



# Apacer

Technology Inc.

## 2021

Sustainability Report

# Table of Contents

About this Report	1
The Chairman's Address	2
SSD ( Sustainability Strategy Development )	3
Stakeholder Engagement	8
Materiality Analysis	10
Materiality Analysis Methods and Procedures	10
Materiality Analysis Matrix	11
List of Material Issues	12
Variations in Material Issues	13
Boundaries of Material Issues	14
Apacer's Covid-19 Contingency Plan for Pandemic Prevention	15

Chapter I A Better Partner for Navigating Innovation	16
1.1 About Apacer	21
1.2 Ethical Management and Corporate Governance (Material Issues)	25
1.3 Diversified Products and Operational Performance	35
1.4 Innovative R&D (Material Issues)	41
Chapter II A Better Partner for Green Environment	44
2.1 Commitment to the Environment and Compliance with Laws and Regulations	47
2.2 Climate Change Risk Management	49
2.3 Waste and water resources management	56
2.4 Green products (Material Issues)	58
Chapter III A Better Partner for Making Progress	54
3.1 Sustainable Supplier Management (Material Issues)	63
3.2 Customer Relationship Management (Material Issues)	70

Chapter IV A Better Partner for a Friendly and Healthy Workplace	76
4.1 Employee Overview	78
4.2 Employee Safety and Health (Material Issues)	83
4.3 Employee Welfare and Communication (Material Issues)	88
4.4 Talent Cultivation and Remuneration System (Material Issues)	99
Chapter V A Better Partner for A Livable Homeland	111
5.1 Local Influence	112
5.2 Local Care	113
Appendix 1 Comparison Table of the Global Reporting Initiative (GRI) Standards	116
Appendix 2 Comparison Table of the Sustainability Accounting Standards Board (SASB)	121
Appendix 3 Disclosure Items of ESG Index for Corporate Governance Evaluation	122
Appendix Independent Assurance Opinion Statement	124

# About **this** Report

## ■ The Framework of the Report

This report adopts the GRI Standards version of Sustainability Reporting Standards published by the Global Reporting Initiative (GRI), and is compiled according to the Core Options. Through the globally recognized reporting framework, Apacer's issues concerned by stakeholders in the economic, environmental, and social aspects are completely disclosed.

## ■ Editorial Principles

Apacer refers to the domestic and international sustainability progress and industry trends, as well as identifies issues concerned by stakeholders through material analysis, utilizing them as the core of the report's disclosures. Meanwhile, the report editor followed the four major reporting principles and the six reporting quality principles required by GRI Standards and compiled the report under the Materiality, Inclusivity, Responsiveness, and Impact specified in AA1000 Account Ability Principle Standards, APS (2018 Edition).

## ■ Report Scope

This report's information disclosure period is from January 1, 2021, to December 31, 2021, and it is the 10th Sustainability Report published by Apacer (the first eight publications are Corporate Social Responsibility Reports). Although Apacer is not an enterprise required to compile and report under regulations of the FSC (Financial Supervisory Commission, Republic of

China (Taiwan)), Apacer still compiled the report following the terms of "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies," "Filing of Corporate Environment, Social and Corporate Governance (ESG) Information Disclosure," and "Correction Application of Corporate Environment, Social and Corporate Governance (ESG) Information Disclosure" published by TWSE (Taiwan Stock Exchange). The previous report was published in August 2021, and the Sustainability Report is published annually and released on the enterprise website, enabling constant communication on the sustainability operations of Apacer. The scope of information disclosure in the report circles Apacer's operating headquarters and plants in Taiwan as the core, excluding all foreign operating sites. If the content includes information about operations not located in Taiwan, it will be noted in the report.

## ■ Third-party Verification

To ensure the transparency and credibility of information disclosure, and enhance the comparability of performance as well as the substantive of the report, Apacer has authorized an independent and credible third party, British Standards Institution (BSI), to conduct the verification of the report according to the first verification type of AA1000AS v3 assurance standard, and the report has been verified meeting the standard of a Moderate Level assurance and the GRI standards Core Option assurance. For the independent third-party verification statement from BSI, please refer to the Independent Assurance Statement attached to this report.

## Contact Information

Apacer eagers to maintain communications with our stakeholders. Your opinions will be the greatest driving force for our improvement. We welcome you to contact us:

### Secretariat, Sustainable Development Committee

Mei Lin, Project Manager

Telephone: (02) 2267-8000 ext. 5519

Email: [Mei\\_Lin@apacer.com](mailto:Mei_Lin@apacer.com)

Address: 1F., No. 32, Zhongcheng Rd., Tucheng Dist., New Taipei City 236

Download the Sustainability Report: <https://www.Apacer.com/zh/Csr/Pages/Apacer-csr-report>  
<https://www.apacer.com/zh/Csr/Pages/Apacer-csr-report>

# The Chairman's Address



Chairman of Apacer

Looking back on 2021, Taiwan was once facing major challenges from the pandemic; however, I want to thank all employees and partners of Apacer, for having faith in the company under all hardships and struggling through the darkest hours together. Although more restrictions have been posted on our lives along with the increasing economic challenges due to the pandemic, our resilience and flexibility have been enhanced to overcome all obstacles, and Apacer's operating performance in 2021 has achieved remarkable results. Besides operating stably, Apacer also has been advancing with the international ESG trend, taking initiatives in various aspects. Our crucial achievements are described as follows:

## Environment /

- The air-conditioners in the headquarters office building are replaced with water-cooled models, reducing electricity consumption and decreasing carbon emissions by 10% in 2021 (compared with 2020).
- All lunch boxes have been provided without disposable chopsticks since May 2021, as all employees are encouraged to bring their own environmentally friendly tableware.
- By cooperating with the suppliers, packaging materials are recycled and reused to reduce waste.
- In the plant's offices, the light bulbs have been replaced with LED lights, and the faucets have been replaced with water-saving faucets, contributing to environmental sustainability even with the miscellaneous.

