
- Complete the implementation of water-cooled air conditioning in the 1st to 6th floors of the headquarters |

Contribution to the United Nations Sustainable Development Goals (SDGs)

SDGs 13 Climate Action

2.1 **Commitment to the Environment** and **Legal Compliance**

Apacer abides by the EHS and energy policies of "legal compliance, energy-saving, and waste reduction, consulting and communication, risk control, green design, and continuous improvement," using no substances that may harm the environment, and making good use of existing resources. By means of energy saving, carbon emission reduction, and resource reuse, Apacer reduces energy and resource consumption and is committed to "becoming a renowned green enterprise."

Apacer's Environmental Commitment

Legal Aspect

Check the status of regulatory updates quarterly and comply with domestic environmental protection and energy management regulations. No penalties for environmental violations were given in 2020

Institutional Aspect

- Introduce ISO 14001:2015 Environmental Management System to systematically manage the manufacturing process and negative environmental impact of products
- Procurement and manufacturing processes comply with international environmental standards for electronic products and Hazardous Substance-Free (HSF) standards. Furthermore, Introduce QC 080000 Hazardous Substance Process Management System
- Advocate and implement 2019 RoHS 2.0 requirements one year ahead of schedule
- No conflict minerals are used
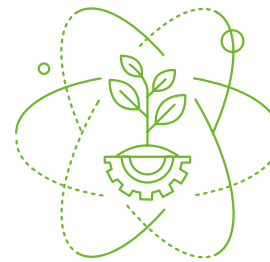
R&D

Develop green products and reduce the number of resources used starting from the product design stage
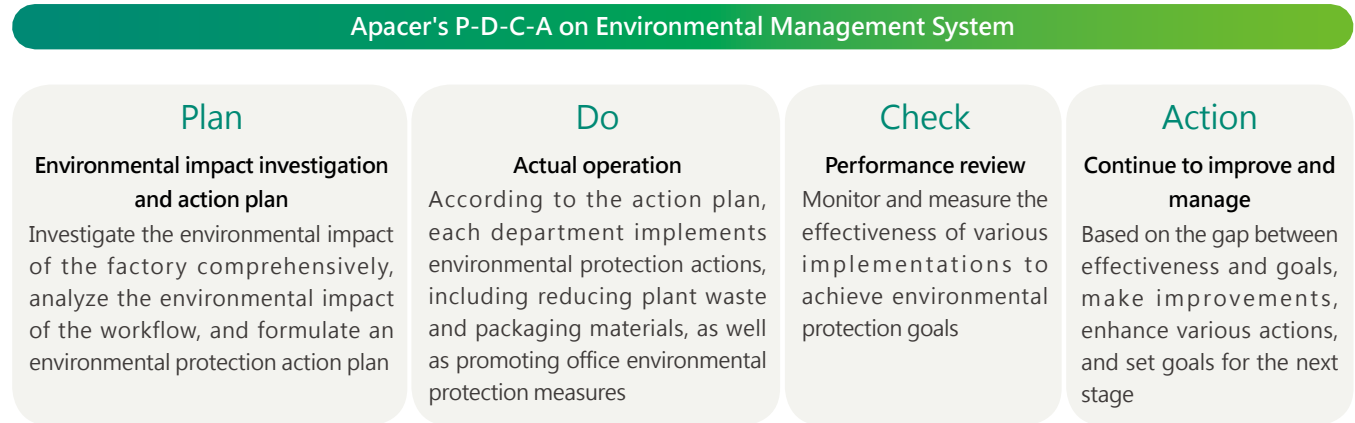
Actions

- Set carbon emission reduction targets, implementing and reviewing them annually, introducing water-cooled air-conditioning to the 1st to 6th floors of the operation headquarters in 2020, tracking the effectiveness of this project in terms of energy saving and carbon emission reduction
- Conduct annual employee education training to strengthen employees' awareness of environmental protection and energy conservation
- Establish short-, mid- and long-term environmental sustainability goals, and continuously enhance its green and sustainable actions

Introduction of the Environmental Management System

To become a green enterprise, Apacer has gradually introduced ISO 9001 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 policies 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's P-D-C-A on Environmental Management System

Plan	Do	Check	Action
Environmental impact investigation and action plan	**Actual operation**	**Performance review**	**Continue to improve and manage**
Investigate the environmental impact of the factory comprehensively, analyze the environmental impact of the workflow, and formulate an environmental protection action plan	According to the action plan, each department implements environmental protection actions, including reducing plant waste and packaging materials, as well as promoting office environmental protection measures	Monitor and measure the effectiveness of various implementations to achieve environmental protection goals	Based on the gap between effectiveness and goals, make improvements, enhance various actions, and set goals for the next stage

Apacer has introduced the ISO 14001:2015 Environmental Management Systems 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.

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

Environmental education and training for employees

In order to internalize the understanding of environmental protection and energy conservation among our employees, we not only pass on new knowledge through announcements from time to time, but also reinforce the knowledge and trend of environmental protection and energy conservation through physical courses. 100% of our new employees are required to pass the general education course on environmental protection and energy conservation, which includes general environmental knowledge, as well as ISO 14001 environmental management and ISO 14064-1 GHG management system policies and indicators.

Employees whose duties are related to product design are also arranged to receive Hazardous Substance Process Management (HSPM) training every year to ensure that they understand professional environmental knowledge and have sufficient awareness of product design that is environmentally friendly.

HSPM (Hazardous Substance Process Management) training Accumulated hours over the years

Year	Hours
2018	200 hr
2019	194 hr
2020	290 hr

Climate change risk management

Material Issues 2.2
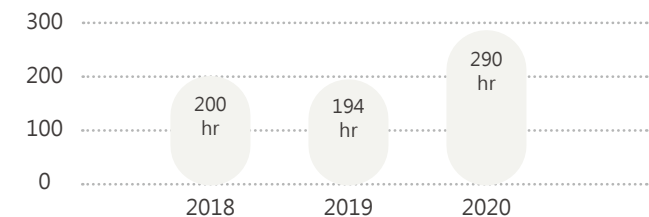
In response to the possible risks and impacts of climate change, Apacer will conduct the identification and management of climate change risks and opportunities by referring to the Financial Stability Board's (FSB) Task Force on Climate-related Financial Disclosures (TCFD) framework in 2020.

Management Strategy and Action Plan

Governance	Strategy	Risk Management	Targets and Goals
- **Corporate Social Responsibility Committee:** Apacer's top climate change risk management organization, chaired by the Chairman, reviews the implementation and planning of climate change-related work on a quarterly basis and reports to the Board of Directors annually - **Environmental Caring Team:** Under the Corporate Social Responsibility Committee, responsible for the planning and promotion of climate change response	- Conduct climate change risk identification across departments and cross-departmental discussions on climate risks and opportunities of key concern - Evaluate the potential opportunities and impacts of climate change on company finances	- Based on TCFD framework, identify the factors affecting Apacer significantly in terms of climate risks and opportunities - Establish risk prevention and management indicators and other measures in advance based on climate risk identification results - Incorporate climate risk identification and assessment into operational risk management	- Set climate change management targets and performance indicators, and track and manage the progress of implementation - Conduct annual GHG emission inventories

Executive Status

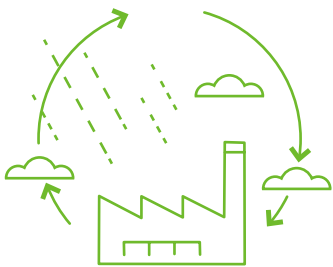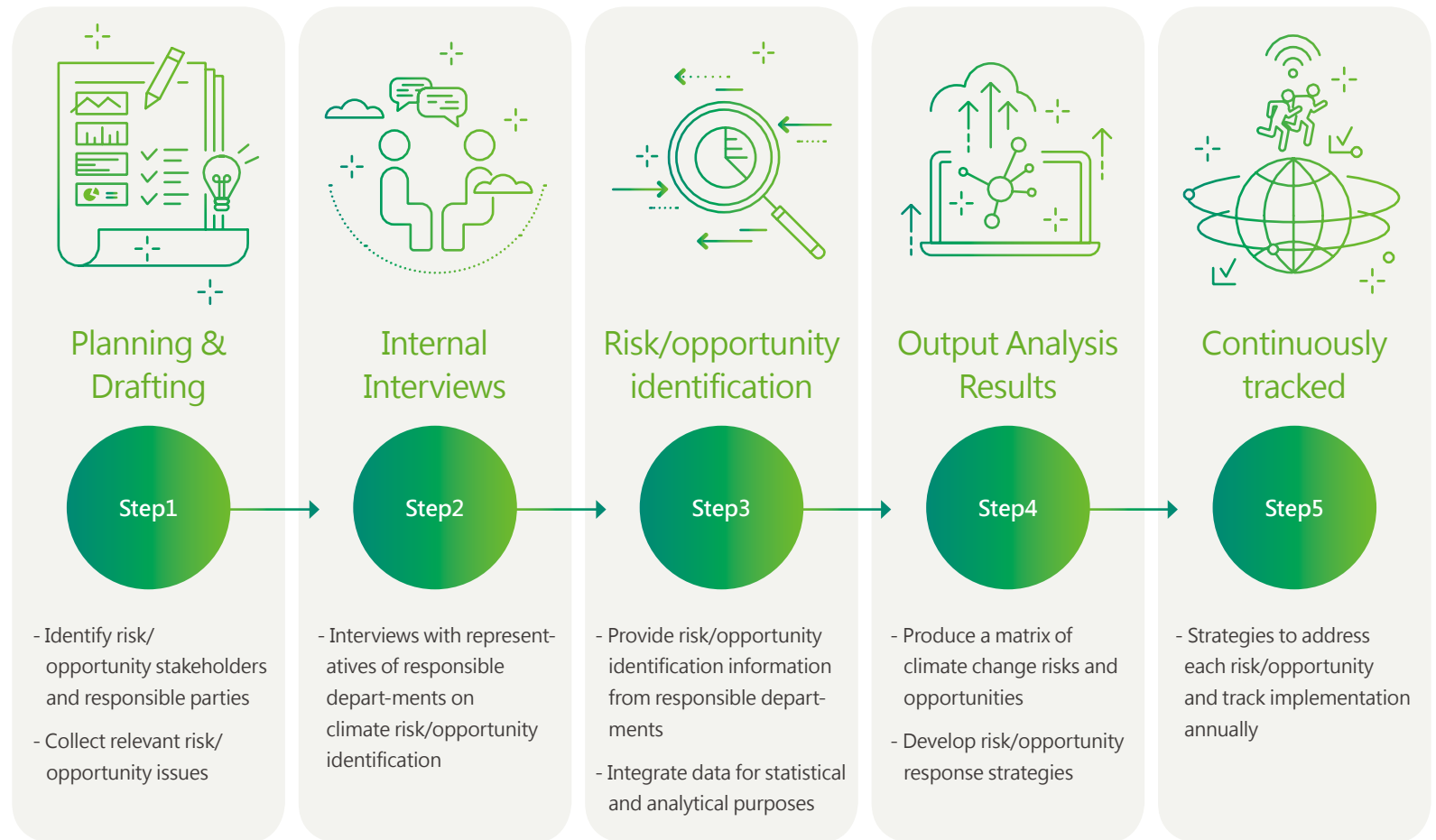| Governance	Strategy	Risk Management	Targets and Goals
- In 2020, we will conduct 4 audits on the effectiveness of energy saving and carbon emission reduction, waste management, environmental hygiene and environmental protection measures - Plan and implement the renewal of power-saving equipment, and track the power-saving benefits of the renewed equipment on a quarterly basis	- Complete the identification and assessment of climate change risks by 2020 - The Environmental Caring Team develops projects and coordinates inter-departmental efforts to promote energy saving and carbon emission reduction activities based on the results of climate change risk assessment	- Cross-departmental discussions to assess the identification of climate related risks/opportunities and to evaluate the potential financial impact to the company - Report the results of climate related risk/opportunity identification and the possible financial impact to the company to the CSR committee chairperson - For more information, please refer to Apacer's CSR report"Operational Risk Management".	- Set climate change management targets and performance indicators, and track and manage the progress of implementation - Conduct annual GHG emission inventories - To reduce carbon emissions, we will continue to implement energy-saving measures to reduce carbon emissions in Scope 2 - Based on the results of the GHG inventory, plan energy-saving and carbon-reduction measures and submit them to the CSR Committee for regular review of the implementation performance by senior executives

Climate Risk Matrix

In order to identify the possible risks brought by climate change to the company, Apacer performs the identification and ranking of climate-related risks/opportunities based on TCFD to understand which risks/opportunities may have an impact on Apacer. By referring to the climate change research reports of international organizations and combining the climate risk and opportunity matrix, Apacer will incorporate sustainable management planning such as energy saving, carbon emission reduction, and water saving into the company's operation policies.

Risk/Opportunity Identification Process

Planning & Drafting	Internal Interviews	Risk/opportunity identification	Output Analysis Results	Continuously tracked
Step1	Step2	Step3	Step4	Step5
- Identify risk/ opportunity stakeholders and responsible parties - Collect relevant risk/ opportunity issues	- Interviews with represent-atives of responsible depart-ments on climate risk/opportunity identification	- Provide risk/opportunity identification information from responsible depart-ments - Integrate data for statistical and analytical purposes	- Produce a matrix of climate change risks and opportunities - Develop risk/opportunity response strategies	- Strategies to address each risk/opportunity and track implementation annually

Climate Change Risk and Opportunity Matrix

Opportunities

1 Obtain public sector cooperation and incentives

2 Promote energy-saving and carbon-reducing production

3 Enter the green product market

4 Enhance positive corporate image

5 Create a green environmental building

Risks

Substantial Risk

I Typhoons and Floods

II Drought

III Temperature rise

IV Sea-level rise

Transformation Risk

A Increasingly stringent environmental regulations

B Increasing cost of carbon emission management

C Unstable supply of energy resources

D Impact on the company's corporate identity

Definition of low risk, constant concern, and major concern

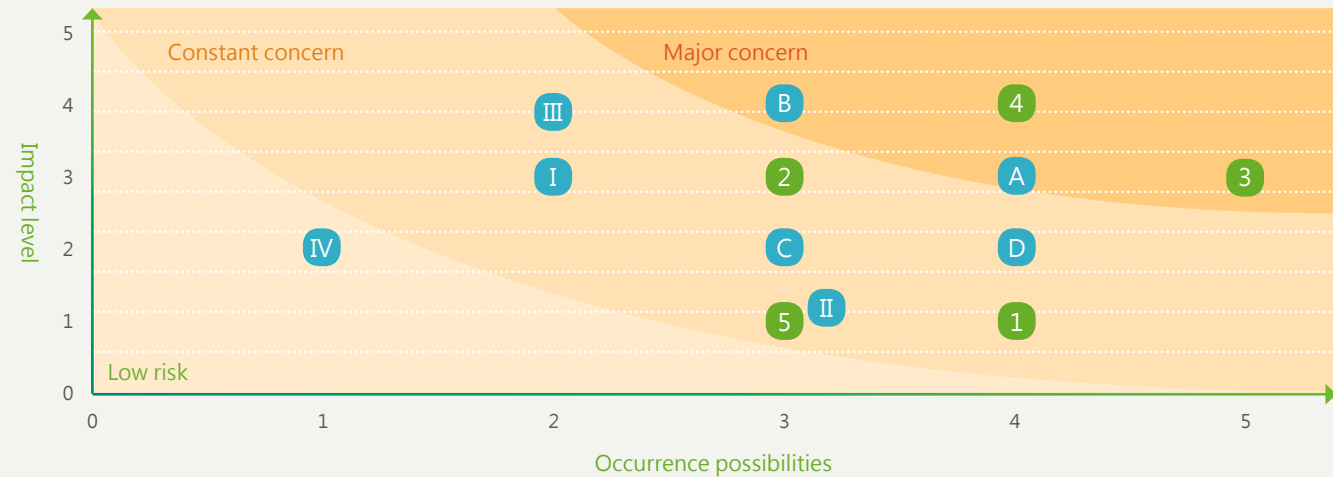Impact level x likelihood of occurrence :

Low risk

score below 2-Continuous observation.

Constant concern

score 3~8-Proactively collect relevant domestic and international news and cases and review the issue annually.

Major concern

score above 9-Formulate response strategies and review the implementation of the strategies annually.

Risk matrix — Impact level (y-axis, 0–5) vs Occurrence possibilities (x-axis, 0–5). Regions labelled Constant concern, Major concern, Low risk. Plotted points: III (2,4), B (3,4), 4 (4,4); I (2,3), 2 (3,3), A (4,3), 3 (5,3); IV (1,2), C (3,2), D (4,2); 5 (3,1), II (3.2,1), 1 (4,1).

Financial Impact of Risks and Opportunities

In 2020, Apacer conducted the identification of climate-related risks/opportunities and identified two major climate risks and three major climate opportunities that Apacer focuses on, and proposed response strategies according to the nature of the risks and opportunities. For risks, we manage them as early as possible to reduce the possible negative impacts in the future; for opportunities, we invest resources and plan in advance to grasp the business opportunities that may be brought by climate change.

|	Type of risk/ opportunity	Risk Description	Major Potential Financial Impact Description	Response Strategy
Risks	Risk 1	Environmental regulations becoming more restrictive	Failure to comply with environmental policies in a timely manner may result in penalties, or strict regulations may result in higher operating costs and limited energy or resource supply	Continuously monitor changes in regulations and understand the trends and possibilities of changes in regulations in advance through external consultants, industry insights and international cases to develop strategies to address
	Risk 2	Carbon emission management costs increasing	In order to control carbon emissions, equipment upgrades, and production reductions may be required, resulting in higher operating costs and lower revenues	Prioritize low energy consumption equipment when upgrading equipment without compromising quality
Opportunities	Opportunity 1	Energy-saving and carbon-reducing production	Reduce energy and resource consumption in production behavior to save production costs	To make the production process more efficient through electronic and process optimization projects to save energy and resources, and thus reduce production costs
	Opportunity 2	Entering the green product market	With the international trend, customers' demand for green products is increasing, and designing eco-friendly and energy-saving products to meet customers' needs can penetrate potential markets and increase revenue	Develop green products, develop low-carbon product markets, and leverage our technological advantages to become a member of the supply chain for new energy or low-carbon products
	Opportunity 3	Enhancing positive corporate image	Meet stakeholder expectations, enhance positive corporate identity, and bring potential opportunities	Reinforce Apacer's positive image of green manufacturing by promoting energy-saving and carbon-reducing production and entering the green product market

Energy Management

Apacer has established a pollution prevention and improvement mechanism through the ISO 14001 environmental management system certification to save energy use and reduce the environmental impact of corporate operations. Apacer's internal energy consumption is dominated by the electricity from the operation headquarters, and the purchased electricity (indirect energy) from the factory office represents more than 99% of the total energy use. In 2020, due to the purchase of additional production equipment, the electricity consumption and energy intensity has slightly increased.

Energy Use Over the Year

Energy Types		Direct Energy		Indirect Energy	
Energy Use		Diesel forklift		Factory and office electricity use	
Year		Energy Usage		Energy usage	
2018	20 liters	702.24 Megajoules	3,700,777 kWh	13,322,797.2 Megajoules	
2019	20 liters	702.24 Megajoules	3,987,706 kWh	14,355,741.6 Megajoules	
2020	0 liters	0 Megajoules	4,112,765 kWh	14,805,954.0 Megajoules	

Note 1 : 1 Liters of diesel =8,400 Kilocalorie ; 1 Calorie = 4.18 Joule (Reference Energy Product Unit Calorific Value Table, Bureau of Energy, Ministry of Economic Affairs)
Note 2 : 1 kWh =3.6 Megajoules

Energy Intensity (GJ/year revenue (million))

Year	Value
2018	1.41
2019	1.92
2020	2.07
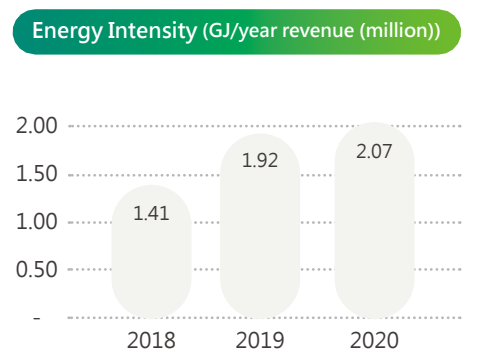
Note: Energy intensity = total energy use (Giga Joules, GJ) / annual revenue (million)

GHG Management

In order to control the impact of operation on the environment, Apacer has been implementing GHG inventory since 2013 and set 2012 as the base year for the inventory. Therefore, Apacer has set 2012 as the base year of the inventory to ensure the company's GHG emission status and strive to reduce. Apacer will complete the GHG inventory of Scope 1 and Scope 2 in 2020 in February 2021, with the operational headquarters in Tucheng District, New Taipei City as the boundary, and the emission sources include in-plant and out-plant equipment and purchased electricity. 2020 GHG emissions are slightly lower than the previous year, while the calculated value is slightly higher than the previous year because the denominator of the calculation is lower. In line with the government's carbon emission reduction policy and the international environmental protection trend, Apacer has set 2020 as the base year and set a 5-year carbon emission reduction target of 3% GHG reduction.

Note: Apacer will update its air-conditioning equipment to more energy-efficient water-cooled hosts from 2018 and take 2 years to observe and record the power-saving benefits to confirm effective savings in air-conditioning power consumption, and complete the full update by 2020, therefore setting 2020 as the base year for GHG reduction.

GHG emissions

Scope	2018	2019	2020
Scope 1 (Tonnes of CO_2e)	8.75	9.11	9.05
Scope 2 (Tonnes of CO_2e)	2,055.21	2,125.45	2,092.49
Total Emissions (Tonnes of CO_2e)	2,063.96	2,134.55	2,101.54

Note 1: Year of GWP reference data: IPCC 2007
Note 2: Source of carbon emission coefficient: Calculated based on the latest electricity emission coefficient announced by the Energy Bureau at the time of the inventory (carbon emission equivalent coefficient 0.509 kg/kWh)
Note 3: Inventory boundary setting method: Operation control method

Greenhouse gas emission intensity
(metric tons of CO2e /year revenue (million))

	2018	2019	2020
	0.22	0.28	0.29

Note: Calculation = Total emissions (metric tons of CO2e) / Annual revenue (million)

Benefits from Energy-Saving Improvements in 2020

Due to human activities, global warming has caused abnormal climates around the world, posing huge threats to ecosystems, water and soil resources, human life, and properties. In order to protect the environment and reduce emissions of greenhouse gases and resource consumption, Apacer invested NT$ 2.5 million in 2019 in alignment with the environmental protection trend to replace air-cooled air conditioners on the seventh floor of the factory with water-cooled air conditioners. After a year of tracking and evaluation, it is calculated that water-cooled air conditioners save more than 30% energy compared to air-cooled air conditioners. Due to the remarkable energy-saving effect, Apacer will invest NT$ 15 million in 2020 to replace the air conditioning equipment on the 1st to 6th floors, which will not only realize the environmental protection advocate, but also achieve the effect of saving electricity costs and contribute to the mitigation of climate change.
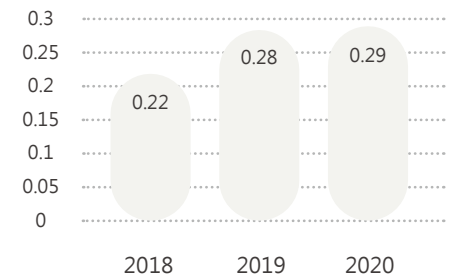
Full Replacement to Water-cooled air conditioner

From 2019 to 2020, we will invest more than NT$ 17.5 million to replace air-cooled air conditioners with water-cooled air conditioners at the plant and will be fully operational in 2021
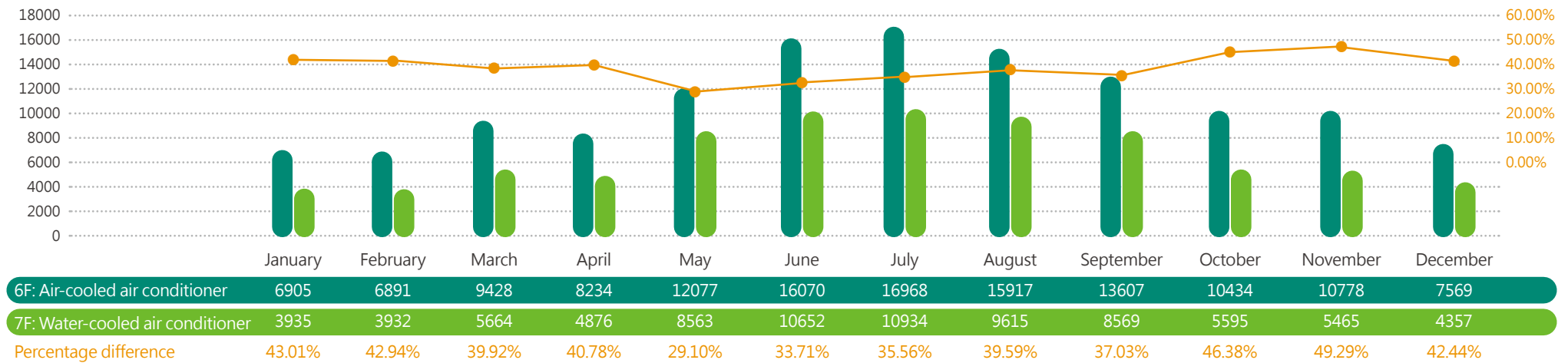
Green Factory/Office Energy Saving Improvement

Air Conditioning Power Consumption Expected to save 30% up

The benefits of replacing water-cooled air conditioners are being traced from 2019, and after 2 years of statistical data, it is expected to save more than 30% of electricity for air conditioning

Air-cooled/Water-cooled Air Conditioner Energy Saving Comparison (Independent Meter) January~December 2020

	January	February	March	April	May	June	July	August	September	October	November	December
6F: Air-cooled air conditioner	6905	6891	9428	8234	12077	16070	16968	15917	13607	10434	10778	7569
7F: Water-cooled air conditioner	3935	3932	5664	4876	8563	10652	10934	9615	8569	5595	5465	4357
Percentage difference	43.01%	42.94%	39.92%	40.78%	29.10%	33.71%	35.56%	39.59%	37.03%	46.38%	49.29%	42.44%

Energy saving actions and benefits over the years

2015	2016	2017	2018	2019	2020

2015

Introduce water-saving facility
Water-saving facility was introduced in 2016, which saved 24.8% of water compared to 2015.

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.

2016

Energy-Saving Patrol
To avoid wasting energy, Apacer's employees established Energy-Saving Patrol in 2016 to evaluate and implement the Company's energy-saving actions.

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.

2017

Introduce dust emission monitoring
Collecting dust produced from the PCB production process. Then, air is discharged. Data monitoring before and after dust emissions ensures compliance with air quality regulations and eliminate harmful air pollutants

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.

2018

Install liquid barriers to prevent chemical spills
Liquid barriers are installed in the eye-washing equipment and explosion-proof room to prevent chemical spills from reaching drainage channels.

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

Optimize SMT equipment, using nitro machine to reduce energy consumption
Update of nitrogen machinery. The machinery offers 5 energy-saving stages. The machinery can automatically adjust energy-saving modes during production.

2019

Optimize test process to reduce energy consumption
The number of Platforms was reduced from 52 to 39, which saved 20-37% of the energy.

Optimize air-conditioning equipment to build an energy-saving office
Water-cooled air-conditioning equipment was introduced on the seventh floor in 2019, which saved more than 30% of energy.

2020

Test process refinement to reduce process power consumption
DRAM test stations reduced from 4 to 2, saving process power consumption

Complete replacement of air-conditioning equipment to save electricity
Following the achievements in 2019, water-cooled air conditioning will be introduced to the 1st to 6th floors of the factory office in 2020 and will be fully operational in 2021, which is expected to save more than 30% of electricity for air conditioning in the future.

2.3 Waste and Water Resources Management

Waste Management

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 audit will be undertaken by the responsible department as needed to ensure the appropriateness and the compliance of the waste processing. Apacer has established relevant management procedures and at least once a year, depending on the needs, the responsible department will conduct on-site audits. If the audit results do not meet the standards, the company will be required to stop the operation and make improvements within a certain period of time, and if the improvements do not meet the requirements, the contract will be stopped, and another qualified vendor will be selected to fulfill the corporate responsibility of 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 to prevent chemical spills from reaching drainage channels, helping the Company fulfill its corporate responsibility in waste management.

Types	Hazardous commercial waste				Common commercial waste				
Processing measures	Burial	Incineration	Reuse	Recycling	Burial	Incineration	Reuse	Recycling	Unit: ton
Volume processed	0	0	0	6.521	0	18.3	0	18.8839	
Subtotal	6.521				37.1839				
Total	43.7049								

Types	Hazardous commercial waste		Common commercial waste		
Processing measures	On-site disposal	Off-site disposal	On-site disposal	Off-site disposal	Unit: ton
Volume processed	0	6.521	0	37.1839	
Subtotal	6.521		37.1839		
Total	43.7049				

Note: Qualified vendor: A citizen-run waste removal and treatment organization that has been authorized by the competent authority to remove and treat this type of waste; Data source: Waste Reporting and Management Information System of the Environmental Protection Administration.

Water Resources Management

Apacer has established a pollution prevention and improvement mechanism through the ISO 14001 environmental management system certification, conserving energy use and reducing the environmental impact of corporate operations. The company's internal resource usage primarily consists of domestic water for the operation headquarters, and no water is required for the manufacturing process of products, so no wastewater is produced in the industrialized operation.

The company's water source is from the Taiwan Water Supply Corporation, and the water source is from the Shimen Reservoir. Domestic wastewater is collected from the pipeline to the sewage processing plant for disposal, and the water intake and wastewater discharge do not cause significant environmental impact. 2020 will see a slight increase in total water consumption due to the commissioning of water-cooled air-conditioning equipment on the 1st to 6th floors.

Water withdrawal over the years

Year	2018	2019	2020
Total water withdrawal	4.59	5.36	5.80

Office Environmental Action

Apacer attaches importance to integrating the concept of energy saving and environmental protection into the daily operation of the corporation, reducing the environmental impact and at the same time cultivating employees to adopt environment-friendly behaviors.

Installation of water-saving faucets

-1F~7F restrooms are fully replaced with water-saving faucets

- 60% of water consumption can be saved in the restroom sink

Replacement of water-cooled air conditioners

-Replace 1F~7F air-cooled air conditioners with water-cooled air conditioners

-More than 30% saving in electricity consumption

Replacement of LED lighting unit

-Replace 50 T5 luminaires in 2020, a more energy-efficient LED luminaires.
-LED luminaires will reduce 35W per unit, saving 5,110 kWh of electricity a year

Note: Calculation: T5 luminaire (14W*4=56W), LED luminaire (7W*3=21W), 35W less per unit, 0.28 kWh/day less. 50 units*0.28 kWh/day=14 kWh/day, 14 kWh/day*365 days=5110 kWh/year.

Energy Saving Promotion

-Posting of energy preservation literature to encourage employees to conserve energy resources
-Organized " WALKING DAY" to accumulate walking steps and encourage employees to use elevators less and walk more

Office Energy Saving Activities

Since 2015, the following environmental actions have been implemented on a regular basis
-Electronic form system is used in all workflows to reduce paper usage
-The printer is preset to print on both sides to reduce paper consumption
-Computers and office machines are set to sleep to avoid energy waste
-Installing curtains, heat insulation paper and circulation fans in office windows to improve the energy efficiency of air conditioning
-The office air conditioning temperature is set to 26 ℃, and the air conditioning system in the office area will stop automatically during non-working hours to avoid the waste of energy

2020 Environmental Protection Expenditure

Unit: NTD

Expenditure Items	NT $
Verification fee of environmental management systems	205,000
RBA coaching and verification fees	200,000
Equipment improvement	15,857,500
Common commercial waste	264,000
Hazardous commercial waste process	95,000
Working environment measurement	101,000
Environmental sanitation inside and outside the office area	1,738,860
Environmental greenification	10,000
Total	18,471,360

Material Issues 2.4

Green Products

In response to the global calls for environmental protection and in order to practice the brand's core value of "Becoming Better Partners," Apacer is constantly thinking about how to make a positive impact on the global environment starting with the core of its business operations. We have extended the concept of environmental sustainability to the whole of our value chain. Through the introduction of environmental management systems, supply chain management, green product design, and environmental education, Apacer implements green production concepts and products in order to comply with the latest international environmental regulations and ensure the competitiveness of Apacer's green products.

Design
- Comply with RoHS and REACH directives
- Energy saving, recyclable and non-polluting
- Reduce packaging materials

Procurement
- Lead-free components
- Recyclable Packages
- Hazardous Substance Management
- Conflict Minerals Management

Manufacturing
- Lead-free manufacturing process
- Compliant with ISO 14001 environmental management system
- ISO 14064 compliant greenhouse gas inventory
- Chemical Control and Waste Disposal

Recycling
- WEEE compliant waste recycling
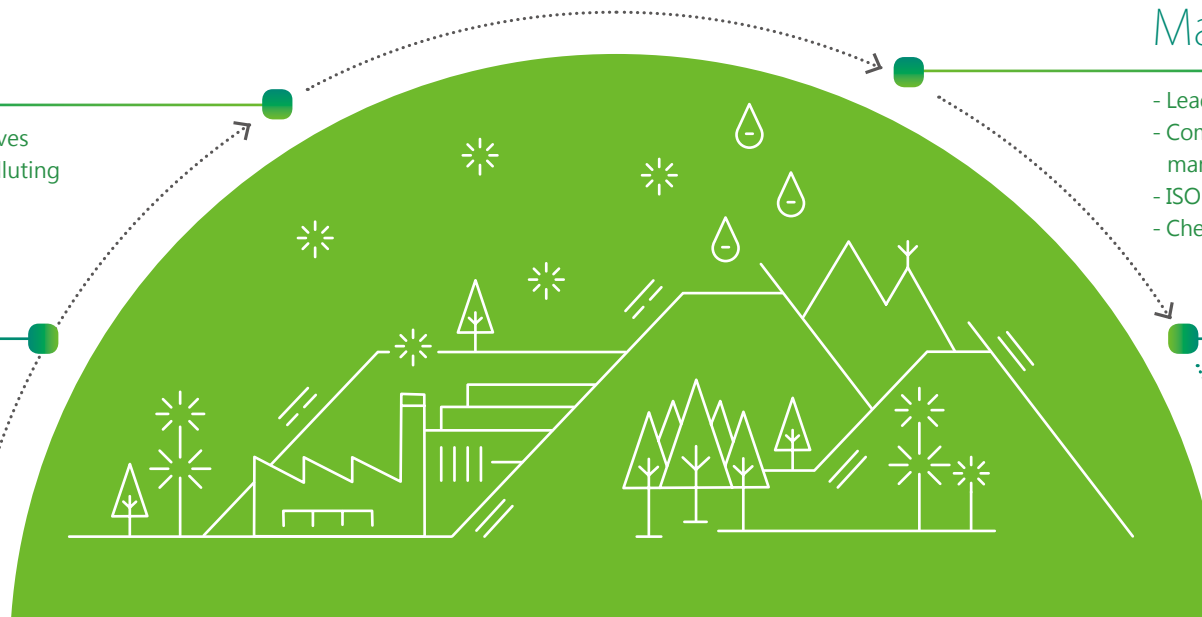
## ● 【Procurement】Advancement of Hazardous Substances Control

Apacer has fully implemented the RoHS directive in its manufacturing process and material management, complying with REACH regulations and relevant customer regulations. It also conducts supplier management and conducts audits on component suppliers and obtains environmental protection undertakings to ensure that source materials comply with environmental regulations.

In 2011, Apacer gradually introduced the halogen-free manufacturing process, and audits and requests for environmental pledges and RoHS test reports from component suppliers. 2019 RoHS Directive adds four new plasticizers The four plasticizer hazardous substances (BBP/DBP/DEHP/DIBP) are banned in the 2019 RoHS Directive, and Apacer has banned these four plasticizer hazardous substances in advance since

2007
- Introduction to lead-free process
- Through QC080000 Management System
- Produce fully controlled and banned hazardous substances

2011
- Progressive intro-duction of halogen-free manufacturing
- Conduct supplier audits and obtain environmental pledges, RoHS test reports

2017
- Advance prohibition of four plasticizer hazardous substances (BBP/DBP/DEHP/DIBP)

2019
- Four new plasticizer hazardous substances (BBP/DBP/DEHP/DIBP) are prohibited under the RoHS Directive

● 【Design】Environmental friendly products with high efficiency and low energy consumption

In order to meet market demands and future trends, Apacer develops its development and design in the direction of high efficiency and low energy consumption. In terms of material usage, we make the most effective use of materials through precise calculations to avoid wasting resources; the leftover materials and tail materials left in the production process are recycled and reused to realize resource recycling. In the design of packaging materials, we consider easy disassembly and recyclability, and reduce the volume to reduce waste generation and impact on the environment. Apacer restricts the use of harmful substances in all of its products to maintain the natural environment and ecology.

Reduced energy consumption → Easily disassembled → Recyclable → Waste reduction → Restricted Hazardous Substances
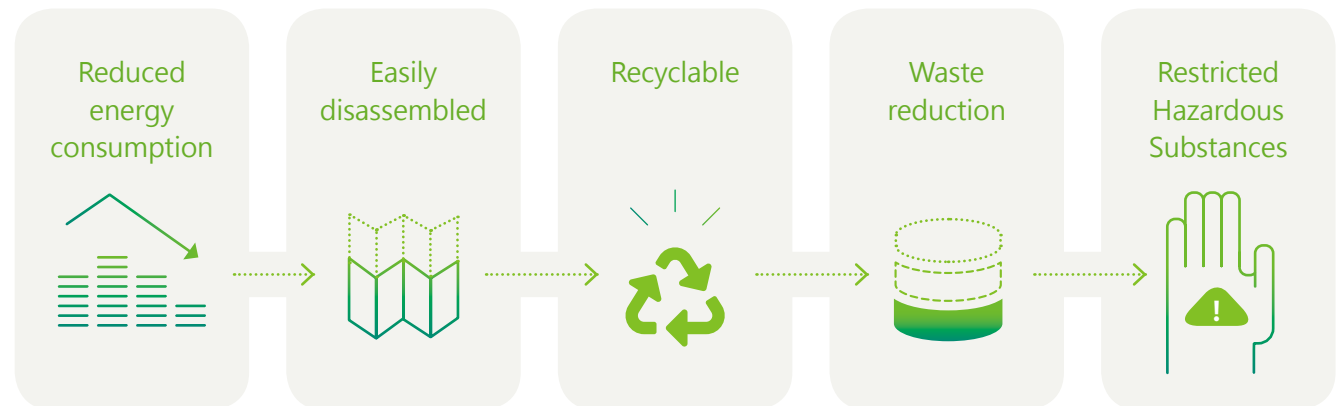
● 【Manufacturing】Smart Green Production

Smart Factory - Manufacturing Process Management Upgrade

Apacer builds the "Smart Manufacturing System" with the three-pronged approach of automation equipment, network communication technology and manufacturing production system, aiming to improve the overall production efficiency and cost competitiveness. By integrating the real and the virtual system, we can make the production process more flexible, reduce the difference between quality and service, and improve customer satisfaction. We have built a green manufacturing environment in line with international standards with our sophisticated production equipment, independent research and development capabilities, and perfect factory management. We not only design the best manufacturing process for our customers, but also precisely control production costs to meet the goal of maximizing production efficiency and optimizing production capacity.

Apacer

Technology Vision of "Smart Factory"

Smart Manufacturing Development Team
Promote the concept of smart factory and implement the concept in every corner of the company.

Production equipment automatization and communication
Strengthen the production equipment network communication capability, with smart production software for management, providing data correction and abnormality prevention

Manufacturing Environment Supervision and Control
Comprehensive environmental detection equipment is installed in the production environment to monitor production working conditions through smart technology.

Introduction of Smart Production Software
Accurate logging of each process and production material, perfectly integrated with production equipment, provides a comprehensive and complete production history with relevant data for analysis and refinement of production measures

Reduction of packaging materials

In order to fulfill energy conservation and carbon emission reduction in routine operations, Apacer has re-examined several production processes to find out where resources may be idle or wasted. In 2019, we adjusted the standard operating procedures for warehousing products. When putting a batch of products into boxes, the remainders will be shipped into the warehouse without packing. Once there are enough products for one box, they will be packed to avoid wasting packaging materials. In 2020, the total savings are approximately 3,600 packages.

2019
Package Carton Reduction

2020
Tray Recycling

In addition to package material reduction, we are also planning to evaluate the reuse of Tray trays. It is expected that after completing the usage and frequency statistics of various Tray trays, the benefits of reducing resource waste can also be achieved by changing the operation SOP. In the future, Apacer will continue to take a proactive attitude to seek ways to save energy and reduce carbon emissions, care for the earth, and take up the responsibility of protecting the environment.

● 【Recycling】Compliance with EU WEEE regulations

Waste electronic products that are not properly disposed of may lead to the release of harmful substances and bring serious pollution hazards. Apacer adheres to the spirit of "producer responsibility" and joins the recycling system of waste electronics in accordance with the European Union's WEEE regulations and labels its products with the WEEE (Waste Electrical and Electronic Equipment Directive) recycling label and moves toward a recycling rate of 80% for recovery and 70% for re-use and recycling. Consumers will jointly move towards the goal of sustainable responsibility. All Apacer products in Europe can be properly disposed of through qualified local recyclers to protect the global environment and recycle resources.

WEEE compliant

Chapter 3

Making Progress Alongside A Good Partner

Vision

Over the years, Apacer insists on providing high-quality products and services, achieving alignment with international environmental regulations, and creating a trustworthy international green brand. Hoping to play an important role in driving supply chain growth, Apacer has established several management policies related to our suppliers and customers in order to achieve cooperation progress and joint growth. Apacer upholds the brand core value, "Delivering on Our Promise, Constant Improvement, and Mutually Beneficial."

Policy and Commitment

Upholding the quality policy, we "deliver competitive, defect-free, and hazardous substance-free products and services on time to satisfy customers." Apacer is committed to fulfilling social responsibilities and providing reliable green products to customers.

Contribution to the United Nations
Sustainable Development Goals (SDGs)

12 Responsible consumption and production

17 Partnerships for The Goals

Issues of the Chapter

Material Topics : Sustainable supplier management

Corresponding Material Topic
GRI 308 Supplier environmental assessment
GRI 414 Supplier social assessment

How to Manage

Responsibility	- Customer Service Division - Global Procurement Division
Resources	- Manpower: 30 staff in Customer Service Division and Global Procurement Division
Channels of Communication	- Apacer Green Product Web System (AGP) for suppliers - Annual supplier conference

Action

- Suppliers are required to sign the Declaration on Environmental Protection
- Suppliers provide the raw material test reports and complete the material surveys to ensure that raw materials conform to HSF regulations.
- Implement Supplier RBA policy
- Convene annual supplier conference

Sustainable Goal

Short-term goal (2021)	- Investigate supplier ESG-oriented policies and implementation
Mid-term goal (2022~2024)	- RBA VAP (Validated Assessment Program) regulations for supply chain assessment/audit/management shall score above 75 - Convene annual supplier conference to promote important issues of the given year - ESG-oriented considerations added to supplier policies to build sustainable supply chain management
Long-term goal (After 2025)	- Develop smart green management Internal: Apacer develops green product design and manufacturing processes External: Update green products and environmental regulations through the AGP system to communicate with relevant supplier partners

Evaluation Method

- Collect data from suppliers and analyze responses to report to CSR committee

- Effectiveness of supplier conference implementation
- Results of annual supplier assessment

- Internal: Increase the proportion of material/finished product in HSF and reduce using hazardous substances
- External: Check weather all suppliers comply with Apacer's green product and environmental law requirements through the AGP system

Achievements and results in 2020

Achieved goals :	- 100% recovery of supplier's RBA statement - 100% recovery of supplier's conflict free minerals pledge - Complete RBA and ISO 9001 audits - Organize supplier conferences to promote major issues

Contribution to the United Nations Sustainable Development Goals (SDGs)

SDGs 12 Responsible Consumption and Production
SDGs 17 Partnerships for the goals

Material Issue : Customer Relationship Management

Corresponding Material Topic
GRI 416 Customer Health and Safety

How to Manage

Responsibility	- Customer Service Division - Sales and Marketing Department
Resources	- Manpower: 52 staff in the Customer Service Division and Sales and Marketing Department
Channels of Communication	- CRM (Customer Relationship Management) system - After-sales system : eRMA - Annual customer satisfaction survey - Customer Service Line

Action

- Establish global after-sales service system
- Optimize product customization services
- Conduct an annual customer satisfaction survey

Sustainable Goal

Short-term goal (2021)	- Improvements based on 2020 customer satisfaction survey results
Mid-term goal (2022~2023)	Customer satisfaction improvement - Promote B/C grade customers to A grade, raising the percentage of A grade customers to 12% - Increase the number of customers with more than 3 transactions by 50
Long-term goal (After 2025)	- Promote smart green management

Evaluation Method

Conduct annual customer satisfaction survey via CRM system

Achievements and results in 2020

Achieved goals :	- Complete the updating of the customer service process, linking to the RMA system to enhance the traceability of resume to meet customer needs - Complete customer satisfaction survey with a satisfaction score of 85

Contribution to the United Nations Sustainable Development Goals (SDGs)

SDGs 12 Responsible Consumption and Production
SDGs 17 Partnerships for the Goals

Material
Issues
3.1

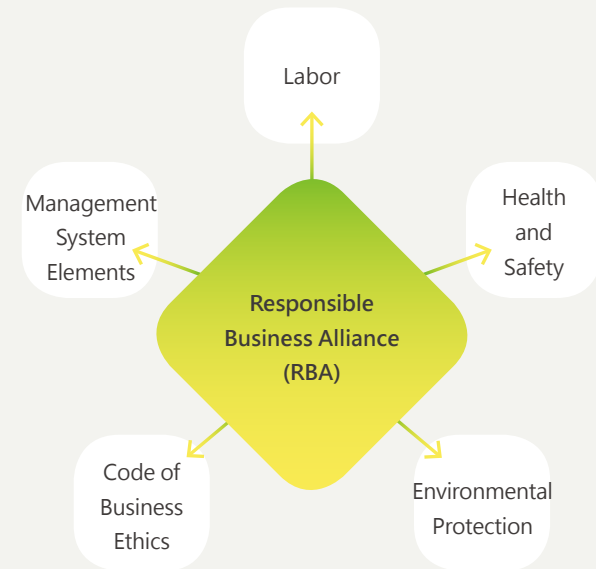# Sustainable Supplier Management

Continue to Implement RBA Guidelines

Apacer's global operations are in compliance with RBA's five behavior-oriented practices, showing our determination in fulfilling our CSR.

Apacer adheres to the VAP standard, implements external audits and makes continuous improvements, and was awarded VAP (Validated Audit Process) Silver in 2018 and 2020. Apacer is striving for excellence in the implementation of RBA in 2020 by improving a total of five areas including labor, health and safety, environment, ethics, and management system.

Our operations are based on ethics and transparency, creating a good working environment for our employees. Moreover, we establish reliable partnerships with suppliers by implementing supplier management regulations" and environmental policies, thus reducing the environmental impact of our operations. Moreover, all of Apacer's employees have completed RBA education and training courses, which help in implementing RBA Code of Conduct in our day-to-day operations.

Labor

Management System Elements

Health and Safety

Responsible Business Alliance (RBA)

Code of Business Ethics

Environmental Protection

Supplier Policy

Apacer also conducts risk assessment with reference to the overall status of suppliers' supply quality (ISO 9001), delivery timeliness, price, green product capability (QC 080000), and implementation of RBA policy. Apacer has purchased raw materials with suppliers from different regions and regularly conducts supplier assessments. Thanks to these policies, we can ensure the consistent quality of Apacer's products and satisfy customers' needs as well as meet the requirements of HSF standards.