## Society /

- Employees are entitled to vaccine leaves in response to the pandemic with all employees insured with vaccine insurance.
- The percentile of external wage and salary survey report results remains above P50.
- The "Workout Day" event is promoted, encouraging employees to walk 4000 steps per day while using stairs more instead of elevators. Apart from saving electricity, a healthy workplace is also nurtured with employees' strengths being cultivated.
- Employee care activities such as "Apacer Thank You Day" were held to relieve the pressure of life under the pandemic.
- Collaborating with Huashan Welfare Social Foundation, Apacer not only held invoices and supplies donation events but also activities to raise lunar new year's dinner for lonely seniors, donating 168 sets of meals to the Tucheng branch of the Foundation and warming up the New Year's Eve for the underprivileged elderly.

## Corporate Governance /

- The business revenue was NT\$8.682 billion in 2021, with a gross profit margin of 17%. During the year, the EPS was NT\$4.81 and the dividend was NT\$2.89, hitting a record high.
- In the 2021 Corporate Governance Evaluation, Apacer ranked in the finest 6% to 20% among 913 listed companies. Apacer will continue to optimize the governance quality, safeguarding the rights and interests of all stakeholders.
- The CSR Committee was reformed into the Sustainable Development Committee, with the ESG Implementation Team and Risk Management Team established within to implement diversified sustainable actions and transform Apacer into a sustainable enterprise.

The new year has arrived, yet the pandemic is still impacting our daily lives. However, I believe that Apacer, celebrating its 25th anniversary this year, has accumulated abundant experience in the past, fostering a formidable brand culture and the core value of "Becoming Better Partners." With all this, we shall witness greater progress in the future, as Apacer continues to prosper in the next 25 years.

# SSD

( Sustainability Strategy Development )

## ■ Sustainability Strategy Roadmap

Apacer has transformed brand core values from "Trust" and "Innovation" into "Becoming Better Partners: Deliver on our promises, strive for constant improvement, and advance with our partners," which has become the center of Apacer's long-term operation strategies, reaching for the United Nations Sustainable Development Goals (SDGs) with actions.



### Deliver on our promises

Based on transparency and integrity, Apacer pursues stable operation, responds to local demands, and passes down the culture of Taiwan.

#### United Nations Sustainable Development Goals

##### Detailed Target

8.2

11.6

16.5 / 16.6

##### Material Issues

R&D Innovation / Economic Performance / Operational Risk Management

-

Corporate Governance

##### Apacer's Commitment

Setting digital storage as the core, continuously cultivating and recruiting talents, transforming R&D innovative technologies into practical business profitability, spurring the growth of R&D momentum, and finally maintaining the sustainable operation of the enterprise.

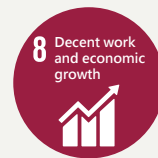
Continuing to strengthen corporate governance, enhancing information transparency, and protecting the rights and interests of shareholders and stakeholders.

Setting sustainable operation as the goal, anticipating to achieve continuous profits can be made and given back to the locals in five years, and promising to establish a homeland suitable for symbiosis.

##### 2021 Action

R&D Innovation:  
 -Providing R&D and customized services  
 -Professional software, hardware, firmware, industrial design, mechanism designing team  
 -Establishing five major patent themes with regular progress review  
 -Clearly formulating reward measures and encouraging the commercialization of patents

Corporate Governance and Economic Performance:  
 -Deepening the company's sustainable corporate governance culture  
 -Establishing an internal audit and reporting system  
 -Protecting shareholders' rights and interests, treating shareholders equally  
 -Strengthening the functions of the board of directors and improving the sustainable value of the enterprise – raising the information transparency to promote sustainable operations



## Strive for constant improvement

Complying with laws and regulations, continuously reducing the operational influences on the environment, and aspiring to become a green enterprise step by step.

### United Nations Sustainable Development Goals

#### Detailed Target

#### Material Issues

#### Apacer's Commitment

#### 2021 Action



6.3

Environmental Compliance / Green Product Design

Improving the manufacturing process and reducing electricity consumption, strengthening the design of product electricity saving mode, reducing the environmental pollution due to the production, and establishing the green intelligent plant.

Green Product Design

- Continuously updating the management system
- Supplier Sustainability Management
- Green product design
- Energy-saving measure improvements for the process
- Promoting environmental protection education and training

12.2

Hazardous Substance Management / Raw Material Management

Striving to comply with the requirements of RBA regulations, implementing the supplier's hazardous Substance Free (HSF) management provisions, and convening a supplier conference annually to advocate the concepts, realizing green and intelligent management.

Raw Material Management

- Establishing a supplier assessment system
- Implementing supplier RBA policy
- Holding annual supplier conference

13.3

Environmental Compliance / Green Product Design

Promoting green product design, implementing internal environmental protection education, internalizing the concept of environmental protection into the overall value chain of the enterprise, and establishing the green intelligent plant.

Environmental Compliance

- Conducting environmental protection regulations identification every quarter to meet requirements of laws and regulations

## Advance with our partners

Establishing a friendly workplace, managing a sustainable supply chain well, and progressing with growth together with business partners.

### United Nations Sustainable Development Goals

#### Detailed Target

#### Material Issues

#### Apacer's Commitment

#### 2021 Action



3.9

Occupational Health and Safety

Building complete workplaces following related occupational safety laws and regulations, as well as laws and regulations accreditations, establishing a trustworthy employer brand.

Talent Cultivation and Employee Welfare

- Apacer double-track talent development system
- Apacer talent supply chain system
- Apacer education and training system (Apacer training courses, training roadmap, learning map)

4.4

Employee Welfare / Talent Cultivation

Utilizing the 5 dimensions of PDDRO(Plan, Design, Do, Review, Outcome) for the management cycle, reviewing the training plan and development, and establishing a trustworthy employer brand.

Occupational Health and Safety

- Disaster prevention measures
- Safety and health education plan
- Automatic reviewing system
- Health management system
- Monitor and improve the operational environment, planning the return to work after occupational injury step by step

5.c.

Employee Welfare

Using A+ health, A+ family, and A+ work, combined with CSR & RBA as the axis of ordinate, and food, clothing, housing, transportation, education, entertainment, and movement as the axis of abscissa, plotting a 28-square A+ EAPs employee assistance program, establishing a trustworthy employer brand.

17.16

Customer Relationship Management

Updating the customer service process system, establishing an after-sales service system worldwide, optimizing product customization services, and becoming partners of customers to create values together.

Customer Relationship Management

- Establish a global after-sales service system
- Optimize product customization service
- Conduct a customer satisfaction survey every year

Note: Please refer to p.8-31 for detailed targets of the United Nations Sustainable Development Goals (SDGs)

## Key Sustainable Performance in 2021

# Economic and corporate governance

Won the nomination of "Emerging Brand" for the "Best Taiwan Global Brands"

Reached the top **6%~20%** in the 2021 Corporate Governance Evaluation

The revenue was **NT\$ 8.682** billion, with a gross profit margin of **17%** in 2021

EPS was **NT\$ 4.81**, hitting a record high since being listed

Individual products won the Silver Award of

## Taiwan Excellence Award

# Environment

Implemented restriction on disposable chopsticks, reducing carbon by **1432.8 kg** (calculated from May to November in 2021)

GHG emissions have been reduced by **10%** (compared to 2020)

The lights of the plant and office have been replaced with **LED**, which can save about **7,256 kWh** of electricity each year

Hazardous waste was reduced by **3%**

Water-saving faucets installed in sinks can reduce the water consumption of toilets by approximately **60%**



# Society



● All employees are provided with vaccine insurance and epidemic prevention supplies

● The percentile of external remuneration survey reports remains **P50** ↑

● The functional availability rate reached **92%** in the first year

● Commodities and pandemic prevention supplies were donated to the Tucheng branch of **Huashan Social Welfare Foundation**

● In response to the raising of raise lunar new year's dinner, **168** sets of meals were donated to the Tucheng branch of **Huashan Social Welfare Foundation**



# Supplier management

● Completed the customer satisfaction survey, and the satisfaction score reached **86.14** points

● **Supplier conferences** were held to advocate important issues

● **Supplier quality audits** were regularly conducted

● Completed sustainable **supplier management coaching**

● Completed a supplier **GHG inventory training course**



## Internal Sustainable Management Measures

### Sustainable Development Committee - Organizational structure

To integrate the concept of sustainability into the enterprise operation while responding to the sustainability trend, Apacer transformed its CSR Committee into the Sustainable Development Committee in 2021, with the Chairman still serving as the Committee Chief and the President serving as the Chief Executive Officer of the Committee. Following the development prospect and goals of the company, the Apacer ESG policies were formulated along with short, mid, and long-term goals, implementation strategies, and management systems.

There are two teams established under the Sustainable Development Committee, one of which is the ESG Implementation Team, commanding five sub-groups, namely "Corporate Governance", "Employee Care", "Customer and Supplier Care", "Environmental Care," and "Community Care," and the managers of related departments act as the heads of the teams, formulating implementation projects and organizing action teams according to the short, mid and long-term goals of each group, combining the daily operation of the department and sustainable development. The Risk Management Team is responsible for regularly inspecting various risks faced by the enterprise, controlling and putting forward improvement plans under the supervision of the managers of the six centers and three divisions of the enterprise.