Since Apacer values purchasing from local supplies, the number of local supplier accounts for 79% of all our suppliers. Also, Apacer spends 50% of its purchasing budget on local 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.
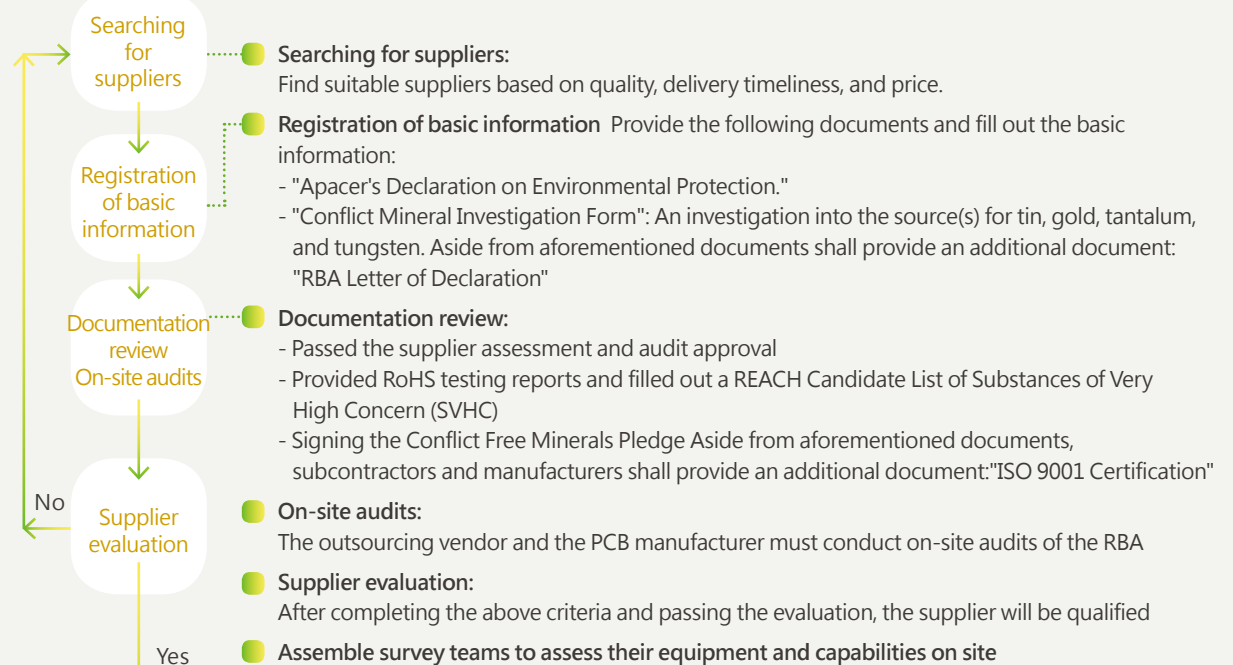
Supplier Policy

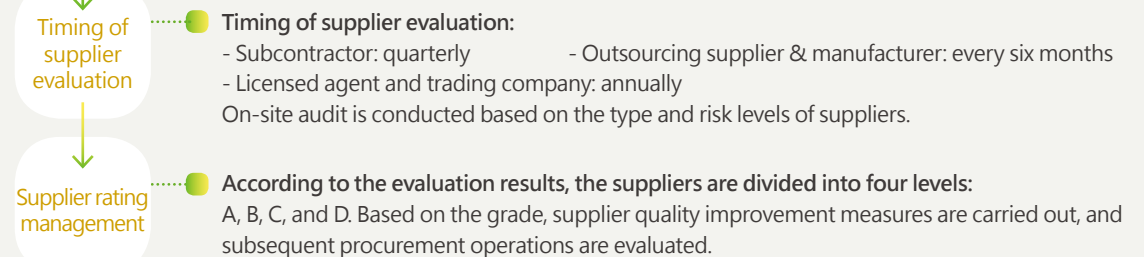| Region	Types of Suppliers	Number of Suppliers	Ratio by Type	Purchasing Budget Ratio
Taiwan	Licensed Agent	38	79%	50%
	Subcontractor	12		
	Outsourcing Vendor	5		
	Trading Company	12		
	Manufacturer	95		
Non-Taiwan Region	Licensed Agent	6	21%	50%
	Subcontractor	1		
	Outsourcing Vendor	6		
	Trading Company	18		
	Manufacturer	12		
Total		205	100%	100%

Note: The content of the supplier policy mainly discloses raw material suppliers and does not include common service suppliers.

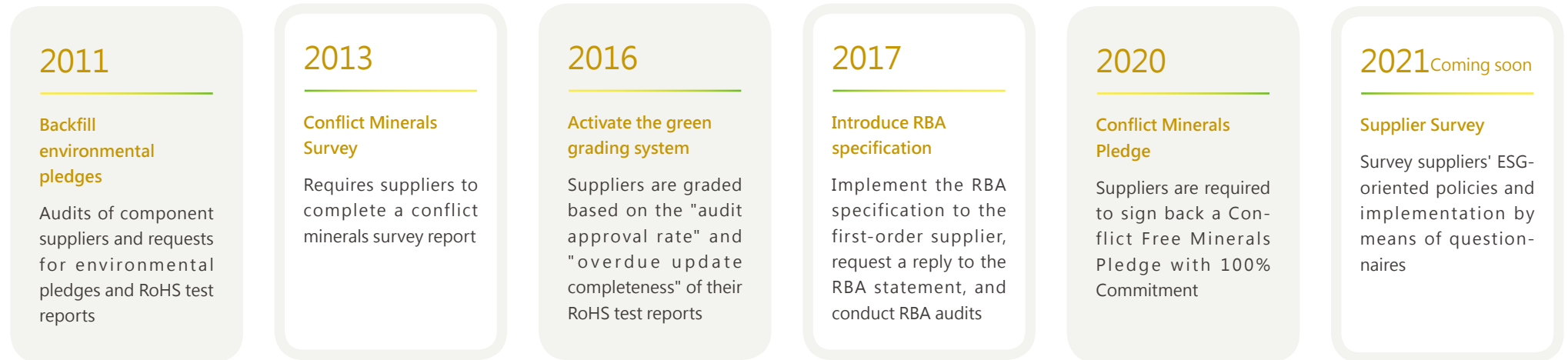## Supplier Management Procedures

New Supplier Introduction Phase

Searching for suppliers

Registration of basic information

Documentation review On-site audits

No

Supplier evaluation

Yes

Searching for suppliers:
Find suitable suppliers based on quality, delivery timeliness, and price.

Registration of basic information Provide the following documents and fill out the basic information:
- "Apacer's Declaration on Environmental Protection."
- "Conflict Mineral Investigation Form": An investigation into the source(s) for tin, gold, tantalum, and tungsten. Aside from aforementioned documents shall provide an additional document: "RBA Letter of Declaration"

Documentation review:
- Passed the supplier assessment and audit approval
- Provided RoHS testing reports and filled out a REACH Candidate List of Substances of Very High Concern (SVHC)
- Signing the Conflict Free Minerals Pledge Aside from aforementioned documents, subcontractors and manufacturers shall provide an additional document:"ISO 9001 Certification"

On-site audits:
The outsourcing vendor and the PCB manufacturer must conduct on-site audits of the RBA

Supplier evaluation:
After completing the above criteria and passing the evaluation, the supplier will be qualified

Assemble survey teams to assess their equipment and capabilities on site

Supplier Evaluation Phase

Timing of supplier evaluation

Supplier rating management

Timing of supplier evaluation:
- Subcontractor: quarterly   - Outsourcing supplier & manufacturer: every six months
- Licensed agent and trading company: annually
On-site audit is conducted based on the type and risk levels of suppliers.

According to the evaluation results, the suppliers are divided into four levels:
A, B, C, and D. Based on the grade, supplier quality improvement measures are carried out, and subsequent procurement operations are evaluated.

Note: The management process does not include common service suppliers

Sustainable Regulation for Supplier Assessment

Apacer's Supplier Sustainability Management initiatives over the years:

2011
Backfill environmental pledges

Audits of component suppliers and requests for environmental pledges and RoHS test reports

2013
Conflict Minerals Survey

Requires suppliers to complete a conflict minerals survey report

2016
Activate the green grading system

Suppliers are graded based on the "audit approval rate" and "overdue update completeness" of their RoHS test reports

2017
Introduce RBA specification

Implement the RBA specification to the first-order supplier, request a reply to the RBA statement, and conduct RBA audits

2020
Conflict Minerals Pledge

Suppliers are required to sign back a Conflict Free Minerals Pledge with 100% Commitment

2021 Coming soon
Supplier Survey

Survey suppliers' ESG-oriented policies and implementation by means of question-naires

Supplier Signed RBA Regulations

Apacer spares no effort in fulfilling its CSR. We implement strict regulations in hopes to play a role in driving growth and progress for the industry chain. Since 2017, Apacer has implemented the RBA regulations on to its Tier 1 suppliers. Labor-intensive suppliers such as raw material manufacturers, outsourcing vendors, intermediaries, and waste management companies should provide a Letter of Declaration for RBA and work with suppliers to value labor safety, environmental protection, in addition to ethical and transparent management.

After gradual promotion and recall of the RBA regulations, the response rate of suppliers has reached 100% by 2020. All Apacer suppliers are aware of and cooperate with the RBA policy and complete the last step of RBA regulations. In the future, Apacer will continue to keep abreast of the implementation of the RBA policy by suppliers to achieve the goal of fulfilling corporate responsibility with its supplier partners.

Percentage of Suppliers Providing Letter of Declaration for RBA

- 2020 35%
- 2019 15%
- 2018 46%
- 2017 4%

15%
46%
35%
4%
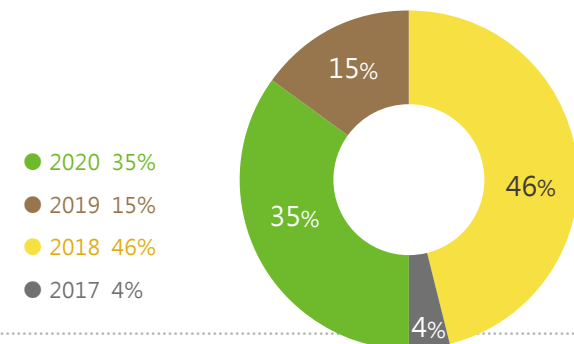
New Suppliers Introduction Phase

-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 as well as our customers' needs through our supplier management processes. Raw materials provided by suppliers need to comply with the EU RoHS, in addition to REACH hazardous environmental substance and chemical substance prohibition and restriction standards.

At the same time, suppliers are also required to sign the Declaration on Environmental Protection, provide a raw material test report, and complete material surveys to be deemed qualified. By implementing Supplier Management Procedures and Supplier Environmental Standards, Apacer is able to achieve "deliver competitive, defect-free and hazardous substance-free products and services on time to satisfy customers" goals while also meeting HSF policies.

-Conflict Free Minerals

Since 2013, Apacer has been targeting first-tier suppliers with the 3TG mineral source survey under the Conflict Minerals Reporting Template (CMRT) of the Responsible Minerals Initiative (RMI). The results of the 2020 survey of 205 qualified suppliers show that 100% of the metal minerals used in Apacer's related products come from Europe, Asia, and the Americas, and 0% come from non-government or illegal military factions in areas controlled by the Democratic Republic of Congo or neighboring countries.

To ensure that suppliers understand and comply with the Conflict Free Minerals Policy, we have taken a number of actions. In terms of policy, new suppliers will be required to sign a Conflict Free Minerals Pledge when they establish their basic data starting in August 2020, and in terms of implementation, we have expanded the requirement for all suppliers to sign the Conflict Free Minerals Pledge. By the end of 2020, 100% of qualified suppliers will have signed the Conflict Free Minerals Pledge or provided the original Conflict Free Minerals Pledge.

CONFLICT
MINERALS
Compliance

100% commitment

Apacer has been extremely efficient in 2020 and has completed 100% of the suppliers' pledges in less than six months

Note 1: Conflict Minerals are minerals mined under armed conflict and human rights violations, especially the four minerals of tin, gold, tantalum, and tungsten (collectively known as 3TG minerals) from the Democratic Republic of Congo and neighboring countries. The minerals mined in these areas are extracted by exploiting the civilian population, forcing them to work in inhumane conditions, and using the mining profits for war and resource looting.

Note 2: Qualified suppliers are not required to sign back the commitment letter for pure subcontractors and intermediaries (11 in total).

-Supplier Introduction Assessment

In the new supplier introduction phase, Apacer's suppliers are subject to constant review. In addition to assessing the suppliers' quality, manufacturing, delivery timeliness, and other capabilities, we also include environmental and social standards in our list of assessment items. Through the Supplier Assessment, the supply chain partners are encouraged to value and implement sustainable operations. At the same time, we undertake on-site audits 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.

Items for New Apacer's Supplier Introduction Assessment

Economic	Environmental	Social	RBA implementation
Business	Hazardous Substance-Free (HSF),	Whether they hire children and minors?	Labor
Management Quality Management		Is there an employee grievance channel?	Health and Safety
Manufacturing		Equality in employee rights	Environment
Capacity Equipment	Environment, Health, and Safety (EHS)		
Management Delivery		Do the employees work overtime?	Ethics
Timeliness		Is any labor forced to work?	Management System

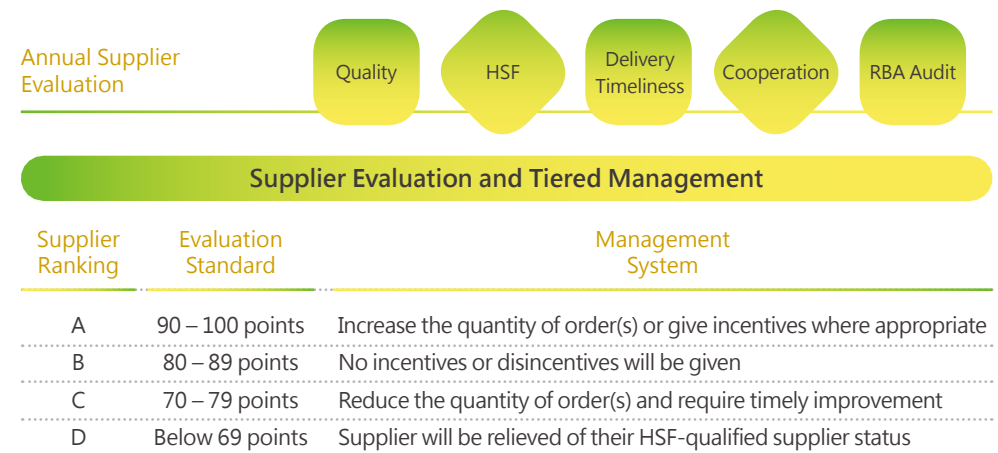## Suppliers Regular Evaluation Phase

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 suppliers with serious quality issues or high risks, Apacer must conduct an on-site audit every year.

In terms of evaluation methods, Apacer evaluates suppliers based on the incoming material inspection, abnormal materials, delivery timeliness, customer complaints handling, improvement of response time, etc. Apacer will notify suppliers of each assessment result and improvement requests will be made. If the improvement is not satisfactory, the number of orders will be reduced as appropriate. According to the evaluation results, the suppliers are divided into four levels: A, B, C, and D.

In 2018, we incorporated five major RBA specifications: Labor, health and safety, environmental protection, ethics, and management systems into our 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 a joint effort with suppliers to align with international standards, and gradually improve the sustainability management competency of suppliers.

Since 2018, we have included the five major RBA regulations: labor, health and safety, environmental protection, ethics, and management system into the annual assessment items.

In the first phase, we will give priority to suppliers who have factories of considerable scale capable of implementing the RBA requirements. In the future, we will continue to expand our assessment targets and work with our suppliers to align with international standards and gradually improve their sustainability management capabilities. 2020 RBA assessment will be conducted with suppliers that are A-rated and 100% RBA compliant.
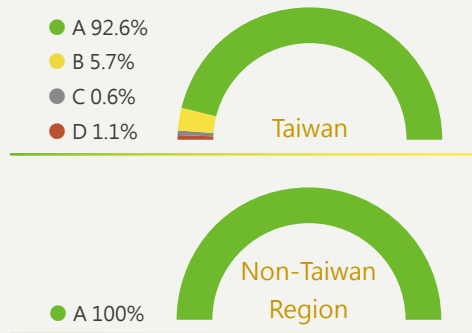
Annual Supplier Evaluation

Quality | HSF | Delivery Timeliness | Cooperation | RBA Audit

Supplier Evaluation and Tiered Management

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 the quantity of order(s) and require timely improvement
D	Below 69 points	Supplier will be relieved of their HSF-qualified supplier status

A Level Percentage increase

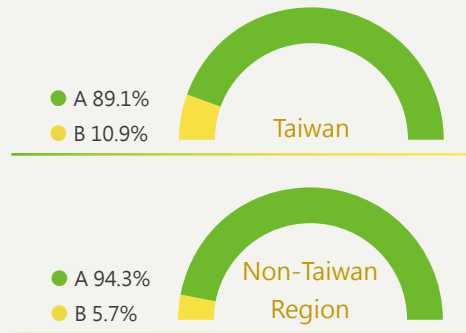### -2020 Supplier Evaluation and Ranking

Since Apacer implemented the evaluation system, Apacer has continued to implement audits in addition to providing related counseling activities in order to make progress together with its partners. In 2020, Apacer implemented an online real-time appraisal system. The manual evaluation originally conducted every three months to a year is replaced by monthly automatic evaluation by the system allowing supplier partners to receive real-time feedback, achieving the effect of equitable, transparent, real-time and open evaluation.

In 2020, the percentage of suppliers with A grade increased, showing the good interaction brought by the system's feedback.
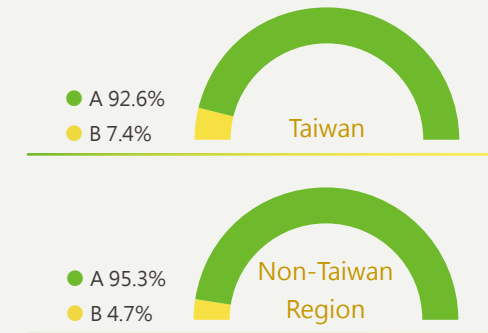
2018

- A 92.6%
- B 5.7%
- C 0.6%
- D 1.1%

Taiwan

- A 100%

Non-Taiwan Region

2019

- A 89.1%
- B 10.9%

Taiwan

- A 94.3%
- B 5.7%

Non-Taiwan Region

2020

- A 92.6%
- B 7.4%

Taiwan

- A 95.3%
- B 4.7%

Non-Taiwan Region

-Green Supplier Ranking System

Aside from the 5 major items used to classify supplier rankings, Apacer launched the "Green Supplier Ranking System" in 2016 based on the existing Supplier Management Procedures in evaluating suppliers'management competency of hazardous substances. The "approval rate" and "timely update" of the RoHS test report uploaded by the suppliers are used as references 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 international and customers' latest requirements and specifications.

In 2020, Apacer encourages suppliers to upgrade their green grading through online evaluation system, supplier conferences and others. Under strong advocacy, the number of suppliers with C and D green grading has dropped significantly.

Green Supplier Ranking over the Years

Ranking	Points	Number of suppliers in 2018	Number of suppliers in 2019	Number of suppliers in 2020
A	90 points or above	187	251	179
B	75~89 points	26	7	8
C	60~74 points	9	4	1
D	Below 59 points	32	26	6
Ungraded	Ungraded	-	-	11
Total		254	288	205

Note: Ungraded suppliers are vendors that provide outsourcing services only or new suppliers.

Future Action: Establishing a Supplier Sustainability Management System

Apacer not only strives to fulfill its corporate social responsibility and respond to the needs of its stakeholders, but also expects to grow together with its supplier partners and make continuous progress in regulations, human rights, environmental safety and health, in reducing risks, building a strong constitution, carrying out sustainable management and development together, leading to "sustainable supply chain".

Apacer sets "promoting sustainable supply chain management" as its medium- and long-term goal, and adds three additional aspects of ESG (environment, society, and governance) to the original four management aspects of QDCS (quality, delivery, cost, and service). Starting from 2020, we will incorporate ESG-oriented considerations into our supplier selection, evaluation and grading, auditing, counseling, and recognition systems in order to implement the spirit of sustainability.

Apacer's Sustainable Supply Chain Management

QDCS + ESG

- Selection
- Evaluation
- Audit
- Counseling
- Award

Annual Supplier Conference: Communications and Mentoring

In 2020, under the impact of COVIC-19 Apacer still successfully organized the supplier conference with 61 suppliers and 89 representatives attending. This year, in addition to the routine promotion and communication with suppliers, an award ceremony for excellent suppliers was added, hoping to create a positive two-way relationship by giving recognition and encouragement to excellent partners.

The post-conference satisfaction questionnaire was conducted using a QR-code electronic questionnaire in response to the environmental protection, and the return rate was 76.4% with overall satisfaction rating 8.8 out of 10.

2020 Supplier Conference Performance Highlights

61 Suppliers
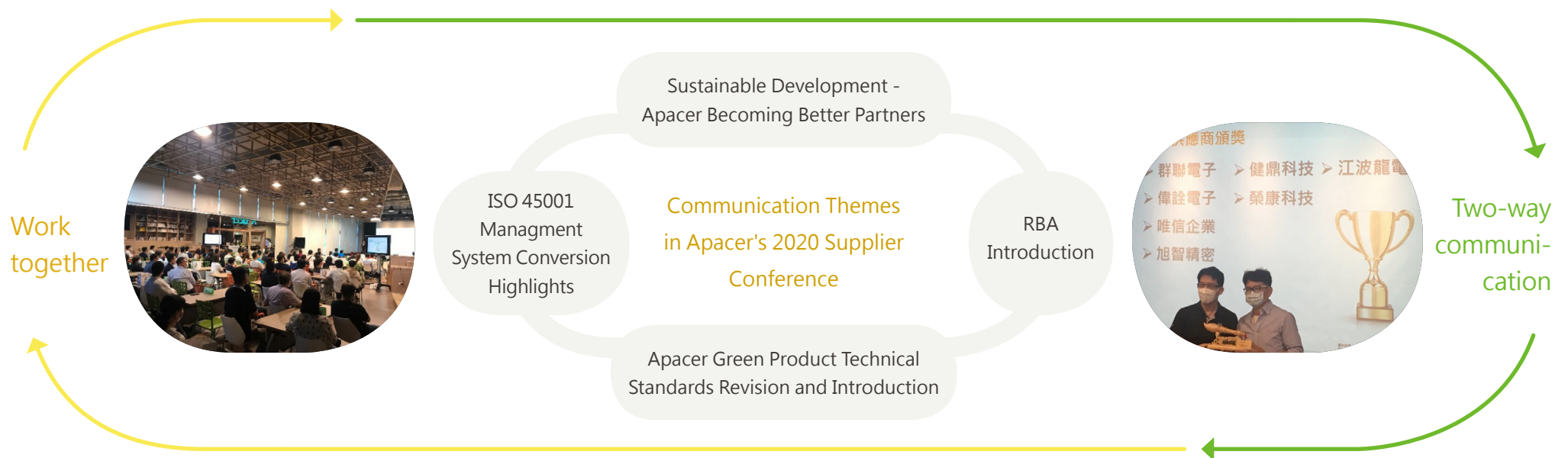**89** Delegates participated

Switching to **QR-code** questionnaires in response to environmental

Questionnaire recovery rate
76.4%

Satisfaction rate of **8.8**

Excellent Supplier
Award Ceremony

Apacer continues to learn and grow with its supplier partners in terms of environmental sustainability. Furthermore, we stimulate the industry chain's management competency when it comes to green environmental issues in aligning with global environmental sustainability trends.

Work together

Sustainable Development - Apacer Becoming Better Partners

ISO 45001 Managment System Conversion Highlights

Communication Themes in Apacer's 2020 Supplier Conference

RBA Introduction

Apacer Green Product Technical Standards Revision and Introduction

供應商頒獎
群聯電子 ➤ 健鼎科技 ➤ 江波龍電
偉詮電子 ➤ 榮康科技
唯信企業
旭智精密

Two-way communi-cation

Feedback from Our Supplier Partner

Since 2010, we have been honored to join the Apacer family. Apacer has been working together with Honten Electronics for more than 10 years and we have been taking care of each other like a family.