### CSR Committee – Organizational Structure



## Sustainable Development History of Apacer

- |      |  |
|------|--|
| 2015 | CSR Committee was established, and organizations were set to promote corporate social responsibility in teamwork; ISO 14001, QC080000, and ISO 50001 accreditation were obtained.                      |
| 2016 | Promoted the Apacer One-Day Volunteer event, obtained 2015 ISO 14001 new version certification.  |
| 2017 | Joined the Responsible Business Alliance (RBA) and obtained the Silver Label accreditation; in 2016, the CSR report won the TCSD Taiwan Sustainability Report Award - Silver Award for the first time. |
| 2018 | Responded to the UN Sustainable Development Goals (SDGs) with strategic actions consistently.  |
| 2019 | Combined with the brand's core value of "Being better partners," a sustainable development strategy was established.   |
| 2020 | Passed the ISO 45001 accreditation and obtained RBA Silver Label accreditation for the second time.  |
| 2021 | In response to international trends, the CSR Committee was restructured to include more divisions for cross-division cooperation and operational performance improvements.                             |
| 2022 | Material risk issues were identified and included in continuously improved or supervised items.  |

# Stakeholder Engagement

## ■ Stakeholder communication approaches and issues

Referring to the industry characteristics and operational status quo, as well as adopting the five major principles of the AA1000 Stakeholder Engagement Standard to rank the stakeholders, seven types of key stakeholders of Apacer are identified: Employees, shareholders/investors, suppliers, customers, media, government institutions, and local community groups

Stakeholder	Importance and significance for Apacer	Achievement of communication	Communication approaches and frequency	Issues of concern	Apacer's response
Employees	Employees are the stakeholders that we prioritize the most. The creativity and stable employee retention rate are the cornerstone for Apacer to continuously secure the advantage of pioneering the industry	<ul style="list-style-type: none"> <li>- Obtained the Healthy Workplace accreditation from the National Health Administration</li> <li>- 0 cases of occupational injury occurred</li> <li>- The annual labor withdrawal rate of all employees is under 3% ↓ (reached 1.9%)</li> <li>- Apacer Academy and Learning Map construction progress reached 100%</li> <li>- The external remuneration survey report percentile remained P50 ↑</li> <li>- The annual growth rate of double-track talents from the talent supply chain reached 2% ↑ (reached 20%)</li> <li>- The implementation rate of talent cultivation courses reached over 90% ↑ (reached 97%)</li> <li>- The functional availability rate reached 92% for the first year</li> </ul>	<ul style="list-style-type: none"> <li>- Review meetings, such as meetings of the Sustainable Development Committee, the Executives Management Committee, the Employee Welfare Committee, and the Occupational Safety and Health Management Committee are regularly held</li> <li>- Related knowledge and activities are promoted through the company's intranet from time to time</li> <li>- Internal employee complaint channel established</li> </ul>	<ul style="list-style-type: none"> <li>- R&amp;D Innovation</li> <li>- Hazardous Substance Management</li> <li>- Employee Welfare</li> </ul>	<ul style="list-style-type: none"> <li>- The A+ EAPs Employee Assistance Program was implemented</li> <li>- Organize Apacer College and the development of a double-track talent system</li> </ul>
Customers	We develop innovative products and services in line with the customers' demands, providing the best product experience. The customers' requirements for environmental and social responsibility aspire Apacer to always strive for better self-regulation	The customer satisfaction survey was completed, achieving an outstanding score of 86.14 points	<ul style="list-style-type: none"> <li>- Customer Relationship Management system: CRM</li> <li>- Return Merchandise Authorization system: eRMA</li> <li>- Annual customer satisfaction survey</li> <li>- Customer service hotline and online consultation letter</li> </ul>	<ul style="list-style-type: none"> <li>- Raw Material Management</li> <li>- R&amp;D Innovation</li> <li>- Customer Relationship Management</li> </ul>	<ul style="list-style-type: none"> <li>- Optimize after-sales service with system integration, knowing customer's demands to enhance manufacturing process capability.</li> <li>- Correct mistakes through customer satisfaction surveys</li> </ul>

Stakeholder	Importance and significance for Apacer	Achievement of communication	Communication approaches and frequency	Issues of concern	Apacer's response
<b>Shareholders / Investors</b>	Capital investment symbolizes the trust and support of shareholders/investors to the company, enabling Apacer to innovate continuously with the sustainable operation of the enterprise	<ul style="list-style-type: none"> <li>- 2 institutional investor conferences were held</li> <li>- 1 shareholders' meeting was held</li> <li>- 4 issue-type press releases</li> <li>- A total of 40 calls from shareholders in 2021</li> </ul>	<ul style="list-style-type: none"> <li>- Shareholders' meetings / institutional investor conferences</li> <li>- Press release</li> <li>- Official website of Apacer</li> <li>- Investor relationship contact person</li> <li>- Market Observation Post System(MOPS)</li> </ul>	<ul style="list-style-type: none"> <li>- Economic Performance</li> <li>- R&amp;D Innovation</li> </ul>	<ul style="list-style-type: none"> <li>- Ensure information transparency through public activities such as shareholders' meetings and institutional investor conferences</li> <li>- Strengthen information disclosure in Chinese and English on the official website</li> </ul>
<b>Suppliers</b>	Suppliers are crucial partners for Apacer to implement green product manufacturing. Through cooperation, communication, guidance, and audit, we progress with our suppliers on the path of sustainability together	<ul style="list-style-type: none"> <li>- Supplier quality audit is regularly conducted</li> <li>- Supplier conferences were held to advocate important issues</li> <li>- Completed sustainable supplier management coaching</li> <li>- A supplier GHG inventory course was completed</li> </ul>	<ul style="list-style-type: none"> <li>- Supplier AGP (Apacer Green Products Web System) platform</li> <li>- Annual Supplier Conference</li> </ul>	<ul style="list-style-type: none"> <li>- Operational Risk Management</li> <li>- Environmental Compliance</li> <li>- R&amp;D Innovation</li> </ul>	<ul style="list-style-type: none"> <li>- Conduct supplier evaluation (current system with RBA audit), supplier conference, and supplier coaching</li> <li>- Conform to ISO 9001, QC 080000</li> </ul>
<b>Media</b>	The media reports may impact the public's impression and opinion of Apacer. We convey our brand image through public relations management and communication with the media	A total of 28 press releases for topics including operations, activities, and products were issued during the year	<ul style="list-style-type: none"> <li>- Irregular media dinner</li> <li>- Irregular media interviews</li> </ul>	<ul style="list-style-type: none"> <li>- Economic Performance</li> <li>- Environmental Compliance</li> <li>- Talent Cultivation</li> </ul>	<ul style="list-style-type: none"> <li>- Patent research and development are encouraged continuously</li> <li>- Provide brand/product information continuously</li> <li>- Maintain decent relationship with media constantly</li> </ul>
<b>Government institutions</b>	We maintain our focus on the global sustainability trend and the government's laws and regulations to plan the corporate sustainability roadmap and strategy more prospectively	No material violation issues	Communicate and cooperate with government institutions under the related divisions	<ul style="list-style-type: none"> <li>- Economic Performance</li> <li>- Environmental Compliance</li> </ul>	<ul style="list-style-type: none"> <li>- Enterprise information is released on the MOPS and the official website according to the materiality</li> <li>- Advocate compliance internally</li> </ul>
<b>Local community groups</b>	While pursuing profits, Apacer is also devoted to giving back to local communities and implementing the brand's core value, "Becoming better partners"	Donated supplies and funds, with the total value reaching NT\$22,000, benefitting 168 persons, and with an additional donation of 594 invoices over 9 months	Local community group site	Environmental Compliance	Constant promotion of local-care projects, while establishing long-term cooperative relations with local groups. Apacer hopes to increase positive social influence by inspiring employees to take action personally, such as treating the community environment with care.



# Materiality Analysis

## Materiality Analysis Method and Procedures

To make the content of information disclosure better fit the expectations of stakeholders, for the first time, stakeholders are identified before distributing the stakeholder questionnaire in 2021. The report was compiled based on in-depth analysis and inspection by interviewing members of each team of the Sustainable Development Committee, which enabled stakeholders to explicitly comprehend Apacer's sustainability initiatives in operational governance, environmental protection, and giving back to society.



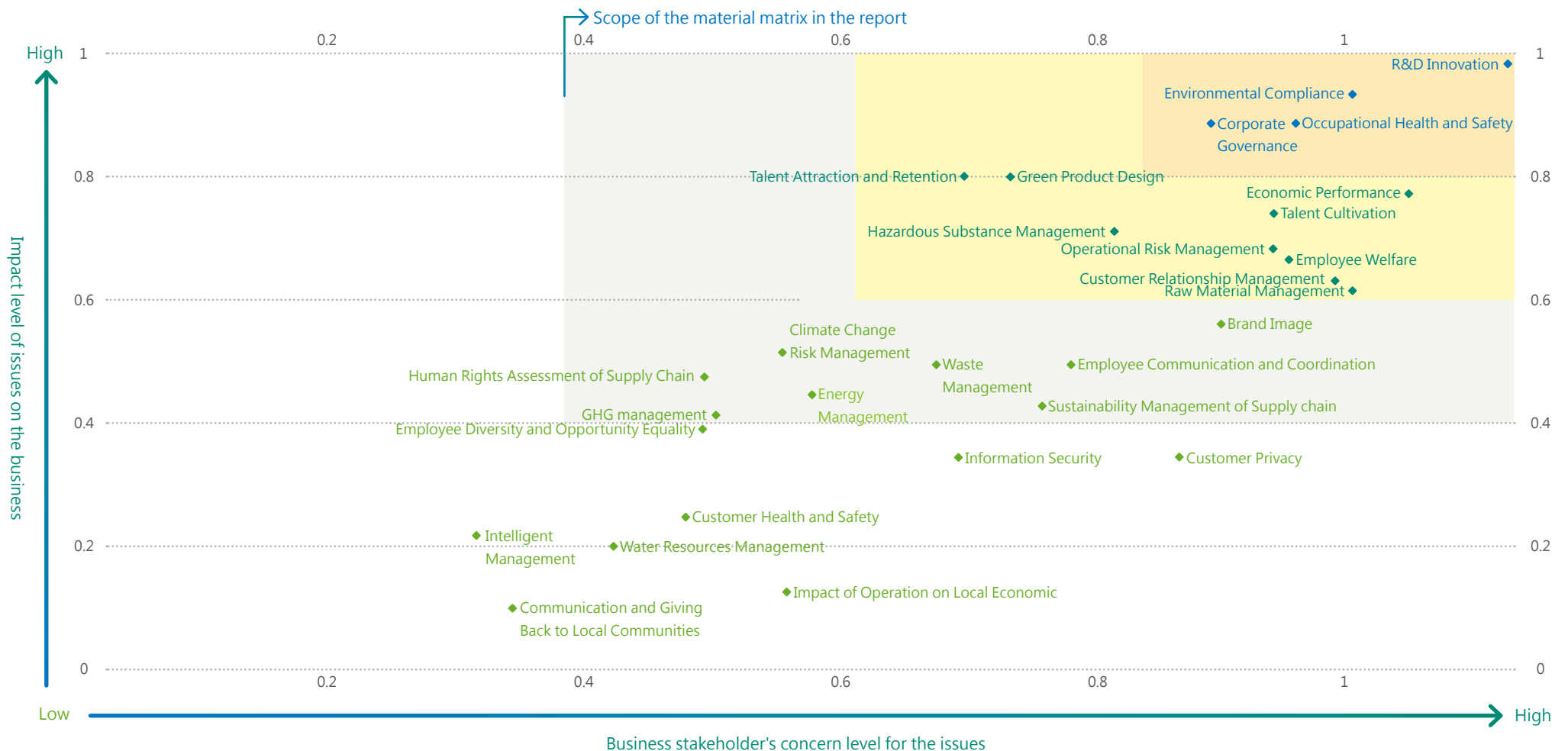
## Materiality analysis matrix

This year, through qualitative interviews conducted with the Sustainable Development Committee, the degree of concern of stakeholders and senior management for the sustainability issues and the impact of the issues on the enterprise were apprehended through materiality analysis. For the first time, Apacer applied the identification results of climate change risks and opportunities as the factor to evaluate the importance of the issues, and accordingly identified 13 material issues as the disclosure focuses of the report this year.

4 Management approach-Issues of high materiality

9 Management approach-Issues of moderate materiality

8 Low-level issues



## List of Material Issues

Topic	Material Issues	Material themes	Importance to Apacer	Responding Chapter	Pagination
Economic	R&D Innovation	GRI 201 Economic Performance	As the industry evolves rapidly, it is crucial to maintain R&D sensitivity at all times to be in customer's confidence with innovative products and services	1.4 Innovative R&D	P.41
	Corporate Governance	GRI 205 Anti-Corruption	Apacer insists on compliance with laws and regulations, ensuring the publicity and transparency of information, ethical operation of the enterprise, and taking responsibility for all stakeholders	1.2 Ethical Management and Corporate Governance	P.25
	Operational Risk Management	-	In response to the ever-changing environment and industry, the early planning and responses to possible risks will affect the sustainable operation of the enterprise	1.2 Ethical Management and Corporate Governance	P.25
	Economic Performance	GRI 201 Economic Performance	Apacer shall continue to create the highest value for its shareholders and stakeholders, setting long-term overall operating performance, stable profits, and growth as the departure point of the enterprise	1.3 Diversified Products and Operational Performance	P.35