Since becoming a partner, Apacer has given us the direction and goals to follow in all aspects, including process improvement, quality improvement, and capacity optimization, allowing us to learn and grow, like brothers working together and supporting each other.

In the process of product development, Apacer plays an important role in product guidance, production details and quality control to reach a consensus and create a win-win situation.

In 2012, Apacer became a qualified supplier of TDK and a qualified HSF supplier of Apacer's customer, making it possible for Apacer to achieve excellent growth and improvement in production capacity, manufacturing and quality. In order to provide Apacer with more complete services, Honten Electronics also introduced the ERP management system in 2013, introduced the assembly department and the laser engraving department in 2014, expanded the anode production capacity in 2015, and added the CNC department in 2018, so that we can provide Apacer with more complete one-stop services. With the assistance of Apacer, Honten Electronics has continued to establish ISO 9001 and ISO 14001 quality systems during its growth process and has become Apacer's most professional and centripetal partner with its advanced technology in terms of process R&D innovation, product yield quality, and service attitude.

With passion, dedication to excellence, continuous improvement of R&D energy, and innovation and professionalism through the design and manufacturing process, Apacer will provide products that are closest to the market and customer needs and work together with Apacer towards a better future and give back to the society with the concept of sustainable management.

President of HONTEN Electronics Co.
YOU,JIA-CING

Material Issues 3.2

Customer Relationship Management

Customer Relationship and Quality Management

In order to provide customers with high-quality products and meet their requirements, Apacer has introduced quality management (ISO 9001) and follows the P-D-C-A (Plan-Do-Check-Act Cycle) management cycle to ensure that all stages of operation and production comply with policies and regulations and achieve set goals with systematic management to ensure the quality of products.

Quality
Commitment

| Continuous Improvement | High Quality Service | Create Product Value |

Niche of customer service provides the best service experience

Global marketing channels

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.

Customized services

With the growing memory demand for mobile devices and equipment, Apacer is committed to providing customers with customized products and services to fulfill their needs and, in doing so, get ahead in the market.
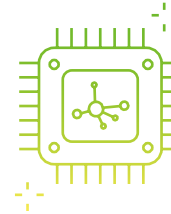
Excellent customer service team

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 made 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 competitive, defect-free and hazardous substance-free products and services on time to satisfy customers" and provides customers with the best experience.

Research and Design

Listening to customers /
We plan and facilitate the best-selling product mix from a user experience-oriented standpoint. We create a convenient, high quality, and enriched digital storage lifestyle for customers.

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.

After-sales Service

Global After-Sales Service /
Through providing localized, timely 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.

Diversity customer communication channel

Apacer adheres to the spirit of "Service First" and values, communication with customers, actively establishing smooth and diversified communication channels to understand customers' needs and provide immediate and perfect services. Customer communication channels can be divided into three categories: regular, periodic, and irregular. Listening to customer feedback and opinions is an important nutrient for Apacer to improve and develop customer relationships.

Customer Privacy Protection

Apacer values the privacy of each customer and has always set the highest standards to ensure the privacy via established comprehensive procedures and regulations to protect customers' private information. 2020 recorded zero complaints of customer data leakage or infringement of customer privacy, and we will continue to maintain this good record and prepare for possible future risks in advance.

Type	Channel
Regular	- Official Website - Official social media (YouTube/LinkedIn/Facebook/Instagram) - Customer Service Mailbox - After-Sales Service Website - Sales / Customer Service Team
Periodic	- Customer Satisfaction Survey / Yearly - CSR Report / Annual - Business review with key customers / Quarterly
Irregular	- Press Release - Promotional Video Release - CRM system to track customer needs and product progress - Customer Visits - Customer Audits

Customer privacy protection measures	
Regulations	- Contract protection: Contracts contain confidentiality agreements - Customer code system: Using customer codes to conceal the real name of the customer - Keeping manufacturing processes independent, so that customers do not learn each other's individual product information
Technologies	- Information equipment security control: Prevent viruses or hackers from compromising customer privacy - Document authority control: restrict the data reading and access authority - System authority control: customer data inquiry and operation authority control - Access control: Information and production line set up access control system

Global After-Sales Service System
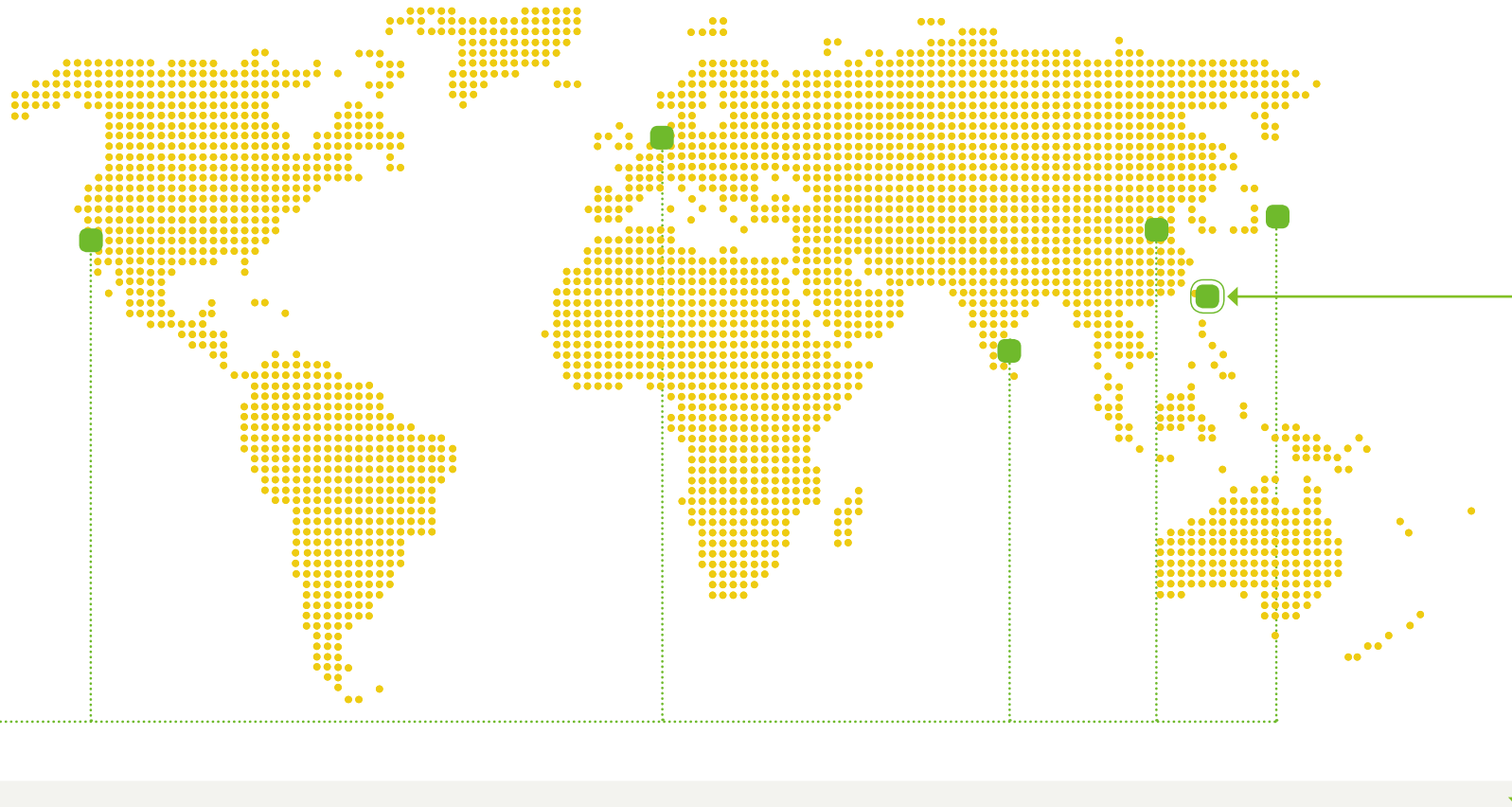
Global

- Provide localized, on-spot sales and technical services through local sales and technical support

- We provide logistic transportation solution to customers so that they can better grasp transportation status. In addition, our efficient planning and competitive cost enable us to offer the fastest and most convenient logistic services.

Taiwan

- Customer Service Dept. and Sales Dept. take care of after-sales service which includes technical support, customer complaint and RMA.

- We have service centers in northern, central and southern Taiwan or agents to provide after-sales service, include return or repair services.

Tandem service system for better service

To provide customers with more complete services, Apacer integrates ERP (Enterprise Resource Planning), MES (manufacturing Execution System), webRMA (web Return (Merchandise Authorization, after-sales service portal) to complete the linkage of information and database, and to strengthen the traceability of information on manufacturing process, maintenance, shipment, and after-sales service, in order to provide customers with more complete services and meet their needs.

In addition, the integration of cross-system data is conducive to data collection and analysis. For example, through the linkage of information and database, we can collect big data such as material management, manufacturing process, customer information, inventory, maintenance, shipment, and after-sales service, and conduct subsequent analysis and application to understand the needs of different customer groups, improve product design, enhance manufacturing capabilities, provide products and services that exceed customers' expectations, and strengthen the company's competitiveness.
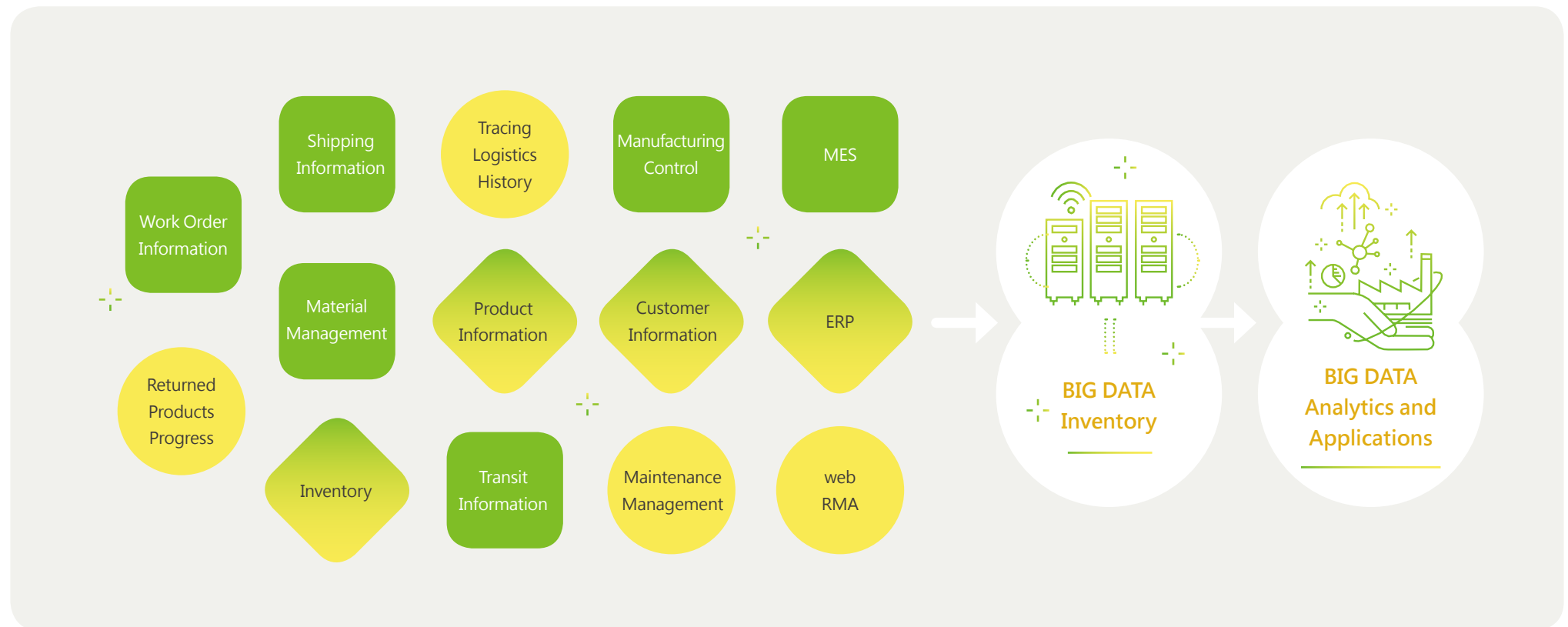
Annual Customer Satisfaction Survey

We regularly conduct customer satisfaction surveys every year to collect customers' opinions, and in 2020 we implemented a customer satisfaction survey improvement project by introducing an online questionnaire and adjusting the questions into six areas: service, quality, delivery, price, design, and environmental protection, focusing on customer satisfaction and making improvements according to customers' comments and suggestions.

The customer satisfaction survey was conducted on a sample of 45 customers who had transactions in the current year, with a 100% questionnaire return rate and an overall average satisfaction score of 85, meeting the customer satisfaction target. In the future, we will use this year's customer satisfaction survey scores as a benchmark for the sales department to take the initiative to review, analyze and improve in order to provide products and services that better meet customer needs and enhance customer satisfaction.

Customer Satisfaction Survey 6 major Perspectives

Design	Service	Quality

Environmental Protection	Price	Delivery Timeline

Customer Satisfaction Survey Key Performance in 2020

Survey
45 customers

100%
recovery rate

Satisfaction reached
85 points

Note: Customer satisfaction scores are calculated based on the arithmetic average of the survey results of each department.

Affirmation from Customers

The cooperation with Apacer started in 2018. Although there were some small mistakes caused by the mutual integration between new suppliers and new customers at the beginning, after the communication between the professional departments of both sides in terms of technical communication, specification requirements and quality requirements, they have established a favorable relationship and communication channel in the past 2 years. Apacer is not only a company selling products, but also has a clear communication and understanding of customers' needs in advance, so as to reduce the frequency of debugging in subsequent product development.

Senior Strategic Procurement Officer / Haidy

The immediate and comprehensive support from sales, PM, and technology makes me think that Apacer is a good partner that I can trust. I also look forward to more cooperation with Apacer in the future to create a win-win situation altogether.

Chapter 4

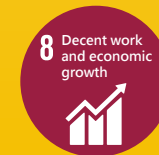# A Good Partner in a Friendly Workplace

Vision

Apacer's core value is "Delivering on Our Promise, Constant Improvement, and Mutually Beneficial." Upholding the philosophy "Becoming Better Partners," Apacer has integrated CSR into our human resources development policies. Combing A⁺ Healthy, A⁺ Family, A⁺ Work with CSR & RBA as the vertical axis; food, clothing, housing, accessibility, education, recreation and exercise as the horizontal axis, we provide A⁺ EAPs (Employee Assistance Programs) with 28 items for employees and received numerous awards, demonstrating Apacer's dedication to a sustainable enterprise that is mutually beneficial to employees and their families.

Policy and Commitment

We are devoted to providing competitive compensations and benefits. We introduce a dual-track talent system and Employee Assistance Programs; Activate talent supply chain and provide A⁺ESPs employee assistance program as well as construct comprehensive education and training to create a friendly and healthy workplace that allows employees to balance their work and personal life.

Contribution to the United Nations Sustainable Development Goals (SDGs)

3 Good health and well-being

4 Quality education

5 Gender equality

8 Decent work and economic growth

10 Reduced Inequalities

Issues of the Chapter

Material Topics: Occupational Health and Safety

Corresponding Material Topic (2018) GRI 403 Occupational Health and Safety

How to Manage

Responsibility	- Occupational Health and Safety Office
Resources	- Manpower: Occupational Health and Safety Committee - Budget: Budget will be allocated annually by Corporate Social Responsibility Committee and Occupational Health and Safety Committee
Channels of Communication	- Organize regular meetings of the Corporate Social Responsibility Committee, and the Occupational Safety Committee - Promote relevant knowledge and events via the Company's Intranet

Action

- Disaster prevention measures
- Safety and health education program
- Automatic inspection mechanism
- Employee health management
- Monitor and improve working environment, and plan for a gradual return to work

Sustainable Goal

Short-term goal (2021)	- Receive the certificate of Accredited Healthy Workplace from the Health Promotion Administration
Mid-term goal (2022~2024)	- Build a friendly and healthy workplace with A$^+$ EAPs
Long-term goal (After 2025 ↑)	- Build a trustworthy employer brand

Evaluation Method

- The status of the certificate of Accredited Healthy Workplace from the Health Promotion Administration
- The status of the certificate from the Sports Enterprise Certification, Sports Administration

- Below 1 occupational accident per 6 months

- Apacer has a turnover rate below 3% ↓

Achievements and results in 2020

Exceeding goals:
- Achieved Silver Certification from RBA for the Second Consecutive Year
- Received ISO 45001 Occupational Health and Safety Assessment Series Certification

Achieved goals:
- Construct a perfect workplace in accordance with occupational safety-related laws and regulations

Not achieved goals:
-2 occupational accidents, but no serious injuries

Contribution to the United Nations Sustainable Development Goals (SDGs)

SDGs 3 Good Health and Well-being

Material Issue: Employee Benefits / Talent Cultivation

Corresponding Material Topic GRI 401 Employment GRI 404 Training and education

How to Manage

Responsibility	- HR and Administration
Resources	- Manpower: HR and Administration Department - Budget: Budget will be allocated annually by the Corporate Social Responsibility Committee, Strategy, and Management Committee, Employee Welfare Committee, and Responsible Business Alliance Committee
Channels of Communication	- Organize regular meetings of the Corporate Social Responsibility Committees, the Strategy and Management Committee, and the Employee Welfare Committee - Promote relevant knowledge and events via the Intranet

Action

Employee Benefits:
- Provide a welfare system that exceeds the requirements in the Labor Standard Act
- Maintain the salary level of the industry's market
- Promote Apacer A$^+$ EAPs (Employee Assistance Programs)
- Create a friendly and healthy workplace

Talent Cultivation:
- A dual-track talent system
- Apacer's Talent Supply Chain Mechanism
- TTQS (Taiwan Training Quality System) management loop (Apacer Academy, Learning Blueprint, Learning Map)

Sustainable Goal

Short-term goal (2021)	- Build Apacer Academy Development Learning Map
Mid-term goal (2022~2024)	- Maintaining salary levels in the industry's labor market - Build a friendly and healthy workplace with A$^+$ EAPs
Long-term goal (After 2025 ↑)	- Bringing in talented people to build up future technologies - Establishing a trusted corporate brand

Evaluation Method

- Complete the Apacer Academy and Learning Map

- External Compensation Survey Report Percentile P50~P75
- Dual Track Talent supply chain annual promotion rate of 2%

- The implementation rate of talent development courses is over 90%
- Annual increase in occupational capacity
- Apacer all employee has a turnover rate below 3% ↓

Achievements and results in 2020

Exceeding goals:
- Received Silver Certification from the Responsible Business Alliance
- External Compensation Survey Report P50 ↑
- 2% annual promotion rate for Dual Track Talent supply chain
- The implementation rate of talent development courses is over 90% ↑
- Apacer has a turnover rate below 3% ↓

Contribution to the United Nations Sustainable Development Goals (SDGs)

SDG 3 Good Health and Well-being, SDG 4 Education Quality, SDG 5 Gender Equality, SDG 8 Work and Economy

Issues of the Chapter

Material Issue：Employee Coordination and Communication — **Corresponding Material Topic：GRI 407 Liberty of Association and Group Consultation**

How to Manage

Responsibility	- HR and Administration Department
Resources	- Manpower: HR and Administration Department - Budget: Budget will be allocated annually by the Corporate Social Responsibility Committee, Strategy, and Management Committee, Employee Welfare Committee, and Responsible Business Alliance Committee
Channels of Communication	- Organize regular meetings of the Corporate Social Responsibility Committees, the Strategy and Management Committee, and the Employee Welfare Committee - The irregularly conducted selection board meeting - Promote related channels and activities through the company's intranet

Action

- Set up a trade union and assembly methods
- Offer a variety of channels for communication
- Apacer A$^+$ EAPs (Employee Assistance Programs)
- Creating a friendly and healthy workplace

Sustainable Goal

Short-term goal (2021)	- Introducing new employee learning passport to help newcomers understand Apacer - Organize corporate culture growth camps to help newcomers integrate into Apacer - Organize CEO afternoon tea party to communicate with talents in both directions
Mid-term goal (2022~2024)	- Achieving RBA Responsible Business Alliance Silver Certification - Create a friendly and healthy workplace with A$^+$ EAPs
Long-term goal (After 2025 ↑)	- Build a trust-worthy employer brand

Evaluation Method

- New indirect employees complete learning passports at a 100% rate
- Implementation results of corporate culture growth camp
- Status of CEO afternoon tea party

- Received Silver Certification from the Responsible Business Alliance
- Dual Track Talent supply chain annual promotion rate of 2%

- Apacer has a turnover rate below 3% ↓

Contribution to the United Nations Sustainable Development Goals (SDGs)

SDG 3 Good Health and Well-being, SDG 5 Gender Equality, SDG 10 Reducing Inequality

4.1 Employee Overview

● Apacer Employee Declaration of Rights

Apacer joined the Electronic Industry Citizenship Coalition (EICC) in 2017 and cooperated with the rebranding of the coalition to participate in the RBA Responsible Business Alliance (RBA) since then. Apacer has been awarded the Silver Award for two consecutive years and guarantees the rights and interests of employees in accordance with the coalition's standards that are higher than national laws and regulations.

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.

Ensuring employee rights

- All employees share the same human rights protections without discrimination based on race, color, age, gender, sexual orientation, or national origin, disability, pregnancy, religion, political affiliation, marriage, education... and other conditions.

- Our company has clearly defined the RBA's Manual, which emphasizes the importance of free employment, young workers, wage and hour, humane treatment, freedom of association and anti-discrimination.

- 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 2020.

Prohibiting unlawful child labor

We have never hired an employee under the age of 16, and we strictly prohibit minor employees from participating in hazardous work. The Company specifies child labor remedial measures and regulations for the management of minor workers.

Diverse communication channels

- We have clearly defined our employee grievance reporting methods to solve incidents related to employees' rights and unfair treatment.

- We regularly organize employment relations conferences to strengthen mutual trust between employers and employees.

Apacer Workplace

Apacer upholds the principle of core value "Do what you say. Insist on better" to build a friendly and healthy workplace for its employees. Apacer values employees as important working partners and family members in the hope that employees can enjoy the comfort and ease while working. There are also a number of independent and stylized discussion spaces on each floor for employees to use in order to reduce the sense of constraint in the office space and to inspire the unlimited creativity of employees with diversified space design.

Apacer Operations Headquarters Lobby

Staff Lounge

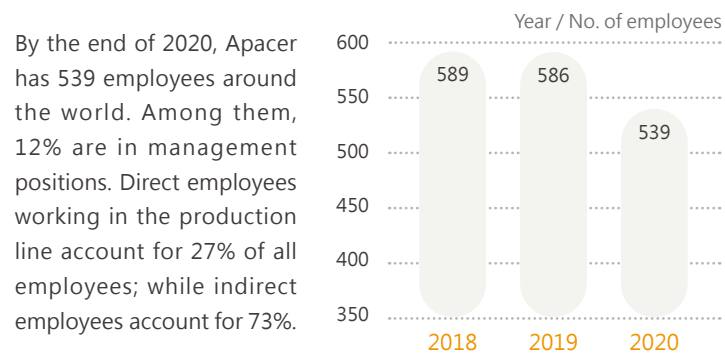Recreational Sports Area

Stress relief massage area

Leisure Reading Area

Leisure and entertainment area

Overview of Employees Worldwide

Number of employees worldwide in recent years

By the end of 2020, Apacer has 539 employees around the world. Among them, 12% are in management positions. Direct employees working in the production line account for 27% of all employees; while indirect employees account for 73%.

Year / No. of employees

2018	2019	2020
589	586	539

Worldwide Employee Distribution in 2020

Apacer gender distribution ratio is fairly average, in terms of gender distribution female employees account for 53%, and male employees account for 47% of all employees.

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

Item	Category	Male		Female		Group Subtotal and Percentage	
		Number	Percentage	Number	Percentage	Number	% of the total
Taiwan	Full-time	247	53.3%	276	46.7%	463	98.3%
	Part-time	5	62.5%	3	37.5%	8	1.7%
Overseas	Full-time	33	48.5%	43	51.5%	68	100.0%
	Part-time	0	0.0%	0	0.0%	0	0.0%
Total		285	52.9%	254	47.1%	539	100.0%

● Overview of Employees in Taiwan

Number of employees in Taiwan in recent years

Apacer values the cultivation of local talents. In 2020, there are 471 employees in Taiwan, of which local employees account for 90% of the total number of employees. There are 8 senior management including the Chairman and Chief of Strategy Officer, President, Vice President, and the head of each center, all of whom are local employees in Taiwan.

2020 Taiwan Employee Analysis
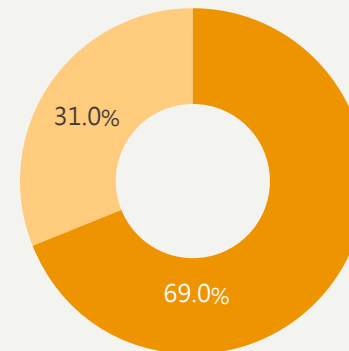
Employee Categories Analysis

In the analysis of Apacer's Taiwan operation headquarters, 98% of the employees in the contract category are regular employees; 69% of the employees in the production category are indirect employees; 48% of the employees in the duty's category are professionals, followed by 31% of the technical staff (direct staff), and the gender ratio of senior management staff is 1:1.
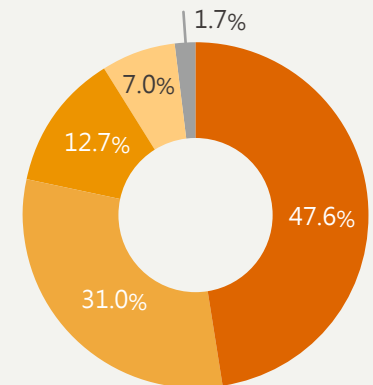
Taiwan Employee Contract Categories

1.7%
98.3%
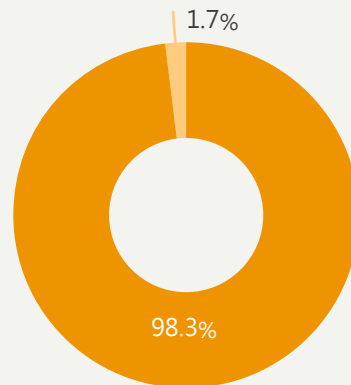
● Regular 98.3%
● Contract 1.7%

Taiwan Employee Production Category

31.0%
69.0%

● Indirect Staff 69.0%
● Direct Staff 31.0%

Taiwan Staff Duty Categories

1.7%
7.0%
12.7%
47.6%
31.0%

● Professional Staff 47.6%
● IT Staff 31.0%
● Manager 12.7%
● Sales Staff 7.0%
● Senior Manager 1.7%

Employee Profile Analysis

Apacer's Taiwan operation headquarters employees' basic information analysis shows that 62% of the employees have graduated with an associate degree or higher in education; 45% of the employees aged 31 to 40 are the mainstay of the age distribution, followed by 34% aged 41 to 50; the gender distribution is approximately the same as the gender distribution of the global employees, and the marriage and gender distribution ratios are fairly average.

Apacer conducts annual analysis of employee categories and basic information to design A⁺EAPs employee assistance programs that meet the needs of employees, see 4.3 Employee Benefits and Communication (Material Issues) for details.

Taiwan Employee Education Distribution

1.1%
15.9%
21.0%
61.8%
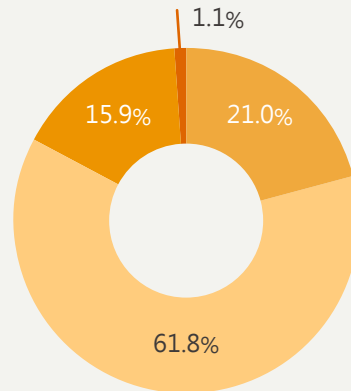
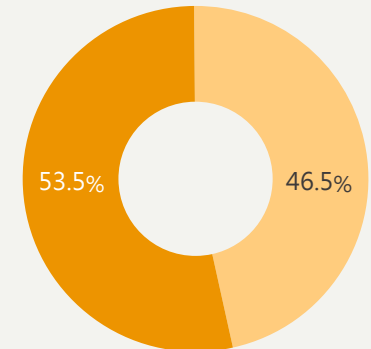- Master Degree 21.0%
- (Associate) Bachelor's Degree 61.8%
- High School (Vocational) 15.9%
- Others 1.1%

Taiwan Employee Age Distribution

5.9%
14.9%
33.8%
45.4%
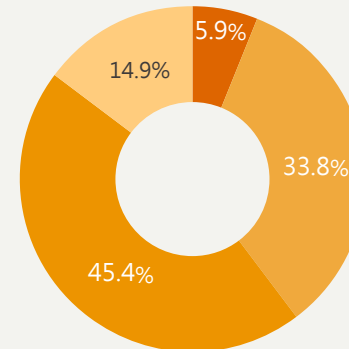
- 21~30 14.9%
- 31~40 45.4%
- 41~50 33.8%
- 51 ↑ 5.9%

Taiwan Employee Gender Distribution

53.5%
46.5%

- Female 53.5%
- Male 46.5%

Employee statistics

Apacer has been respecting the law to protect ethnic minorities and safeguard the quota for the physically and mentally challenged, and the statistics of various categories of related employees are as follows.

2020 Statistical Data on Employees in Taiwan

Item	Category	Female Number	Female %	Male Number	Male %	Group Subtotal Number	Group % of the total
Type of Contract	Full-time	247	53.3%	216	46.7%	463	98.3%
	Part-time	5	62.5%	3	37.5%	8	1.7%
Type of Employee	Direct	105	71.9%	41	28.1%	146	31.0%
	Indirect	147	45.2%	178	54.8%	325	69.0%
Type of Position	Management Staff	4	50.0%	4	50.0%	8	1.7%
	Professional Staff	18	30.0%	42	70.0%	60	13.0%
	Sales Staff	111	49.6%	113	50.4%	224	48.4%
	Technical Staff	14	42.4%	19	57.6%	33	7.1%
	Management Staff	105	71.9%	41	28.1%	146	31.5%
Distribution of Educational Background	Doctorate Degree	0	0.0%	1	100.0%	1	0.2%
	Master's Degree	36	36.4%	63	63.6%	99	21.0%
	Bachelor's Degree	153	52.6%	138	47.4%	291	61.8%
	General and Vocational High School	59	78.7%	16	21.3%	75	15.9%
	Others	4	80.0%	1	20.0%	5	1.1%
Age Distribution	20 ↓	0	0.0%	0	0.0%	0	0.0%
	21~30	40	57.1%	30	42.9%	70	14.9%
	31~40	116	54.2%	98	45.8%	214	45.4%
	41~50	80	50.3%	79	49.7%	159	33.8%
	51 ↑	16	57.1%	12	42.9%	28	5.9%
Marital Status	Married	123	50.6%	120	49.4%	243	51.6%
	Single	129	56.6%	99	43.4%	228	48.4%
Preserve Nationality	Indigenous People	2	66.7%	1	33.3%	3	0.6%
Insurance capacity	Physically and/or Mentally	2	50.0%	2	50.0%	4	0.8%
Total		252	53.5%	219	46.5%	471	100.0%

Note 1: Technical Staff are direct employees working in the production line
Note 2: If there are vacancies arising from staff changes, Apacer not only complies with the law and pays the surrogate fee, but also takes the initiative to actively on website openly welcome indigenous and people with physical and mental disabilities to join Apacer's ranks.

2020 New Employees and Outgoing Employees

Apacer's annual employee turnover rate is less than 3% each year, and we will continue to maintain a stable manpower supply and appropriate talent development with this goal in the future.

2020 Structure of New Employees and Outgoing Employees in Taiwan

Type	Group	New Employees Persons	New Employees % of Employees in the category	Outgoing Employees Persons	Outgoing Employees % of Employees in the category	Total Persons	Total Overall %
Gender	Female	63	40.9%	91	59.1%	154	57.5%
	Male	52	45.6%	62	54.4%	114	42.5%
Age	20 ↓	0	0.0%	0	0.0%	0	0.0%
	21~30	41	44.1%	52	55.9%	93	34.7%
	31~40	48	41.7%	67	58.3%	115	42.9%
	41~50	25	48.1%	27	51.9%	52	19.4%
	51 ↑	1	12.5%	7	87.5%	8	3.0%
Total		115	42.9%	153	57.1%	268	100.0%

2020 Turnover of Employees in Taiwan

Number of Original Employees	Number of New Employees	Number of outgoing employees Manager	Number of outgoing employees Non-manager	Number of outgoing employees Subtotal	Number of persons at the end of the year	Turnover rate
505	115	10	143	153	502	2.5%

Note 1: The calculation of the turnover rate is based on the statistics of employees from the Minister of Labor
Note 2: Turnover employees include voluntary departure, involuntary departure, retention, retirement, etc.

Material Issues 4.2 — Employee Safety and Health

Occupational Safety and Health Management System

Apacer received the OHSAS 18001 Occupational Health and Safety Management Systems certification in 2013. Moreover, OHSAS 18001 was renamed ISO 45001:2018 Occupational Health and Safety Management Systems. Apacer has been re-accredited with ISO 45001 occupational safety and health management certification in 2020 and expects to maintain system effectiveness with continuous external validation in 2021.

Based on the PDCA principle, we achieve occupational safety and health management by implementing measures including risk evaluation, risk control and management, and regular improvements.

Internal Audit
- Irregular internal audits: Carry out irregular internal audits every year and report the results at the quarterly Occupational Safety and Health Committee meeting.
- Regular internal audits: Carry out regular Internal audits every year. Self-inspection is conducted prior to external audits to ensure that relevant Management Measures are operating properly.

External Audit
- Carry out external audits every year. Renew, re-certificate and transfer according to the validation period of the management system.

Note 1: The Occupational Safety and Health Management System covers Apacer's Taiwan operational headquarters and workers but does not include employees in overseas sales offices, overseas employees are not included.
Note 2: The above workers refer to all Apacer's employees in Taiwan, on-site customer, and property management personnel.

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 Occupational Safety and Health Act.

The Occupational Safety and Health Committee is directly under the supervision of the President and convenes meetings quarterly to review issues regarding occupational safety and health.

Operation of Occupational Safety and Health Committee in 2020

Number of representatives of employees and employers	10 from employees, and 6 from employers
Election method of employee representatives	Elected by all of the full-time employees
Term of service	2 years
Frequency of meeting	Once quarterly, four meetings were convened in 2020
Discussion issues	- Occupational Safety and Health Management Plan - Workplace Monitor Plan - Occupational Safety System ISO 45001 - Fire system overhaul

Note : Representatives from employees account for more than 1/3 in the Occupational Safety and Health

Occupational Safety and Health Committee Practical Measures

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.

Occupational safety and health management 4 major actions

Actions	Disaster Prevention	Working Environment Inspection	Workplace Safety Control	Health Management
2020 Performance	100% implementation rate of occupational safety training	Qualified in working environment measurement	New CCB (Chemical Control Banding) chemical classification management	Semi-annual occupational accidents below 1 case

Disaster Prevention

To prevent occupational hazards, Apacer has established a Safety and Health Management Plan and Occupational Safety System to manage any potential risks. In addition, we have implemented the Occupational Safety and Health Management Plan 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 through regular education and training[1] for all employees.

Apacer does not have any false alarm in 2020, and the ISO 45001 system risk identification identifies high-risk sites to set up target programs for improvement, by implanting the above measures, we hope to achieve the management objectives of less than one occurrence of operational disaster a year.

2020 Statistical Data on Occupational Safety and Health Education Training

Courses	Total Participants	Total Hours
Safety and Health Education Training for New Employees	115	345.0
General Employee Safety and Health Education Training [2]	500	500.0
Initial training/retraining for occupational safety and health related licenses	29	42.0

Note 1: Education and training include: occupational safety and health, RBA and integrity management education, etc.
Note 2: Occupational safety and health related licenses include: occupational safety and health business supervisor, occupational safety and health personnel, organic solvent operation supervisor, radiation protection, fire prevention manager, first aid personnel, nursing staff, etc.

Statistics data on the number of occupational injuries and diseases among employees in 2020

The two workplace injuries that occurred in Apacer in 2020 were both due to human error, and operator education has been enhanced in accordance with ISO 45001 to prevent the same incidents from happening again. The relevant statistics are as follows:

Note 1: Total hours of work are calculated on the "number of employees x total workdays x eight working hours per day."
Note 2: Total number of occupational injuries: including all commuting and work-related traffic accidents
Note 3: Injury rate (IR) = (total work-related injuries/total hours of work) x 200,000*
Note 4: Number of occupational injuries: Excluding commuting and work-related traffic accidents
Note 5: Lost day rate (LDR) = (total lost days /total hours of work) *200,000*
Note 6: 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 (for example, occupational diseases, sick leave, and menstrual leave). Traffic accidents are not included.
Note 7: Absent rate (AR)= total absent days/ (number of employees x total workdays)
Note 8: A serious injury causes death or makes a worker difficult to return to pre-injury health status within six months.
Note*: Indicates 50 weeks per year, 40 working hours per week, for every 100 employees

Item	Female	Male
Total hours of work[1]	532,779	451,269
Total workdays	55,188	54,093
Number of injuries[2]	5	3
Injury Rate (IR)[3]	1.88	1.33
Number of work-related deaths	0	0
Total work-related injuries [4]	1	1
Total lost days	182	25
Lost day rate (LDR)[5]	68.32	11.08
Total absent days [6]	1275	414
Absence rate (AR)[7]	0.009%	0.003%
Number of serious work-related injuries [8]	0	0
Serious work-related injury rate	0	0

Cases of Occupational Injury and Occupational Disease (Employees Excluded) in 2020

Item	Female	Male
Total work-related injuries	0	0
Injury rate (IR)	0%	0%
The number of deaths	0	0

Apacer has established a detailed investigation process for "occupational injuries." The investigator, together with a labor representative, must investigate the cause of the accident, and the investigation report must be signed by the President. Besides, the injured employees must be provided with counseling services on their health. To help the injured employees return to work, a gradual return to work system has been established to ensure that the injured employees are given medical care and suggestion by medical staff in the factory/office. We also assist injured employees in applying for insurance coverage.

According to the Occupational Safety and Health Act, employees have withdrawn rights. If employees believe there is a serious hazard in the workplace, they can leave immediately and assemble at the emergency assembly point. For general workplace risks, Apacer has established a risk assessment system to evaluate risks. Risks are managed and improved according to different levels. If the risk factor is 4 or more, a management program is established with the goal of improving and reducing the risk. If there are accidents related to wind, flood, fire, and earthquake,an emergency response team will be immediately formed, and relevant response measures, as well as procedures, will be established to contain the hazard. In the meantime, the cause of the hazard will be investigated, and preventive measures will be reviewed to avoid the recurrence of relevant accidents.

Occupational Safety and Health Unit	Occurrence unit	Relevant units
Occupational Safety Office	Notification of disaster	HR to assist in absence operations
Contact - Related Supervisor - Equipment personnel - Others	Unit Supervisor	
Hospital	Fill out the investigation form for detail	
Diagnostic Certificate	Identify the incident cause	
Occupational Safety Room Supervisor Approval	Follow-up corrective measures	
Factory doctor Factory nursing follow-up	Include in risk assessment	

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 and safety.

For more information on Apacer's healthy workplace initiatives, please refer to: 4.3 Employee Benefits and Communication.

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. 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 a professional qualification and undergo regular on-the-job retraining.

To prevent injuries, 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. Inspection items for checkups are divided into "general operations" and "special hazard operations" 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. In 2020, 8 special health checks were conducted for special hazards workers and the results were normal. Also, we have implemented classified management. Health abnormalities related to work will be evaluated and handled with classified management.

At the same time, the Company has commissioned on-site nurses to fill out "personnel health risk evaluation charts" to help employees pay attention to their health conditions. In addition, Apacer's A$^+$ EAPs employee assistance program has planned a series of health and exercise activities in the vertical "A$^+$ Health" and the horizontal "Action" to enhance employee health management and continuously promote a healthy workplace.

Material
Issues
4.3

Employee Benefits and Communications

● Apacer A$^+$ EAP Employee Assistance Programs   Apacer promises to create a healthy and friendly workplace for every single one of our employees.

2017

A$^+$ Well-being
Enterprise Program

Our "A$^+$ Happy Workplace Plan" plans various benefitting activities revolving around health, family and work. We received the certificate of Accredited Healthy Workplace from Health Promotion Administration, Ministry of Health, and Welfare.

2018

Apacer A$^+$ EAPs
18-items Employee Assistance & Exercise Programs. Honored with the Ministry of Labor Work-Life Balance Award

Apacer took things to the next level by upgrading to the "Apacer A$^+$ EAP (Employee Assistance Programs)" with cohesion and organizational development as foundation. With A$^+$ Healthy, A$^+$ Family, A$^+$ Work with CSR & RBA as the vertical axis, food, clothing, housing, accessibility, education, and recreation as the horizontal axis, we provide A$^+$ EAPs with 18 items for employees. We were honored with the Ministry of Labor's Work-Life Balance Award.

2019

Apacer A$^+$ EAPs
28-items Employee Assistance & Exercise Programs. Honored with the Sports Enterprise Certification Award by the Sports Administration, Ministry of Education

Apacer continues to make improvements. Apacer promotes a healthy workplace by embodying the CSR and RBA's spirit of sustainable management and encourages employees to be active in order to be healthy! In addition to A$^+$ Health, A$^+$ Family, and A$^+$ Work, the vertical axis is combined with "CSR & RBA" to form a total of 4 main aspects. The horizontal axis includes food, clothing, housing, movement, education, and music. In addition to food, clothing, housing, accessibility, education, and recreation, the horizontal axis also includes "exercise", to form a total of 7 programs. Our 28-items Employee Assistance & Exercise Programs are what won us the Sports Enterprise Certification Award from the Sports Administration, Ministry of Education.

2020

Apacer A$^+$ EAPs
28-items Employee Assistance & Exercise Programs. Awarded Sports Enterprise Certification, Ministry of Education for 2 consecutive years

Apacer continues to promote a friendly and healthy workplace and continues to operate the 28-items employee assistance program and activities and has been awarded the certification of Sports Enterprise Certification Award from the Sports Administration again.

Apacer A⁺ EAPs Employee Assistance Program Operations

Apacer A⁺ EAPs = (A⁺ Work) + (A⁺ Family) + (A⁺ Health) + (CSR & RBA)

The design concept of Apacer A⁺ EAPs is based on the annual analysis of employee categories and basic data by the human resources to design activities or programs that meet the needs of employees; Apacer's Taiwan employees are evenly distributed by marriage and gender, and employees aged 31 to 50 accounts for 78% of the total, and the nature of in-service duties accounts for 89%. Therefore, Apacer Taiwan's various activity planning targets should include the family members of married employees and friends of unmarried employees as far as possible, and the day and night shifts of production line operators should be considered simultaneously to design activities that not only emphasize team interaction but also avoid over-stimulation or greater physical effort to meet the needs of exclusive Apacer employees.

The Development of A⁺ EAPs

A⁺ EAPs Employee Assistance Programs	Food	Clothing	Housing	Transportation	Education	Recreation	Exercise
A⁺ Work	- Provision of 3 meals a day - Department gathering	Apacer uniform	- Employee Lounge - Creativity Center	- Flexible working hours - Shuttle Transportation	- New employee training - On-the-job training	- Massage day - More holidays than the legally-required minimum	- Sports clubs - Sports instructor
A⁺ Family	Group food purchase	Exchanging secondhand and goods	- Nursing room - Designated seats for pregnant workers	Spousal insurance	- Novice parents - Childcare incentives - Childcare measures	- Family Day - Employee trips - Family Arts Gallery	- Sports Day
A⁺ Healthy	Vegan Day	Dry cleaning of uniforms	- Dual certification in environmental and safety - Medical Center	Sports Community	Stress-relief courses Health seminars	- Happy Health Examination - Medical Consultation	- Exercising areas - Sports competitions
CSR / **RBA**	Food allowance	Free laundry room for migrant workers	- Free Dormitory for Migrant Employees - Migrant Agent Subsidy - Migrant License Subsidy	Transportation subsidy for migrant employees	- Volunteer Day - Future Youth - Learning and Reading Program	Artistic Youth Promotion Plan	Sports Junior Sponsorship Program

A⁺ EAPs _ A⁺ Work

Employed sports instructors and received certification of Sports Corporation for two consecutive years

Apacer actively promotes a friendly and healthy workplace and encourages its employees to participate in club activities that benefit the body and mind, while providing founding funds and activity subsidies to support the operation and development of the clubs. Currently, Apacer's diverse sports clubs include basketball club, bike club, boxing aerobics club, golf club, etc. Through these clubs, Apacer promotes cross-unit employee communication and expects each employee to have a healthy and enriched life.

Since the National Sports Administration has been actively promoting sports instructors, Apacer has received subsidies from Sports Corporation to employ sports instructors who serve as healthy workplace promotion angels to provide counseling and advice to various sports clubs, enhance the intensity and breadth of physical training for employees, and promote the health benefits of sports to more employees. Apacer has continued to improve the promotion of a friendly and healthy workplace and has been awarded the Sports Enterprise Certification by the Sports Department of the Ministry of Education for two consecutive years.
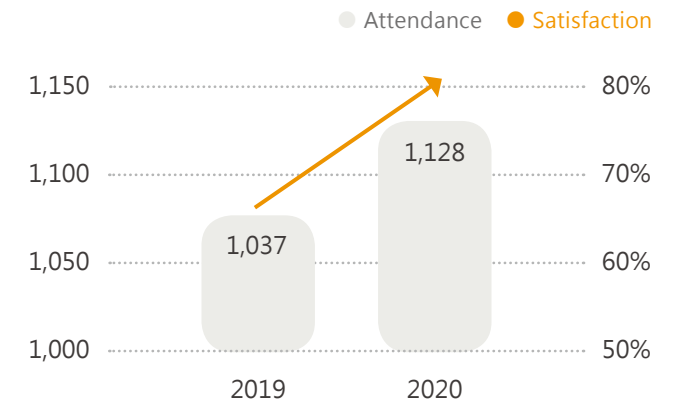
A⁺ EAPs _ A⁺ Family

Organized Family Day and Sports Day to unite employees' centripetal force

In September 2020, Apacer held "Family Day_Wild Adventure" at Hsinchu Green World during the period when the COVID-19 epidemic declined. In addition to arranging and designing various kinds of stress-relieving and parent-child activities, Apacer always combines the spirit of Sports Day with festive events or family day activities and holds various action competitions, so that colleagues can promote family and associate friendship through the process of exercising. Apacer's Family Day 2020 saw a total of 1,128 employees and their family members participate in the event, an 8% increase in the number of participants compared to 2019, and a 13% increase in satisfaction compared to 2019.

Statistics of Family Day

● Attendance   ● Satisfaction

	2019	2020
Attendance	1,037	1,128

Family Day Highlights

A⁺ EAPs _ A⁺ Health

### Vegan Day, implementing the concept of healthy eating

Apacer regularly organizes Vegan Day every year to regularly remind employees and workers to carry out self-health management, while letting them understand that health can be very simple, as long as there are fewer bottles and jars of vitamins and processed food products, and a new concept of health can be easily established! In 2020, we are also cooperating with Jingwen University of Science and Technology to implement a corporate social practice program, with the theme of ugly fruits and vegetables, and through the three major knowledge of nutrition, agriculture, and diet, we will promote the DIY experience and let colleagues experience the fun of vegetable food activities.

Sports community, respond to the health seize action

"To be healthy, let's Sport!" is the philosophy that Apacer's Chairman I-Shi Chen actively promotes after recovering from meningioma surgery. After the surgery, the chairman not only strives to follow the "333 Exercise Rules" advocated by the Department of Physical Education and Sports (3 days of aerobic exercise per week, 30 minutes per day, and a heart rate of at least 130 beats per minute per exercise), but also strives to build a healthy workplace for Apacer and encourages employees and workers to cultivate a regular exercise habit.