Environmental	Environmental Compliance	GRI 307 Environmental Compliance	Compliance with the environmental protection laws and regulations in the operation area to reduce the negative impact on the environment during the product manufacturing process	2.1 Commitment to the Environment and Compliance with Laws and Regulations	P.47
	Green Product Design	GRI 302 Energy	With practicing sustainable green concepts from product design to manufacturing and setting the manufacturing of environment-friendly products as the goal, it is anticipated that a green industrial chain can be created	2.4 Green products	P.58
	Hazardous Substance Management	-	Focusing on hazardous substance management, and performing the supplier management, warehousing, production line operation, and waste disposal process prudently, to ensure no personnel and local environment would be harmed	3.1 Sustainable Supplier Management	P.63
	Raw Material Management	GRI 301 Material	Increasing the proportion of renewable raw materials and the recyclability of packaging materials to realize the ethos of a circular economy	2.4 Green Products	P.58
Social	Employee Welfare	GRI 401 Employment GRI 402 Labor/ Management Relations	Acting based on the needs of the employees with the diversified communication channels, advantageous remuneration conditions, and career growth space provided, to establish a friendly and healthy workplace for all employees	4.3 Employee Benefits and Communications	P.88
	Occupational Health and Safety	GRI 403 Occupational Health and Safety	Providing a safe and healthy work environment following laws and regulations, with regular inspections and improvements performed, ensuring employees are carefree in a safe workplace	4.2 Employee Safety and Health	P.83
	Talent Cultivation	GRI 404 Training and Education	Talent cultivation empowers the growth of the enterprise. Therefore, a complete learning roadmap and systematic career development are established to maintain the learning motivation of employees and fuel the company's momentum for competition	4.4 Talent cultivation and compensation system	P.99
	Talent Attraction and Retention	GRI 401 Employment	Increasing employees' recognition of Apacer with goals for talents attraction and retention to support the long-term growth of the company	4.3 Employee Benefits and Communication	P.88
	Customer Relationship Management	GRI 416 Customer Health and Safety	The core value of Apacer's brand is to "Deliver on our promises, strive for constant improvement, advance with our partners," which is extended as the core value of the company, "Being better partners," to provide products and services that satisfy all customer's needs	3.2 Customer Relationship Management	P.70