Apacer has accumulated a total of 196 participants in the 2020 Apacer Exercise Community (42% participation rate) and has walked 114,945,293 steps or 91,956 kilometers since 2018, which is equivalent to the distance of flying from Taiwan to Los Angeles and back eight times! Such an amazing record! Through the JoiiSports Sports App, all of our colleagues' exercise results are recorded on the same platform, and we encourage each other to keep exercising, making exercise a part of our colleagues' stress relief, promoting them to maintain a healthy physical and mental state, and gradually moving toward a healthy workplace.
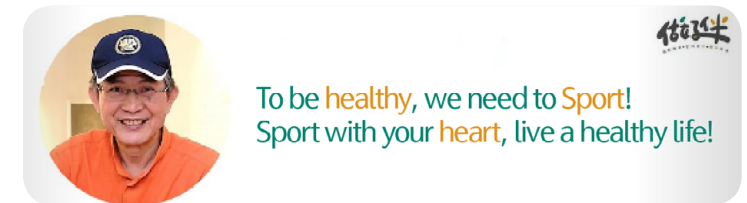
Health promotion seminars/activities to enhance the right concept of health

Apacer will conduct the following seminars and activities in the latter half of the year to cope with the global COVID-19 epidemic in 2020:

| Item	Period	Attendance
Health Activities Physical Fitness Test	Q3	121
Health Seminar - Preventing Sports Injuries and Saying Goodbye to Soreness	Q4	34

A⁺ EAPs _ A⁺ Health

Happy, healthy examination and medical consultation to improve health promotion

Apacer holds regular health examination activities for all employees every year to regularly check the health of employees and implement the concept of "prevention is better than cure", and arranges interviews with resident doctors for employees in high-risk groups based on the results of health examinations; in 2020, a total of 460 people underwent general health examinations, among which 12 people had abnormalities of the three highs (high blood pressure, high blood fat, and high blood sugar), and a total of about 200 people were consulted by doctors throughout the year to provide professional medical assistance and services to employees.

Physical Fitness and sports competition, fun and health into daily life

Apacer has set up its own aerobic physical fitness area and a flywheel fitness area in its operational headquarters, providing equipment such as flywheel machines, horseback riding machines, hand soccer machines, etc., so that employees can spend every day in the company for a healthy exercise; under the leadership of President David Chang, basketball competitions are held from time to time.
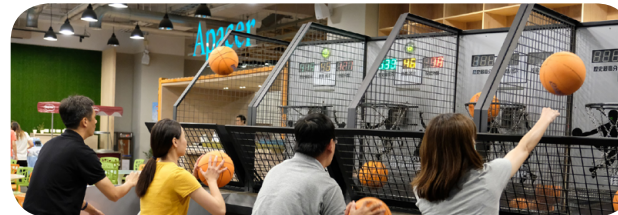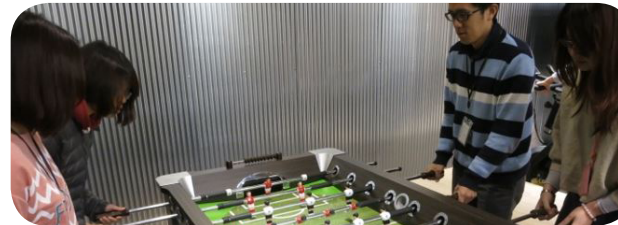
A⁺ EAPs _ A⁺ CSR & RBA

Benefits for migrant workers

Since Apacer joined the Responsible Business Alliance (RBA) in 2017, Apacer has gained a deeper understanding of the various expenses required by migrant workers coming to Taiwan, and in addition to continuing to provide monthly subsidies for the agency fees in Taiwan, supplying three meals at a discounted rate and enjoying meal allowances, free dormitories, transportation allowances, etc., Apacer also helps each migrant employee pay for overseas agency fees, various medical examinations and license fees during their term of office, and return air tickets. In 2020, in response to the Covid-19 epidemic, Apacer not only provides training for epidemic prevention for migrant employees, but also strengthens epidemic prevention information dissemination in dormitories to help migrant employees understand and comply with epidemic prevention measures and safeguard their own health and safety.

● Diverse and open communication channels for employees

Apacer design an interesting Passport for new employees and a corporate culture growth camp to help to integrate into Apacer's corporate culture. Apacer attaches great importance to the expression of opinions and feedback from all employees and has established a multi-faceted and smooth employee communication channel as shown below, as well as the "Employee Grievance Policy", "Workplace Sexual Harassment Grievance and Discipline Policy" and "Sexual Harassment Prevention Grievance and Investigation Measures", which not only allow employees to fully express their voices and opinions, but also provide care and assistance when necessary.

Overall Corporate Employees

Face-to-Face Communication
- New Employee Interviews
- Performance Interviews
- Labor-Management Meeting
- CEO Tea Party
- Gathering activities of each unit

- Supervisors of each unit
- Human Resources and Administration Department

E-communication
- Hii Apacer Intranet Station
- Individual Functions and Units e-Groups
- Employee Opinion Survey

- Functional Groups
- Unit Supervisors
- Human Resources & Administration Department

Grievance channels
- Grievance Hotline/e-mail
- Sexual Harassment Grievance Procedure

- Sexual Harassment Grievance Handling Team
- Human Resources and Administration Department

Communication Results
- CSR Report
- RBA Advocacy & Training

CSR Committee RBA Committee

Board of Directors
Executive Management

Face-to-face communication

- New employees' interview

In order to help new employees, adapt and integrate into the workplace, we conduct monthly interviews with new employees to respond to their suggestions and evaluate improvements.

- Performance Interviews

Regularly conduct performance evaluation for employees and encourage unit supervisors to take the opportunity to conduct performance interviews with employees to help them understand their strengths and weaknesses in the workplace.

- Labor-management meeting

Regular quarterly labor-management meetings are held so that employees can discuss and communicate with each other about the company's system, as well as their opinions on the company's policies, working environment, safety and health...etc.

- CEO tea party

Interact with the talent supply chain members to understand their expectations and suggestions on the current operation and future development of the company. The results of the tea party will serve as an important reference for the company's development and execution of operational plans.

Statistic data of the Labor-Management Conference in 2020

Number of representatives of labor and management	5 representatives from the labor and 5 representatives from the management
Method of election of labor representatives	Elected by all regular employees
Term of office of labor representatives	3 years
Frequency of labor-management meetings	Quarterly, 4 meetings per year
Items discussed at labor-management meetings	1. Operation and profitability of the company 2. In response to the amendment of the Labor Standards Act 3. Annual new product planning 4. CSR and employee welfare activities discussion

E-communication

- Hii Apacer Intranet Station

The home page of the website is designed with 3 major elements: important company policies, various announcements and information, etc., and allows employees to click on the platform, ask questions or post comments at any time.

- Each function and unitary e-group

Each function and unit are encouraged to use various social media to form their own community to achieve common goals through immediate communication and information.
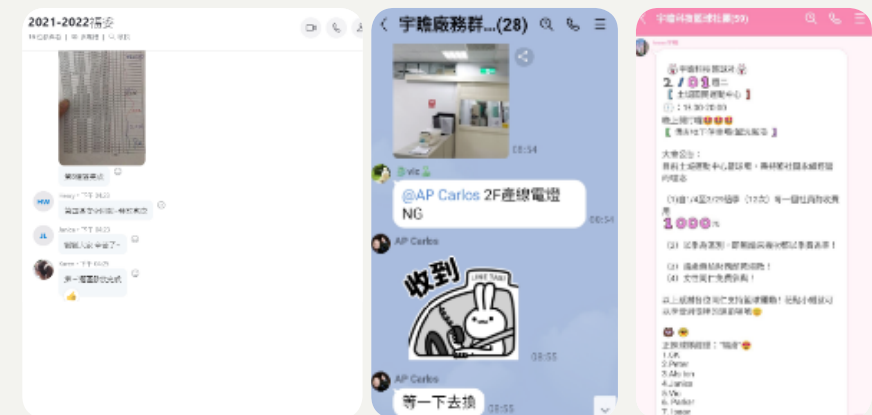
- Employee Opinion Survey

Employee opinion surveys are conducted every two years to understand the commitment of employees in three areas: value, effort, and retention through six major drivers: supervisors, colleagues, compensation, job development, corporate culture, and overall satisfaction, etc.

2020 Employee Opinion Survey Questionnaire Collection
Recovery Rate 67% ↑10%

Employees	Returned	Valid
470	315	304

Employee Grievance Reporting Procedures

- Grievance Hotline / e-mail

Apacer has established the "Employee Grievance Procedure", which is applicable to all employees of the company, so that employees can follow open and unobstructed channels to report labor inequities or unlawful acts affecting the company; at the same time, the grievance window is also routinely promoted on the intranet site.The Human Resources and Administration Department is the grievance window, and the identity of the grievant will be kept confidential when necessary.

The Human Resources and Administration Department shall reply to the complainant within 30 days with written documents regarding the investigation results of the accepted grievance cases, and the complainant may file another grievance within 10 days after receiving the reply if he/she disagrees.As of the end of 2020, no employee grievances have occurred.

Grievance report filing
↓
Grievance investigation
↓
Preliminary investigation
↓
Factual investigation
↓
Investigation result and resolution
↓   ↓
Case closure   Re-appeal

- Sexual Harassment Grievance Procedure

Apacer has not only established the "Workplace Sexual Harassment Grievance and Disciplinary Measures", but also added the "Sexual Harassment Prevention Grievance and Investigation Measures" in 2020, which will be applicable to all employees of Apacer (employed, dispatched workers, technical students and interns) and all employees of Apacer (including non-employees) who have complained about sexual harassment, in order to prohibit any form of sexual harassment and protect the rights of employees and the public.

The Human Resources and Administration Department will be the contact point for grievances, and complainants may request to remain anonymous.In the case of sexual harassment, the "Sexual Harassment Grievance Processing Team" is convened by the grievance window in accordance with the needs of the case and is composed of representatives from both employers and employees to handle and investigate sexual harassment cases.

The proportion of female representatives shall not be less than 1/2, and male representatives shall be at least 1/3. The Ministry of Health and Welfare may, depending on the need, refer to the "Sexual Harassment Investigation Professional Pool" https://expert.mohw.gov.tw/) · and recruit experts and scholars as members of the panel.

The Ministry of Human Resources and Administration shall conduct an investigation within 7 days from the day after the complaint is filed or referred to the Ministry of Health and Welfare, and complete the investigation within 2 months, or 1 month, if necessary, with the extension limited to 1 time, and notify the parties involved. As of the end of 2020, an employee of the Company was notified by an outside party of a complaint, and the prosecutor of the Yilan District Prosecutor's Office in Taiwan eventually dismissed the case.

Material Issues 4.4

Talent cultivation and compensation system

Apacer's Talent Cultivation Strategy

Apacer's talent cultivation is to " introduce outstanding talents, accumulate future technologies, and establish a trustworthy employer brand"; through a talent management development framework based on functional cultivation.

Key actions for talent cultivation in 2020 include:

Introducing a dual-track talent cultivation system and continuing to promote the talent supply chain mechanism.

Apacer will continue to build Apacer Academy, maintain the salary level above the P50th percentile of the industry each year, and continue to operate the A$^+$ EAPs employee assistance program to ultimately create a friendly and healthy workplace, thereby achieving Apacer's talent development strategy.

Input

Talent recruitment cost：

-NT$1,336,380

Talent cultivation cost：

-NT$1,194,792

Personnel compensation and benefits：

-NT$493,792,961

Apacer Talent Cultivation Strategy

Apacer Talent Cultivation Strategy

- Introduce talented people and stack future technologies
- Establishing a Trustworthy Employer Brand
- Develop a function-based talent development structure
- Pouring into a dual-track talent development system
- Promote talent application chain mechanism
- Establishing Apacer Academy
 -(Structured as a training blueprint Planning learning map courses)
- Maintain salary level in the industry
- Continuous A$^+$EAPs employee assistance program
- Create a friendly and healthy workplace

Output

HR Benefits

- External Salary Survey Percentile: P50up
- Double track talent annual promotion rate: 2%
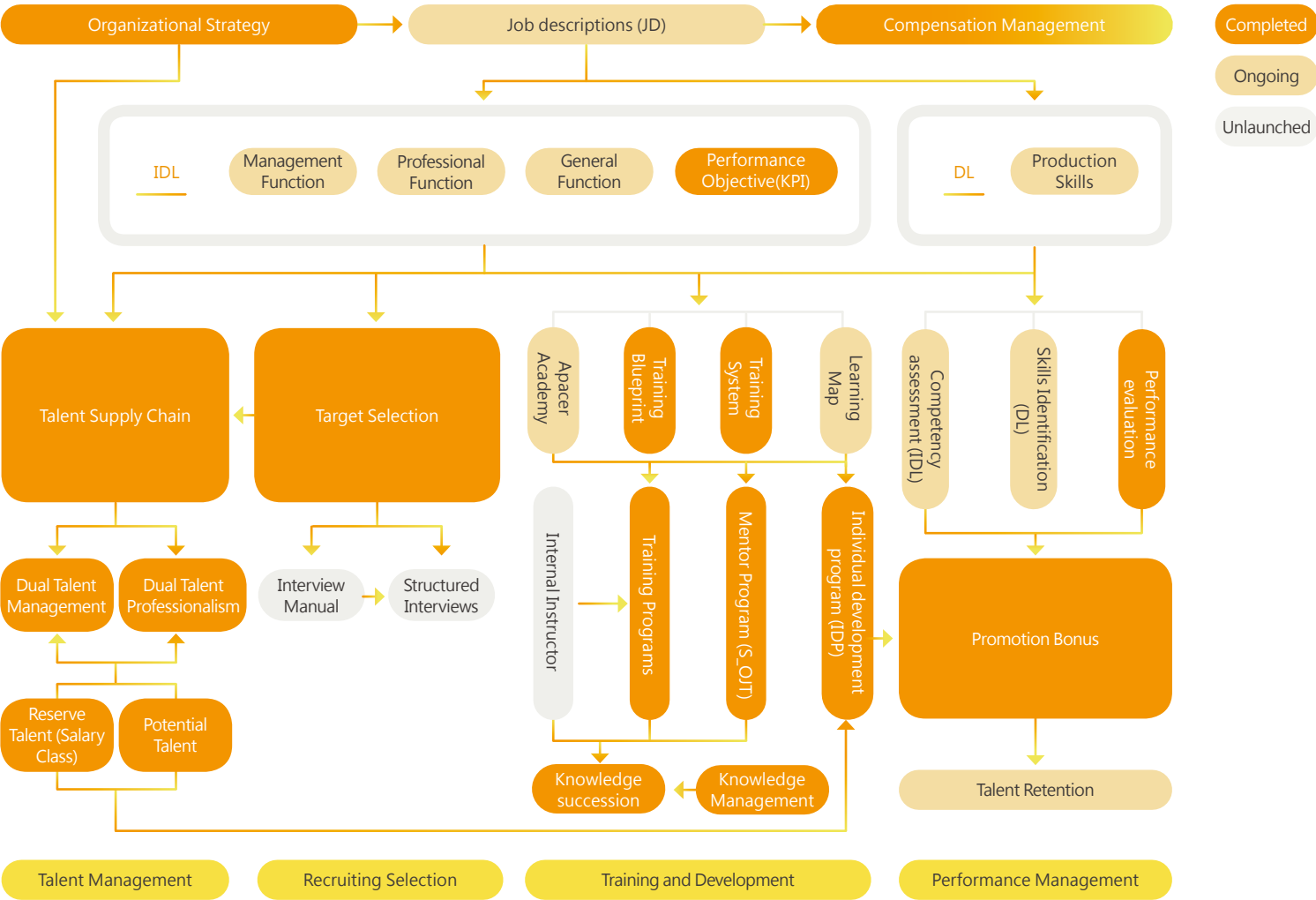- Employee annual turnout rate: 2.5%

Socio-Economic Benefits

- Socio-economic contribution of employee compensation and benefits: NT$493,792,961

A Function-Based Talent

Development framework

In order to establish a talent system applicable to the development of management and professional positions, Apacer designs a function-based talent cultivation development framework that starts from task descriptions, distinguishes management functions, professional functions and general functions, and then plans a series of talent cultivation frameworks related to compensation management, talent management, recruitment and selection, training and development, and performance management.

Organizational Strategy → Job descriptions (JD) → Compensation Management

Completed
Ongoing
Unlaunched

IDL: Management Function | Professional Function | General Function | Performance Objective(KPI)

DL: Production Skills

Talent Supply Chain ← Target Selection

Apacer Academy | Training Blueprint | Training System | Learning Map

Competency assessment (IDL) | Skills Identification (DL) | Performance evaluation

Dual Talent Management | Dual Talent Professionalism

Interview Manual → Structured Interviews

Internal Instructor → Training Programs | Mentor Program (S_OJT) | Individual development program (IDP)

Reserve Talent (Salary Class) | Potential Talent

Promotion Bonus

Knowledge succession ← Knowledge Management

Talent Retention

Talent Management | Recruiting Selection | Training and Development | Performance Management
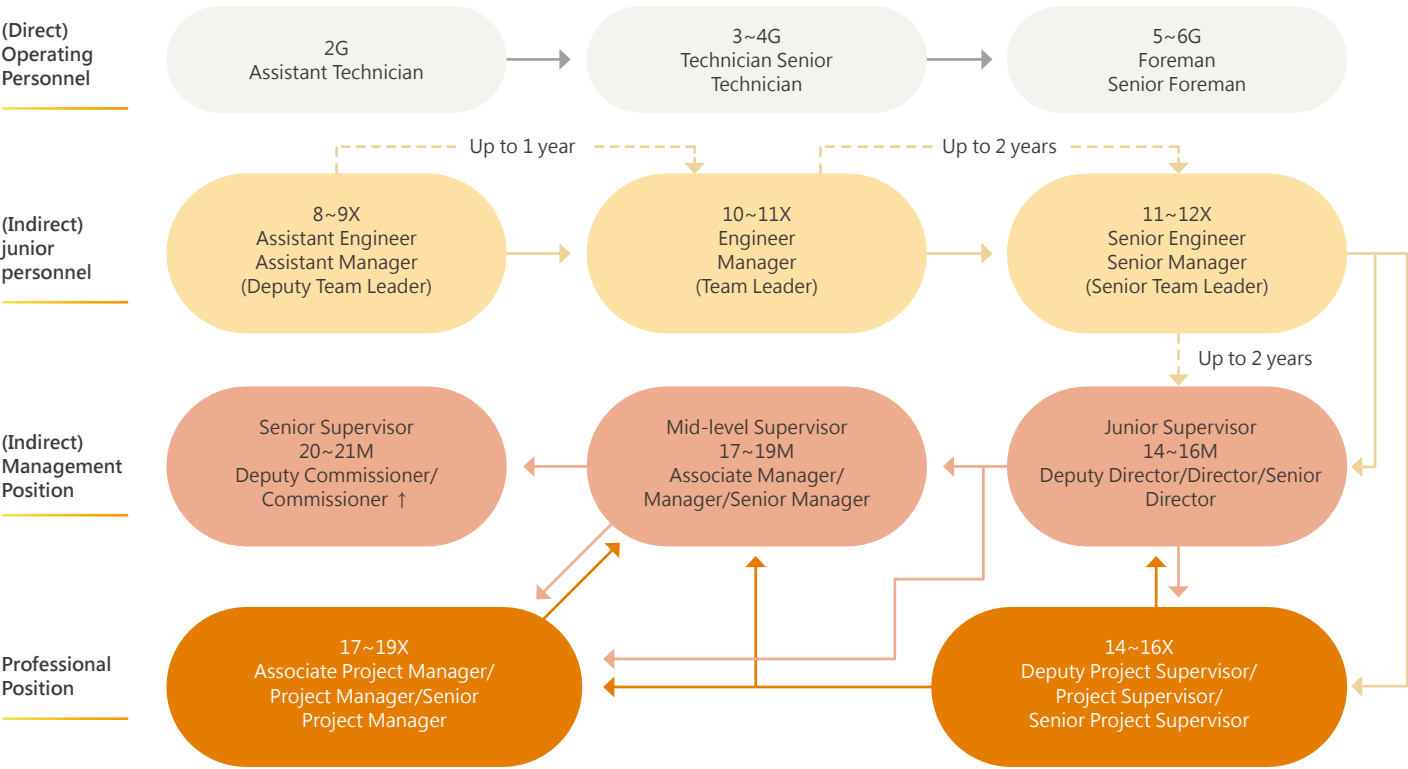
Apacer Dual-Track

Talent Cultivation System

In order to improve the problem of insufficient promotion, Apacer's Human Resources and Administration Department has re-planned from the original single track of 10 grades (direct 3 grades and indirect 7 grades) to a dual track of 19 grades (direct 5 grades and indirect 14 grades) and after explaining and reaching a consensus with the supervisors of each center and each division, all Apacer employees will follow the new dual track talent cultivation system in 2020 and re-grade with academic experience, duty descriptions, functional evaluation and performance evaluation results to solve the original problem of about 60% of employees' grade congestion.

DL : 3-steps and 5 levels promotion structure

IDL : 6-step 14-level promotion structure

(Direct) Operating Personnel

- 2G Assistant Technician → 3~4G Technician Senior Technician → 5~6G Foreman Senior Foreman

(Indirect) junior personnel

- 8~9X Assistant Engineer Assistant Manager (Deputy Team Leader) → 10~11X Engineer Manager (Team Leader) → 11~12X Senior Engineer Senior Manager (Senior Team Leader)

Up to 1 year — Up to 2 years — Up to 2 years

(Indirect) Management Position

- Senior Supervisor 20~21M Deputy Commissioner/ Commissioner ↑
- Mid-level Supervisor 17~19M Associate Manager/ Manager/Senior Manager
- Junior Supervisor 14~16M Deputy Director/Director/Senior Director

Professional Position

- 17~19X Associate Project Manager/ Project Manager/Senior Project Manager
- 14~16X Deputy Project Supervisor/ Project Supervisor/ Senior Project Supervisor

Job Category Remark :
- G: Representative Field Operations
- X: With a collective name of functional duties(A~Y)
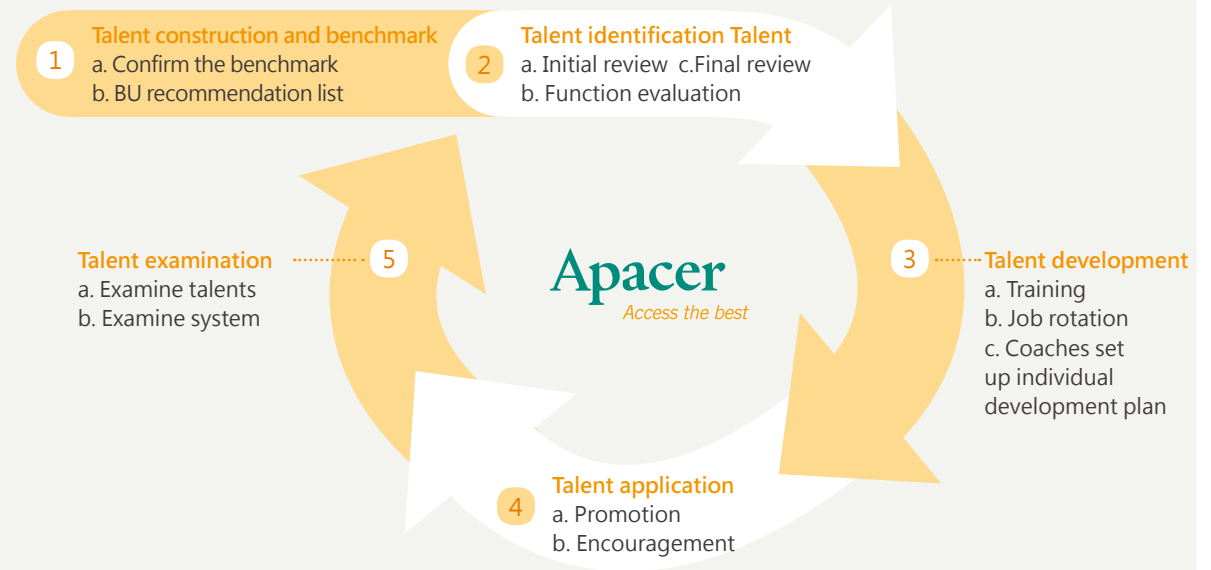- M: Representing management position

Apacer Talent Supply Chain

In order to continuously provide and cultivate quality talents and in response to market competition and various operational challenges, Apacer has established a "talent supply chain" mechanism, from identifying reserve talents, cultivating them into potential talents, to becoming long-term core talents of the company.
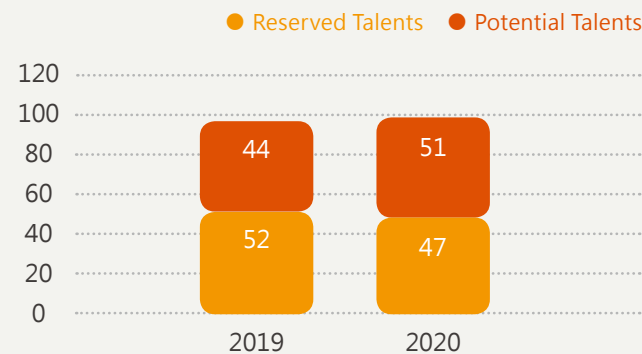
After the list of talents at each stage is confirmed, the Human Resources and Administration Department provides a Coach or Mentor according to the needs of the talents. After the Coach assists the talents in formulating their personal development plans, the Human Resources and Administration Department then combines the results of the talent's functional inventory to arrange the required talent cultivation courses for the talents at each stage; the Strategy and Operation Management Committee also evaluates the talent mechanism according to the strategy, and Apacer provides corresponding incentive rewards according to the development status of the talents.

Apacer's talent supply chain had total 98 members in 2020, up by 2% from 2019; it included 47 reserved talents, 51 potential talents, and 19% of the members were promoted to new positions, 16.3% were promoted to new jobs grades, and 3.1% were promoted to developmental rotations.
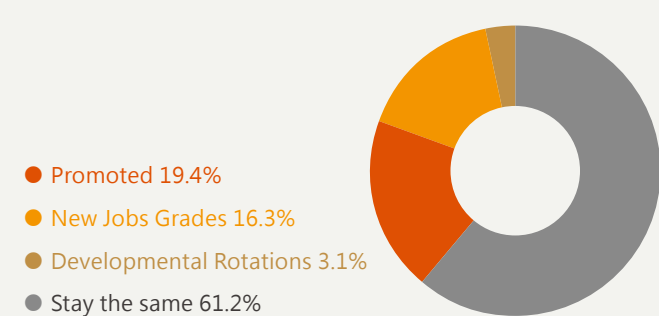
Apacer Talent Supply Chain

1. **Talent construction and benchmark**
   a. Confirm the benchmark
   b. BU recommendation list

2. **Talent identification Talent**
   a. Initial review c.Final review
   b. Function evaluation

3. **Talent development**
   a. Training
   b. Job rotation
   c. Coaches set up individual development plan

4. **Talent application**
   a. Promotion
   b. Encouragement

5. **Talent examination**
   a. Examine talents
   b. Examine system

Apacer
Access the best

Number of People in Apacer's Talent Supply Chain

● Reserved Talents ● Potential Talents

	2019	2020
Potential Talents	44	51
Reserved Talents	52	47

Talent Utilization

● Promoted 19.4%
● New Jobs Grades 16.3%
● Developmental Rotations 3.1%
● Stay the same 61.2%

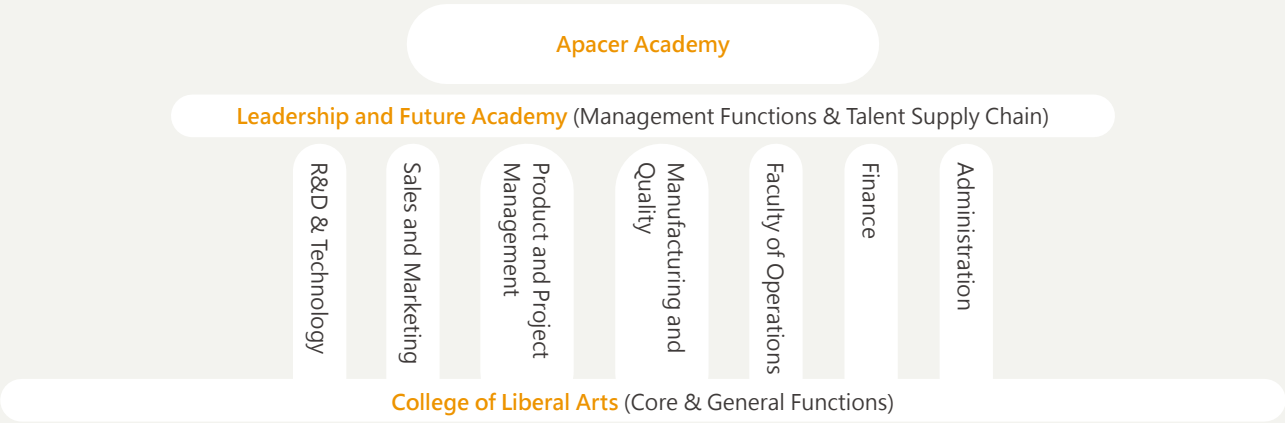## Apacer Academy

In 2020, Apacer started to establish Apacer Academy, with the President serving as the president of Apacer Academy. Based on the functions, Apacer Academy is divided into nine colleges according to functional and professional categories, and plans the education and training for all employees, including new recruits and current employees.

Apacer Academy

Leadership and Future Academy (Management Functions & Talent Supply Chain)

- R&D & Technology
- Sales and Marketing
- Product and Project Management
- Manufacturing and Quality
- Faculty of Operations
- Finance
- Administration

College of Liberal Arts (Core & General Functions)

A Learning Blueprint for Education and Training

Apacer adopts the five components of TTQS talent development quality management: Plan, Design, Do, Review and Outcome as the training management circle and plans the training blueprint as the training structure to establish a complete and systematic human resources development system through systematic management from training demand generation to annual training plan and course execution process.
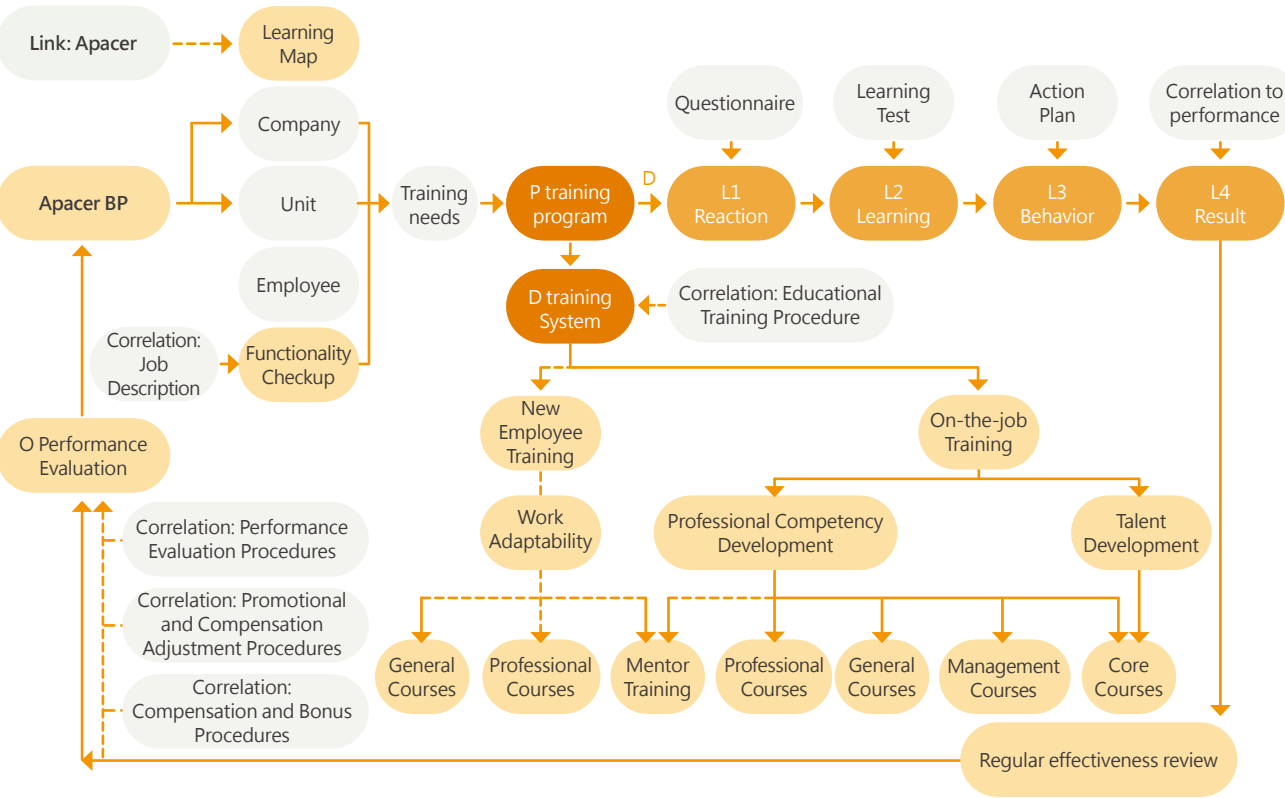
Education and Training Courses

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 interviews supervisors and staff from each department and conducts after-course satisfaction surveys. During annual training surveys, the supervisors of each department can raise education and training needs. This can help employees achieve the developmental objectives of the Company and make sure that the courses fulfill the needs of the employees.

The structure of the training curriculum is classified into new employee training, general employee training, talent training (including management training), RBA & management ethics training, CSR training, etc. Apart from hiring external lecturers, we also invited internal experts to serve as lecturers to pass on their experience.

Due to the impact of the global COVID-19 epidemic, in the first half of 2020, most of the training courses were conducted online or in small groups, and only after the epidemic in Taiwan subsided in the latter half of the year did, we hold regular classroom-based courses, with the total number of trainees, hours and fees slightly lower than in previous years.

New Employee Training

Training is focused on the Company's operating objectives, developmental vision, environmental policy, management systems, company rules, and SOP. It is also for new employees to identify with the Company's core value and woring environment.

General Employee Training

We arrange general training for all employees, including interpersonal relations and communications, autonomous management, innovation camp, and the professional training needed by each department. Moreover, labor safety and health and fire prevention training are also organized regularly in accordance with legal regulations.

Talent Training (Including Management Training)

Training focuses on identifying potential employees and providing current/new supervisors with the talent and management training they need to develop good executive or planning management skills, based on their functions and taking into account actual and future development needs.

RBA & Management Ethics Training

Training focus on RBA and ethical management related regulations, RBA includes: labor, health and safety, environment, ethical standards, management system and other five major areas; ethical management contains not only the ethical standards of RBA, but also contains: ethical management code of conduct and ethical management behavior guidelines and other advocacy

CSR Training

The focus of the training includes: international CSR development trends, global CSR concerns... etc.

2020 Statistics of Education and Training Courses

Type of Courses	Total participants	Total training hours	Budget proportion	Total expenditure (NT$)
New Employee Training	212	622	3.52%	
General Employee Training	2,498	6,549	44.32%	
Talent Training (Including Management Training)	348	1338	36.05%	
Overseas Professional Training	85	589	16.11%	$1,194,792
RBA & Ethics Management Training	500	500	0.00%	
CSR Training	34	51	0.00%	
Total	3,677	9,649	100%	

Average hours of training received by an employee in 2020

Position	Average hours of training received (female)	Average hours of training received (male)
Management Staff	30.3	31.4
Professional Staff	21.3	28.6
Sales Staff	30.4	27.4
Technical Staff	5.8	6.6

🟠 Performance Management

Apacer regularly conducts skills assessment for direct employees and functional evaluation for indirect employees every year. The company's promotion system also takes into account the results of functional evaluation/skills assessment to effectively link employees' future development plans.

Professional Competency Evaluation

- Professional Competency Evaluation of direct personnel

Direct personnel are required to undergo annual skills assessment to ensure that all operators in the production process are able to operate in accordance with standard operating to reduce quality instability caused by human factors, and to cultivate multi-talented workers to effectively adjust manpower utilization.

**- Professional Competency Evaluation of indirect personnel**

The function evaluation items are divided into three categories, such as management functions, professional functions, and general functions, etc. If the evaluation results result in a function gap, it will be linked to the relevant courses in the learning map, so as to make up for the required functions and improve the various abilities of the staff.

Employee Performance Evaluation

All of Apacer employees that have passed on-board training are subject to annual performance evaluations, including all direct and indirect personnel. Apacer's incentives and punitive measures as well as a promotional system are also designed based on the results of the performance evaluations, 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 is undertaken every month. The performance evaluation items include five major categories, which are material rules, work quality, discipline at work, enhancement of professional knowledge, and attendance. The monthly performance evaluation assesses employees' level of performance, and performance-based bonuses will be awarded to employees as encouragement for efficiency and productivity improvement.
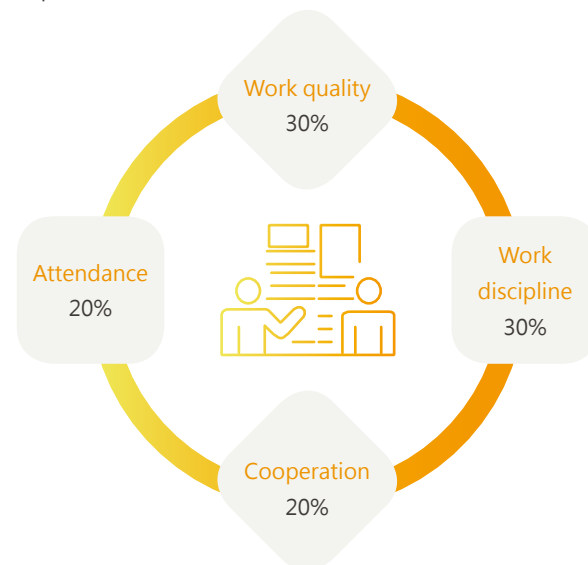
Work quality
30%

Work discipline
30%

Attendance
20%

Cooperation
20%

- Performance Evaluation of Indirect Employees

Performance evaluation of indirect employees is undertaken every six months. The performance evaluation items for indirect employees are classified into "target evaluation" and "competency evaluation." In terms of "target evaluation," supervisors will talk with the workers of their departments to jointly establish targets before January each year. The establishment of employee's annual KPI performance shall be in line with the Company and the department's objectives. Performance evaluation is based on the core competency items for each function development and is standardized by the Human Resources and Administration Department. The Human Resources and Administration Department issues annual performance bonuses based on the performance evaluation results, which not only reward the performance results of employees, but also regularly review the development of employees' performance and personal development plans.

Executives

- Target : 60%
- Functional Development : 40%

Non-Executives

- Target : 70%
- Functional Development : 30%

Compensation Management

Superior to the Labor Standards Act

- Flexible working hours (except for production line)
- 3 meals per day, weekly massage, annual vacation, annual health examination...
- Support and encourage childbirth! Provide legal holidays and maternity bonuses

Apacer has established the Compensation Committee since 2011 in accordance with the law, and since 2018, all members are independent directors who regularly review the policies, systems, standards and structures of directors' and managers' performance and compensation, as well as the performance of the management team and employee compensation policies.

Over the years, Apacer has adopted the salary survey reports provided by more than two external professional consulting firms as the reference for the salary level in the industry, ensuring that the salary level of Apacer's various positions can reach the P50th percentile or higher in the industry.

In addition, Apacer allocates surplus to employees each year according to the operation status to attract outstanding talents to contribute their expertise and long-term commitment; it also has reward systems such as business performance bonus, annual performance bonus, R&D bonus, etc. to encourage employees to continuously pursue excellence and surpass themselves in their work.

Benefits	Salary	Compensation and Bonus	Allowance
- Daily Meal	- Market P75up percentile	- Holiday Bonus	- Supervisor Allowance
- Weekly Massage	- Industry P50up percentile	- R&D Bonus	- Meal Allowance
- Annual vacation		- Performance Bonus	- Shift Allowance
- Annual health examination		- Employee Compensation	- Overseas Allowance
- Birth bonus			- Relocation Allowance
- Holidays / birthday gift certificates			- Settlement Allowance
- Travel/childbirth subsidy/wedding and bereavement subsidy			
- A⁺EAPs Employee Assistance Program Activities			

Annual Gross Salary Ratio of Employees in 2020

Position	female	male
Management Staff	1.0	1.0
Professional Staff	1.0	1.1
Sales Staff	1.0	1.3
Technical Staff	1.0	1.0

Note: Apacer applies fair and impartial standards to verify grades and salaries based on academic experience, duty category, professional licenses and special expertise.

Ratio of Grassroots Employees to Local Minimum Wage in 2020

Gende	Apacer Salary	Local Minimum Salary	Female to Male Salary
Femal	1.1	1.0	1:1
Male	1.1	1.0	

Note: The local minimum wage is calculated based on the monthly basic wage of NT$23,800 effective January 1, 2020.

Salary Overview for Non-Executives by Year

Item	2018	2019	2020
Number of non-exclusives employees	459	482	476
Average annual salary of non-exclusives employees	$881,000	$909,000	$869,000
Median annual salary of non-exclusives employees	NA	$742,000	$729,000

Note: Employees refer to the number of employees employed in Taiwan after deducting managers, partial working hours, and those who have been employed for less than 6 months, and the average number of employees is used for calculation; total salaries are calculated on an accrual basis, including: base salary, various allowances, overtime pay, various bonuses, and employee compensation, etc., but do not include the estimated amount of fees paid on a share basis.

Compensation and benefits expense in 2020

Type	Item	NT (Dollars)	Number of
Salary	Employee Salary	$331,063,794	6,102
Reward	Holiday Bonus	$40,153,769	1,131
	Performance Bonus	$66,341,200	498
	Employee Compensation	$47,919,400	449
Benefits_Company	Maternity Allowance	$474,000	20
	Group Insurance	$1,534,161	6,773
	Retirement Plan	$220,300	1
	Massage Services	$16,840	842
	Family Activities	$2,120,867	1,128
Benefits_Welfare Committee	Bereavement Subsidy	$108,145	44
	Fellowship Subsidy	$176,150	403
	Newspaper and Magazine Subsidy	$33,700	471
	Annual Festival Subsidy	$1,587,663	471
	Community Support	$60,000	105
	Travel Subsidy	$1,982,972	352
Total		$493,792,961	18,790

Retirement System

In accordance with the Labor Standards Act, Apacer established the Employee Retirement Law, which specifies the provision of retirement benefits, the conditions for employee retirement, and the payment of retirement benefits. Meanwhile, Apacer established the Employee Retirement Reserve Fund Supervisory Committee in accordance with the law and deposits the employee retirement reserve fund in the name of the Committee and in accordance with the amount evaluated by a third-party actuary in a statutory financial institution every year (the actuarial evaluation report is produced in January each year for the previous year). Since July 2005, in accordance with the government's new labor retirement system, employees who have chosen the new system have contributed 6% of their labor pensions (employees can also make voluntary contributions within the 6% range), which are deposited in their personal pension accounts at the Labor Insurance Bureau.

Chapter 5

A Good Partner in a Livable and Synergistic Homeland

Vision

We hope to maintain positive interaction with local neighborhoods and organizations. As a company, we engage employees in giving back to the community and building a livable homeland together. It is our goal to exert maximum effort, respect local development, and create a sustainable and synergistic environment.
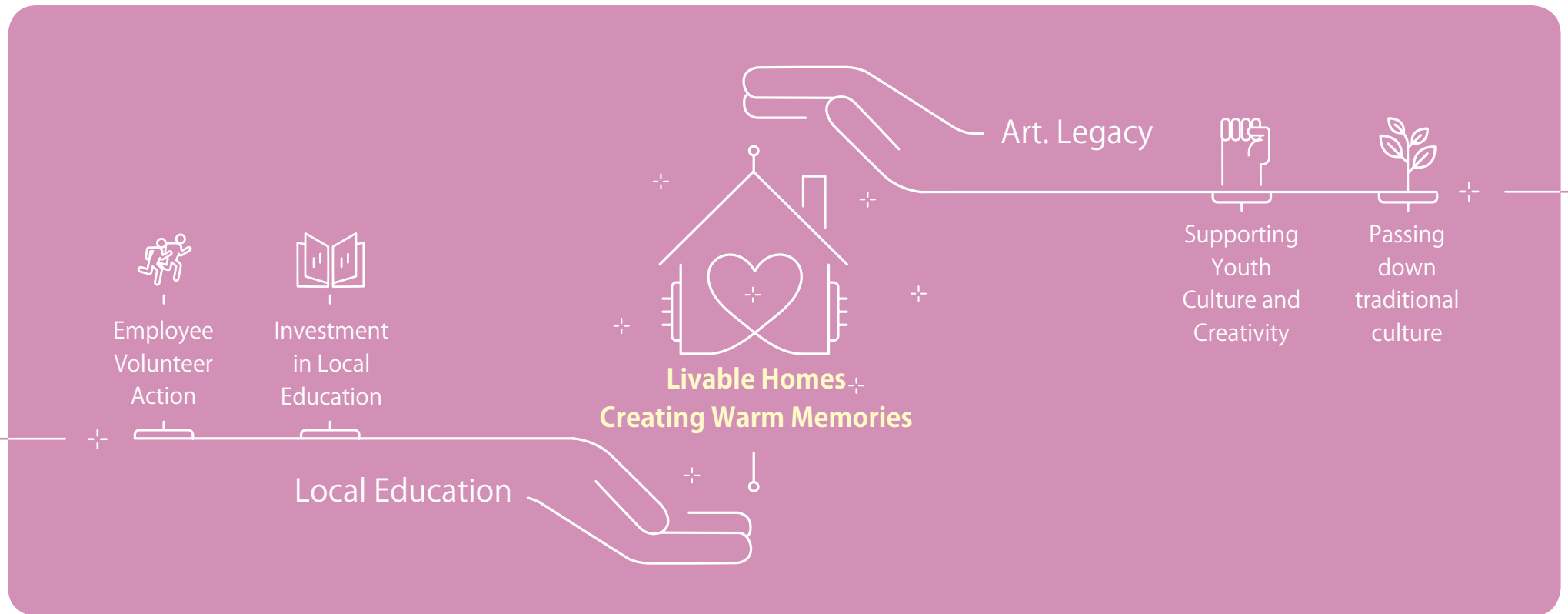
Policy and Commitment

Our headquarter is in New Taipei City's Tucheng District, where the factory and offices are on the same site. We not only support local development through practical actions but also promote traditional culture and be friendly to the environment of the neighborhoods. In addition, we establish long-term cooperation with local groups and encourage employees to participate in our CSR activities to expand our influence.

Contribution to the United Nations
Sustainable Development Goals (SDGs)

11 Sustainable cities and communities

Issues of the Chapter

Material Issue : Communications and giving back to the local community | **Corresponding Material Topic : GRI 413 Local Communities**

How to Manage

Responsibility	- Corporate Marketing Office
Resource	- Manpower: Mainly consist of members from the Corporate Marketing Office, internal staff are allocated when appropriate and external agencies are entrusted for the planning and execution of events. - Budget: Yearly budget allocation is based on year-by-year goals.

Channel of Communication	- Communicate with internal and external stakeholders through supplier conference and quarterly CSR review meetings.
	- Local Partner Meetings
	- Social Media Communication
	- Communication window for stakeholders:
	  Mei Lin, Senior Project Supervisor
	  Tel: (02)2267-8000 Ext. 5519
	  Email: Mei_Lin@apacer.com
	  Address: 1F., No. 32, Zhongcheng Rd.,Tucheng Dist., New Taipei City 236

Action

Long-term local activity:
- Green Cultivation Plan - local environment maintenance and care
- Promote local care event and encourage employees to participate
- Support local education
- Promote culture and arts

Sustainable Goal

Short-term goal (2021)	- Assist development of the local care and traditional culture with 2 to 3 projects (planned) for a year.
Mid-term goal (2023~2024)	- Continuously promote local care and invite more local manufacturers to respond together.
Long-term goal (After 2025)	- Aiming at sustainable operation, we hope to keep making profits and give back to the society in the next five years. Apacer promises to build a livable and synergistic homeland.