## Variations in Material Issues

Material issues	2021 Importance	2020 Importance	Rank	Reasons for change	Page Number
Environmental Compliance	Issues of high materiality	Issues of low materiality	Ascend ↑	This issue was a low-level issue in 2020, showing that stakeholders' level of concern for related environmental laws and regulations and the issue of "Environmental Compliance" has raised	P.47
Occupational Health and Safety	Issues of high materiality	Issues of moderate materiality	Ascend ↑	This issue was an issue of moderate materiality in 2020, showing that stakeholders focus more on the issue of "Occupational Health and Safety"	P.83
Raw Material Management	Issues of moderate materiality	Low-level issues	Ascend ↑	Raw material management is a key issue for SASB and MSCI, and it also indicates that Apacer's raw material management is an important issue of concern for stakeholders	P.58
Operational Risk Management	Issues of moderate materiality	Low-level issues	Ascend ↑	In response to COVID-19, the impact of climate change, and ESG issues, the enterprises shall manage operational risks to enhance their response abilities	P.49
Sustainability Management of Supply Chain	Issues of low materiality	Issues of moderate materiality	Descent ↓		P.63
Energy Management	Low-level issues	Tracked issues	Descent ↓		P.52
Employee Welfare	Issues of moderate materiality	Issues of high materiality	Descent ↓	Compared with the previous year, stakeholders have less concern for this issue, however, it remains an issue of importance for the enterprise, and will be continuously tracked	P.88
Customer Relationship Management	Issues of moderate materiality	Issues of high materiality	Descent ↓		P.69
Customer Health and Safety	Low-level issues	Tracked issues	Descent ↓		
Communication and Giving Back to Local Communities	Tracked issues	Issues of moderate materiality	Descent ↓	In response to COVID-19, the volunteer activities were suspended in 2021. In the future, actions for giving back to the communities will be reorganized to expand the local influence of the company	P.111



## Boundaries of Material Issues

After Identifying all material issues through materiality analysis and collecting data through referencing GRI topics to describe how Apacer manages economic, environmental, and social impacts related to the material issues. We define the internal and external boundaries of information to ensure the transparency and integrity of information disclosure.

Note: The organization's level of involvement level in Material issues is indicated by different symbols. ▲ Represents direct impact; ● Represents elements of impact; ■ Represents impact through business relationships.

Category	Material issues	Value chain					Relevant Stakeholder	Responding Chapter
		R&D and improvement	Raw material purchase	Manufacturing production	Product sales	After-sale service		
Economic	Corporate Governance	●	●	●	●	●	-Shareholders /Investors -Suppliers	1.2 Ethical Management and Corporate Governance
	R&D Innovation	▲		▲	▲	▲	-Employees -Customers -Media	1.4 Innovative R&D
	Economic Performance	●	●	▲	▲		-Shareholders /Investors -Customers -Employees	1.3 Diversified Products and Operational Performance
	Operational Risk Management	●	●	●	●	●	-Shareholders /Investors -Employees -Suppliers	1.2 Ethical Management and Corporate Governance
Environmental	Environmental Compliance		▲	▲	▲		-Suppliers -Employees -Customers	2.1 Commitment to the Environment and Compliance with Laws and Regulations
	Green Products Design	▲	■	▲	■		-Employees -Suppliers	2.4 Green products
	Hazardous Substance Management		■	▲			-Employees -Customers -Suppliers	3.1 Sustainable Supplier Management
	Raw Material Management		●	●	●		-Shareholders / Investors -Suppliers -Employees	2.4 Green Products
Social	Employee Welfare	●	●	●	●	●	-Employees	4.3 Employee Welfares and Communications
	Occupational Health and Safety			▲			-Employees	4.2 Employee Safety and Health
	Customer Relationship Management	■			■	■	-Customers	3.2 Customer Relationship Management
	Talent Cultivation	▲	▲	▲	▲	▲	-Employees -Media	4.4 Talent Cultivation and Remuneration system
	Talent Attraction and Retention	▲		▲	▲	▲	-Employees -Media	4.3 Employee Welfares and Communications

# Apacer's Covid-19 Contingency Plan for Pandemic Prevention

In 2021, Apacer's Contingency Plan for Pandemic Prevention was revised in response to the covid-19 pandemic, which was further announced to all global subsidiaries for synchronous compliance. While the pandemic broke out again in 2021, Apacer cooperated with the government policies and made timely adjustment measures to mitigate the impact on its operation. It is hereby explained as follows:

## ■ Apacer's operation headquarters

### Continuous implementation

Body temperature measurement, travel history management, office space management, and other measures were continued to be implemented. Employees in overseas subsidiaries shall work at home following local government regulations and pandemic prevention policies.

### For employees diagnosed with Covid-19

After the contact tracing, related employees shall perform rapid test and self-quarantine at home (with paid quarantine leave), and their work area shall be shut down and fully disinfected.

### Post-pandemic recovery

After the government adjusted the pandemic prevention regulations, Apacer's headquarters adjusted the pandemic prevention policies and advocated them depending on circumstances, and overseas subsidiaries shall comply with regulations from their local governments.

## ■ Supply chain end

- Nearly 80% of Apacer's suppliers are located in Taiwan. With the experience of 2020, the material backup and multiple-site supply chain have already been activated early to reduce geographical risks and enhance the flexibility of the supply chain.

- Evaluation to confirm whether to adjust the capacity of outsourcers and opportunities to collaboratively manufacture in response to a possible escalation of regional pandemic alert.

- The second supplier database has already been established in advance to reduce the risk of uncontrollable factors.

## ■ Customer end

Due to the confirmed cases among employees in May 2021, Apacer took the initiative to issue an official statement at once, and provided the customers a statement in multiple language versions to reassure them that the delivery date of the shipment will not be affected.

Reference News: An Employee of Apacer Confirmed to be Covid Positive, the Headquarters is Fully Disinfected and Contacted Employees are Provided with Paid Quarantine Leave.

News source: <https://news.cnyes.com/news/id/4648437>

## ■ Community pandemic prevention policies

Cooperating with the policies of Yong-Ning Science Park where the Apacer headquarters is located, Apacer strictly controlled visitors' and employees' access. According to the pandemic alert level, the guest and visitor numbers are reduced, and the available areas are restricted, etc. Once the alert level is above 3, all visitors would be prohibited.