Evaluation Method

- Effectiveness of the "Apacer Be with You" Local Care Project
- Taiwan Corporate Sustainability Award (TCSA) - Award winning results

- Number of companies/ participants in the local care projects

Achievements and results in 2020

Achieved goals:	- Collaborated with the social responsibility program of the local Xinwu industry at Jingwen University of Science and Technology to organize a carbon-reducing vegetable - Folk Drums & Art Troupe at Tainan Municipal Daguang Elementary School - Honored with Taiwan Corporate Sustainability Award (TCSA) - Golden Award in IT & IC manufacturing category.

Contribution to the United Nations Sustainable Development Goals (SDGs)

SDGs 11 Sustainable Cities and Communities

Employee Volunteer Action

Investment in Local Education

Local Education

Art. Legacy

Livable Homes Creating Warm Memories

Supporting Youth Culture and Creativity

Passing down traditional culture

5.1 Local Participation

Upholding its brand core value of "Delivering on Our Promise, Constant Improvement and Mutually Beneficial," Apacer has invested in sustainable long-term projects, "Green Cultivation Plan" and "Supporting Local Education" in order to "Becoming Better Partners." In addition, we hold a series of CSR activities with NPOs/ NGOs, communities, schools, and our local neighborhoods. We hope our employees can get a better understanding of the local ecology, as well as make contributions to exert the spirit to "Becoming Better Partners."

In order to strengthen local feedback and fulfill the brand's spirit of "being a good companion", Apacer re-examines the direction of implementation and will combine Apacer's operational areas with local NGOs to promote the "Apacer Be with You" project, focusing on enhancing the impact level of local care, hoping to invite upstream and downstream partners to participate through conceptual rendering and practical actions, expecting to combine more forces to implement corporate social responsibility and achieve the development vision of sustainable management.

● Ecological Protection - Green Cultivation Plan

Since 2015, "Green Cultivation Plan" project has been promoted for six years. From the beginning, the project has only done internal promotion activities such as energy saving, carbon reduction, and vegetables, and has extended to volunteer activities that are more connected with local communities. In 2016, we collaborated with the Tucheng Nature Conservation Association, and NGO, to promote the importance of maintaining the mountain and forest environment through the Tucheng Tung Blossom Season and continued to introduce the local ecology - firefly restoration explanation in 2018. In 2019, we will encourage our staff to take action to remove foreign plants and maintain the balance of the natural environment in our homes. 2020, due to the epidemic, the scheduled volunteer activities for the Tung Blossom Season have been cancelled. Instead, we are working with the Jingwen Local Social Responsibility Program to promote the concept of natural vegetables and expand the project's target audience and influence.

To review the results during the implementation of the Green in the Green Cultivation Plan.

Carbon Reduction and Vegetable Activity:
A total of 213 participants (colleagues and family members) participated in the activity, promoting the concept of healthy eating.

Volunteer activities during the season:
155 colleagues and family members responded, with a total of 465 volunteer hours, contributing to local environmental protection.

Apacer - Results of the Green Cultivation Plan Over the Years

Year	Activity	Results
2015 Empowerment	Month of Vegan Diet for Carbon Reduction, Onsite Diagnostics by Taiwan Energy-Saving Patrol	- Five seminars were held and a total of 218 employees participated. Nearly 60% of the employees stated that "the event increased their willingness to choose a vegetarian diet."
	Green Family Day	- A total of 48 employees and their family members attended the event. All interviewed participants stated that "the event inspired me to adopt energy-saving and environmentally-friendly habits"
2016 Action	Apacer One-Day Volunteer Event	- A total of 34 employees and their family members participated. All Interviewed participants stated that they are "willing to participate in corporate volunteer events in the future".
2017 Strong engagementc	Apacer One-Day Volunteer Event	- A total of 42 employees and their family members participated. Satisfaction rate from the participants was 100%.
	Carbon Reduction Vegetarian Day	- Hosted 1 Stamina Soup session and Vegetarian Meal Experiential Workshop was hosted. A total of 60 employees participated in the event.
2018 Innovative plans	Apacer One-Day Volunteer Event	- A total of 42 employees and their family members participated. 97.6% are satisfied with the ecological tour of Apacer One-Day Volunteer Event. We cooperated with the nature protection association for 3 consecutive years to build a local network. - With innovative planning, we combined the theme of Tung flowers and fireflies on the exhibition held on first floor, gaining positive feedback.
	Parent-Children DIY Vegetarian Spring Roll	- We arranged the parent-child vegetarian spring roll DIY activities to encourage employees to have a healthy diet and live a healthy life. A total of 45 employees participated.
2019 Continuous devotion	Apacer One-Day Volunteer Event	- A total of 37 employees and their family members participated. - This year's theme is the removal of foreign species and firefly viewing. - Abbot of Shanshi Temple expressed support for Apacer's activities in maintaining ecological balance.
2020 Expansion of participation	Parent-Child Vegetable DIY	- Collaborated with Jingwen University of Science and Technology - Jingwen Social Responsibility Project to promote the concept of natural vegetables, total 60 colleagues participated in the project.

5.2 Social Care

● Apacer Be with You – Warm Memories

Apacer expects to implement the "Apacer Be with You" project from 2021 onwards. The main purpose of the project is to cooperate with local NGOs to give full play to the company's actual influence and make contributions, so as to create warm memories for more people. Currently, we have been in contact with Huashan Senior Welfare Center to focus on "invoice donation" and "material fundraising", the former is expected to start in March 2021, while the latter will assess the suitable material fundraising plan according to the needs of NGOs. We hope to use the power of our internal colleagues to create a spreading effect and attract companies in Tucheng Science and Technology to join the event, enabling more people to give back to this land.

● Do One Thing for Tamsui River-Natural Environment Care

In 2020, Apacer received an invitation from the CommonWealth Magazine, hoping to jointly respond to "Do One Thing for the Tamsui River". The Tamsui River supports about 8 million people in Northern Taiwan. According to the information from the CommonWealth Magazine, on average about 14,700 tons of garbage and plastic particles flow through the Tamsui River to the ocean every year, becoming a killer of marine life or a link in the food chain, endangering your health and mine.

Apacer is located in the Tucheng District of New Taipei City, which is exactly where the Tamsui River basin passes through. In the spirit of "Becoming Better Partners", we enthusiastically respond to this activity by not only participating in the signing of the convention, but also promoting the project internally by posting the action on the intranet and replacing all the water faucets in our office space with water-saving faucets, starting with our own actions to show our support and contribute to the recovery of water resources.

[Do One Thing for Tamsui River](#) for complete information please refer to

Source

● Passing down and sharing – Warm Memories

Apacer is concerned about Taiwan's local traditional arts and understands the importance and difficulty of passing them on. Therefore, we have been donating money to Folk Drums & Art Troupe at Daguang Elementary School to help the school children learn about the beauty of traditional culture since 2018, hoping that both "traditional art" and "memory" can be passed down. At the start of 2019, Hsiu-Chih Yang, Principal of Daguang Elementary School, led the members of the troupe to the UK where they delivered a performance. With "Tradition in Taiwan: Art Troupe in London" as the theme, the performance attracted around 300 overseas compatriots and international students. They conducted flash mob performances at famous attractions such as London Bridge, Trafalgar Square and Chinatown, and were highly praised by British citizens and tourists from all over the world. In 2020, we hold a celebration to announce the results of our education and cultural sponsorship, which is a perfect ending to our 3-year-long sponsorship.


● Donations - Exerting Positive Value and Influence

Apacer believes that the true value of donations lies in building connections within the society and solving problems. We hope to make full use of each donation and exert positive influence on to society.

By 2020, Apacer has donated a total of NT$1.52 million to local communities, charitable organizations, arts and cultural heritage organizations, and other related organizations.

Year	Donation Unit	Donation amount (NT$)
Cultural Heritage	Tainan Municipal Daguang Elementary School	500,000
Track & Field team	Municipal Yulin Junior High School	297,220
Local Community	New Taipei City Tucheng Nature Protection Association	32,000
Others	Charitable foundations, welfare foundations, etc.	748,481
	Total amount of donation	1,577,701
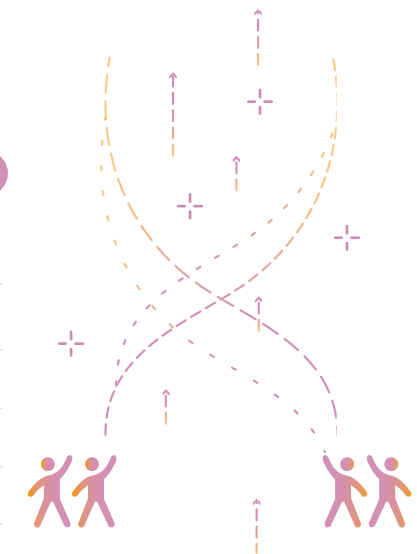
● Appendix 1 Global Reporting Initiative (GRI) Standards Comparison Table

The indicators in the below table are listed within the structure given by the 2016 version of the GRI Standards, which corresponds to the contents of this Report. Apacer adopts the new version of GRI 403:2018 to disclose information related to occupational safety and health. 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	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 Innovative R&D	
	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 Diversified Products and Operational Performance	
	102-7	Scale of organization	1.1 About Apacer	
			1.3 Diversified Products and Operational 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 organization and supply chain in 2020
	102-11	Precautionary principle or approach	1.2 Cornerstone of Corporate Sustainability - Ethical Management	
			2.1 Environmental Commitment and Compliance	
	102-12	External initiatives	3.1 Sustainable Supplier Management	
	102-13	Membership of associations	1.4 Innovative R&D	

GRI 102: General Disclosure 2016

Disclosure Item	Description	Description	Referenced Section	Remark
Strategy	102-14	Statement from senior decision-maker	A word from the President	
	102-15	Key impacts, risks, and opportunities	1.2 Cornerstone of Corporate Sustainability - Ethical Management	
Ethics and Integrity	102-16	Values, principles, standards, and norms of behavior	1.2 Cornerstone of Corporate Sustainability - Ethical Management	
			3.1 Sustainable Supplier Management	
	102-17	Mechanisms for advice and concerns about ethics	1.2 Cornerstone of Corporate Sustainability - Ethical Management	
Governance	102-18	Governance Structure	SSD: CSR Internal Management Measures	
			1.2 Cornerstone of Corporate Sustainability - Ethical Management	
	102-19	Delegating authority	SSD: CSR Internal Management Measures	
	102-20	Executive-level responsibility for economic, environmental, and social topics	SSD: CSR Internal Management Measures	
	102-22	Organization of the highest governance unit and its committees	1.2 Cornerstone of Corporate Sustainability - Ethical Management	
	102-24	Nomination and selection of the highest governing unit	1.2 Cornerstone of Corporate Sustainability - Ethical Management	
	102-32	Highest governance body's role in sustainability reporting	Compensation System	

GRI 102: General Disclosure 2016

Disclosure Item	Description	Description	Referenced Section	Remark
Stakeholder Communication	102-40	List of stakeholder groups	SSD: Stakeholder Engagement	
	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 Engagement	
	102-44	Key topics and concerns raised	SSD: Stakeholder Engagement	
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	
	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	

GRI 102: General Disclosure 2016

Disclosure Item	Description	Description	Referenced Section	Remark
Reporting Practice	102-55	GRI content index	Appendix Global Reporting Initiative (GRI) Standards Comparison Table	
	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 Issue: R&D Innovation				
Economic Performance	201-1	Direct economic value generated and distributed	1.3 Diversified Products and Operational Performance	
	201-2	Financial implications and other risks and opportunities due to climate changes	2.1 Environmental Commitment and Compliance	
	201-3	Defined benefit plan obligations and other retirement plans	4.4 Talent cultivation and compensation system	
Management Approach	103-2	The management approach and its components	Chapter 1 Your Ideal Innovation Partner	
	103-3	Evaluation of the management approach	Chapter 1 Your Ideal Innovation Partner	
Market Presence	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	4.4 Talent cultivation and compensation system	
	202-2	Proportion of senior management hired from the local community	4.1 Personnel Overview	
Indirect Economic Impact	203-1	Infrastructure investments and services supported	5.1 Local Participation 5.2 Social Concern	
Procurement Practices	204-1	Proportion of spending on local suppliers	3.1 Sustainable Supplier Management	

GRI 200: Topic-specific Standards - Economic topics 2016

Disclosure Item		Description	Referenced Section	Remark
Material Issue: Ethical Management				
Anti Corruption	205-2	Communication and training about anticorruption policies and procedures	1.2 Cornerstone of Corporate Sustainability - Ethical Management	
	205-3	Confirmed incidents of corruption and actions taken	2.1 Commitment to the Environment and Legal Compliance	No corruption incidents occurred in Apacer's operating locations in 2020
Manage-ment Approach	103-2	The management approach and its components	Chapter 1 Your Ideal Innovation Partner	
	103-3	Evaluation of the management approach	Chapter 1 Your Ideal Innovation Partner	
Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior		No relevant incidents occurred in 2020

GRI 300: Topic-specific Standards - Environmental topics 2016

Disclosure Item		Description	Referenced Section	Remark
Material Issue: Green Products and Services				
Energy	302-1	Energy consumption within the organization	2.2 Climate change risk management	
	302-3	Energy intensity	2.2 Climate change risk management	
	302-4	Reduction of energy consumption	2.2 Climate change risk management	
Manage-ment Approach	103-2	The management approach and its components	Chapter 2 A Good Partner for Green Environment	
	103-3	Evaluation of the management approach	Chapter 2 A Good Partner for Green Environment	
Water	303-(2018)	Management of drainage impacts	2.3 Waste and Water Resources Management	
	303-(2018)	Water withdrawal	2.3 Waste and Water Resources Management	

GRI 300: Topic-specific Standards - Environmental topics 2016

Disclosure Item		Description	Referenced Section	Remark
Materiality Issue: Greenhouse Gas (GHG) Management				
Emissions	305-1	Direct (Scope 1) GHG emissions	2.2 Climate change risk management	
	305-2	Energy indirect (Scope 2) GHG emissions	2.2 Climate change risk management	
	305-4	GHG emissions intensity	2.2 Climate change risk management	
	103-2	The management approach and its components	Chapter 2 A Good partner for green environment	
	103-3	Evaluation of the management approach	Chapter 2 A Good partner for green environment	

Disclosure Item		Description	Referenced Section	Remark
Effluents and Waste	306-2 (2020)	Waste by type and disposal method	2.3 Waste and Water Resources Management	
	306-3 (2020)	Significant spills	2.3 Waste and Water Resources Management	
	306-4 (2020)	Waste disposal and transfer	2.3 Waste and Water Resources Management	
	306-5 (2020)	Waste disposal and transfer	2.3 Waste and Water Resources Management	
Environ-mental Compliance	307-1	Non-compliance with environmental laws and regulations	2.1 Commitment to the Environment and Legal Compliance	No relevant incidents occurred in 2020.
Material Issue: Hazardous Substance Management Sustainable Supplier Management				
Supplier Environ-mental Assessment	308-1	New suppliers that were screened using environmental criteria	3.1 Sustainable Supplier Management	
	308-2	The negative impact of the supply chain on the environment and the actions taken	3.1 Sustainable Supplier Management	
Manage-ment Approach	103-2	The management approach and its components	Chapter 2 A Good Partner for Green Environment	
			Chapter 3 Making Progress Alongside A Good Partner	

GRI 300: Topic-specific Standards - Environmental topics 2016

Disclosure Item		Description	Referenced Section	Remark
Material Issue: Hazardous Substance Management Sustainable Supplier Management				
Management Approach	103-3	Evaluation of the management approach	Chapter 2 A Good Partner for Green Environment	
			Chapter 3 Making Progress Alongside A Good Partner	

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

Disclosure Item		Description	Referenced Section	Remark
Material Issue: 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	
Management Approach	103-2	The management approach and its components	Chapter 4 A Good Partner in a Friendly and Healthy Workplace	
	103-3	Evaluation of the management approach	Chapter 4 A Good Partner in a Friendly and Healthy Workplace	
Material Issue: Occupational health and safety				
Disclosure on Occupational Health Management Approach	103-2	The management approach and its components	Chapter 4 A Good Partner in a Friendly and Healthy Workplace	
	103-3	Evaluation of the management approach	Chapter 4 A Good Partner in a Friendly and Healthy Workplace	
	403-1 (2018)	Occupational health and safety	4.2 Employee Safety and Health	
	403-2 (2018)	Hazard identification, risk assessment, and incident investigation	4.2 Employee Safety and Health	
	403-3 (2018)	Occupational health services	4.2 Employee Safety and Health	

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

Disclosure Item		Description	Referenced Section	Remark
Material Issue: Occupational health and safety				
Disclosure on Occupational Health Management Approach	403-4 (2018)	Worker participation, consultation, and communication on occupational health and safety	4.2 Employee Safety and Health	
	403-5 (2018)	Worker training on occupational health and safety	4.2 Employee Safety and Health	
	403-6 (2018)	Promotion of worker health	4.2 Employee Safety and Health	
			4.3 Employee Benefits and Communications	
	403-7 (2018)	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	3.1 Supplier Sustainability Management	
	403-8 (2018)	Workers covered by an occupational health and safety management system	4.2 Employee Safety and Health	
	403-9 (2018)	Work-related injuries	4.2 Employee Safety and Health	
	403-10 (2018)	Work-related ill health	4.2 Employee Safety and Health	
Material Issue: Talent Cultivation				
Training and Education	404-1	Average hours of training per year per employee	4.4 Talent cultivation and compensation system	
	404-3	Percentage of employees receiving regular performance and career development reviews	4.4 Talent cultivation and compensation system	In 2020, all employees are reviewed.
Management Approach	103-2	The management approach and its components	Chapter 4 A Good Partner in a Friendly and Healthy Workplace	
	103-3	Evaluation of the management approach	Chapter 4 A Good Partner in a Friendly and Healthy Workplace	

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

Disclosure Item		Description	Referenced Section	Remark
Material Issue: Talent Cultivation				
Diversity and Equal opportunity	405-1	Diversity of governance bodies and employees	1.2 Cornerstone of Corporate Sustainability - Ethical Management 4.1 Employee Overview	
	405-2	Ratio of basic salary and remuneration of women to men	4.4 Talent cultivation and compensation system	
Non-discrimination	406-1	Incidents of discrimination and corrective actions taken		No discrimination by Apacer in 2020
Child Labor	408-1	Operations and suppliers at significant risk for incidents of child labor		Apacer does not use any child labor
Local Communities	413-2	Operations with local community engagement, impact assessments, and development programs		Apacer's operations have no negative impact on local communities
Management Approach	103-2	Operations with significant actual and potential negative impacts on local communities	Chapter 5 A Good Partner in a Livable and Synergistic Homeland	
	103-3	The management approach and its components	Chapter 5 A Good Partner in a Livable and Synergistic Homeland	
Human Rights Assessment	412-2	Evaluation of the management approach	1.2 Cornerstone of Corporate Sustainability - Ethical Management	
Material Issue: Sustainable Supplier Management				
Supplier Social Assessment	414-1	New suppliers that were screened using social criteria	3.1 Supplier Sustainability Management	
	414-2	The negative impact of the supply chain on the environment and the actions taken	3.1 Supplier Sustainability Management	
Management Approach	103-2	The management approach and its components	Chapter 3 Making Progress Alongside A Good Partner	
	103-3	Evaluation of the management approach	Chapter 3 Making Progress Alongside A Good Partner	

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

Disclosure Item		Description	Referenced Section	Remark
Material Issue: Sustainable Supplier Management				
Public Policy	415-1	Political contributions		No political donation expenditures were made in 2020.
Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories	1.3 Diversified Products and Operational Performance 3.1 Sustainable Supplier Management	
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services		No violations of related laws and regulations in 2020
Management Approach	103-2	The management approach and its components	Chapter 3 Making Progress Alongside A Good Partner	
	103-3	Evaluation of the management approach	Chapter 3 Making Progress Alongside A Good Partner	
Marketing and Labeling	417-1	Requirements for product and service information and labeling	1.3 Diversified Products and Operational Performance	
	417-2	Incidents of non-compliance concerning product and service information and labeling		No violations of related laws and regulations in 2020
	417-3	Incidents of non-compliance concerning marketing communications		No violations of related laws and regulations in 2020
Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data		No relevant incidents occurred in 2020
Socio-economic Compliance	419-1	Non-compliance with laws and regulations in the social and economic area		No violations of related laws and regulations in 2020

Note: The 102-20 and 22 are non-core options in the general disclosure topics, and Apacer actively discloses related information.

Appendix 2 Comparison Table of the Sustainability Accounting Standards Board (SASB)

Industry:Semiconductors industry

Disclosure Topics:Greenhouse Gas Emissions

Index Code	Disclosure Indicator	Chapter Reference	Page Number
TC-SC-110a.1	- Total Emissions in Scope 1 (Unit: CO2-e) - Percentage of emissions covered by regulatory limits/restrictions (unit: %)	2.2 Climate change risk management	p.43
TC-SC-110a.2	Long-term and short-term carbon reduction strategies or plans for Scope 1 GHG emissions, with descriptions of emission reduction targets and the status of achievement of those targets	2.2 Climate change risk management	p.43

Disclosure Topics:Employee Health& Safety

Index Code	Disclosure Indicator	Chapter Reference	Page Number
TC-SC-320a.1	Describe how to assess, monitor, and reduce potential health hazards to employees	4.2 Employee Safety and Health	p.78
TC-SC-320a.2	Property damage caused by employee health and safety violations	4.2 Employee Safety and Health	p.78

Disclosure Topics:Product Lifecycle Management

Index Code	Disclosure Indicator	Chapter Reference	Page Number
TC-SC-410a.1	Percentage of products containing IEC 62474 declared substances by revenue	To be included in the future management policy	
TC-SC-410a.2	Describe the energy efficiency of processors at the system level, including servers, desktops, and laptops	2.4 Green Products	p.51

Industry: Software & IT Services

Disclosure Topics:Managing Systemic Risks from Technology Disruptions

Index Code	Disclosure Indicator	Chapter Reference	Page Number
TC-SI-550a.1	Total number of service disruptions that resulted in customer outages	No relevant events occurred in 2020	
TC-SI-550a.2	Describe the continuity of business risks associated with disruptions	1.2 Cornerstone of Corporate Sustainability - Ethical Management	p.23

bsi.

INDEPENDENT ASSURANCE OPINION STATEMENT

Apacer 2020 Sustainability 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 sustainability, more particularly described in the Scope below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the independent assurance opinion statement may be read.

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by 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 2020 Sustainability 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 AA1000AS v3 sustainability 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 2020 Sustainability Report provides a fair view of the Apacer CSR programmes and performances during 2020. The Sustainability 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 2020 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 Sustainability Report assurors in accordance with the AA1000AS v3. 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 v3 and their self-declaration in accordance with GRI Standards: Core option were fairly stated.

Methodology

Our work was designed to gather evidence on which to base our conclusion. We undertook the following activities:
— a top level review of issues raised by external parties that could be relevant to 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.
— 12 interviews with staffs involved in sustainability management, report preparation and provision of report information were carried out.
— review of key organizational developments.
— review of the findings of internal audits.
— review of supporting evidence for claims made in the reports.
— an assessment of the organization's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness and Impact as described in the AA1000AP (2018).

Conclusions

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

Inclusivity

This report has reflected a fact that 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 has established relative procedure in organization level, as the issues which were identified by all departments have been prioritized according to the extent of impact and applicable criterion for sustainable development of organization. Therefore, material issues were completely analyzed and the relative information of sustainable development was disclosed to enable its stakeholders to make informed judgments about the organization's management and performance. In our professional opinion the report covers the 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 v3 in our review, as defined by the scope and methodology described in this statement.

Responsibility

The Sustainability 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

AA1000
Licensed Assurance Provider
000-4

...making excellence a habit.™

Statement No: SRA-TW-2020058
2021-05-20

Taiwan Headquarters: 2nd Floor, No. 37, 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