## Chapter I

# A Better Partner for Navigating Innovation

### Vision

Apacer considers "Pioneering the technicalized information services integration with digital storage as the core" as its corporate vision to create a rapid, stable, and reliable intelligent storage application environment, aspiring to become a trust-worthy integrator of value-added services and provide premium product/service experience.

### Policies and Commitments

Apacer deems "Access the best" as the brand commitment, continuing with innovative R&D, branching out into diversified product fields, positioning itself as a technicalized information service integrator, and planning a roadmap for future development. We promise, that as Apacer continues to pursue growth and breakthrough, honest management shall remain as the company's cornerstone, with sustainable development as the core goal of all business operations, creating value for stakeholders persistently.

### Contribution to the United Nations Sustainable Development Goals (SDGs)



## Issues in this Chapter

### Material issues : Corporate Governance

#### Manage method

Responsibility	-Board of Directors -Sustainable Development Committee - Corporate Governance Group
Resources	- Human resources: The Chief Financial Officer is appointed as the person in charge, with 5 members from the Finance & Risk Management Office, Audit Office, and Human Resources & Administration Management Dept.
Communication Approach	-Report the annual corporate governance planning and condition of execution at the Sustainable Development Committee meetings every quarter -Regularly report to the Board of Directors on the education and training status of enterprise ethical management and whether there are any reported cases each year

#### Sustainability goals

Short-term goals (2022)	Maintain being ranked in the top 6%-20% by the Corporate Governance Evaluation
Mid-term goals (2022~2024)	Take the corporate governance 3.0 roadmap as the template, improving the corporate risk management and control, enhancing the transparency of corporate information to maintain the corporate governance appraisal of 6%-20%
Long-term goals (2025)	Apart from maintaining a corporate governance appraisal of 6%-20%, the corporate governance performance shall be strengthened continuously, and corporate governance system shall be self-inspect regularly, also improve information transparency and protect the rights and interests of shareholders and stakeholders

#### Achievements and performances in 2021

Achieved goals :	-The 2021 Corporate Governance Evaluation resulted in the top 6%~20% rank -Material information was disclosed accurately and completely in both Chinese and English on the company's official website and MOPS, as regular reports on the communication with stakeholders were delivered to the Board of Directors -Corporate governance continued to be strengthened, with perfect related corporate governance regulations being stipulated to further improve the completeness of corporate governance indices.
------------------	--

#### Contribution to the United Nations Sustainable Development Goals (SDGs)

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

### Responding material topics GRI 205 Anti-Corruption / 102-18~102-39(2016): Governance

#### Actual action

- Establish an internal audit and reporting system
- Protect shareholders' rights and interests, treating shareholders equally
- Strengthen the functions of the Board of Directors and enhance the sustainable value of the enterprise
- Increase information transparency and promote the sustainable operation
- Deepen the culture of sustainable corporate governance and provide diversified goods
- Put enterprise social responsibility into practice and enhance the sustainable operation of the enterprise

#### Appraisal method

- Through the internal company annual questionnaire for self-appraisal and the external SFI (Securities and Futures Institute) annual Corporate Governance Evaluation

## Issues in this Chapter

Material issues : Operational risk management		Responding material topics Industrial issues
Manage method		Actual action
Responsibility	<ul style="list-style-type: none"> <li>-Risk management is the responsibility of all employees Each employee should have risk aware-ness and implement procedures for risk identification, measure-ment, and control concerning their related work scope.</li> <li>-The Board of Directors is the highest decision unit of the company's risk management, and is responsible for approving the related measures of risk management policies, supervising the implementation of the system, and ensuring the effective operation of the management mechanism.</li> <li>-The Sustainable Development Committee is the unit that executes and manages risk management policies, and is responsible for promoting the operation of risk management, formulating and implementing the policies and related measures approved by the Board of Directors, supervising the overall implementation and coordination of the operation, and presenting to the Board of Directors at least once a year focusing on the discrimination and analysis,prevention and monitoring of overall risks or material risk control issues.</li> <li>-The Risk Management Team is subordinate to the Sustain-able Development Committee and is in charge of the implementation of risk management operations. It includes the basic risk identification of the company's various operational aspects, submitting improvement and responding strategies and control plans, and executing daily risk management operations.</li> <li>-The head of each unit of the Risk Management Team is responsible for the risk management operation, and is in charge of analyzing and monitoring the related risks within the subordinate unit, ensuring that the risk control mechanism and procedures can be implemented effectively.</li> </ul>	<ul style="list-style-type: none"> <li>-The company formulated the company's "Risk Management Policies and Procedures" on August 4, 2021, and they were revised on October 31, 2021.</li> <li>-Under the "Risk Management Policies and Procedures," the "Corporate Social Responsibility Committee" originally established by the company was reorganized into the Sustainable Development Committee in October 2021, and a "Risk Management Team" was set up under it to perform risk management related matters.</li> <li>-On December 16, 2021, the current "Risk Management Team" of the "Sustainable Development Committee" has reported to the Board of Directors on the material risk issues and related countermeasures for risk identification, appraisal, and measurement.</li> </ul>
Resources	The manpower and budget shall be prepared by related units respectively according to the risk category, and shall be carried out according to the risk level	
Communication Approach	Related units shall communicate respectively according to the risk category in individual ways, such as internal meetings, internal networks, etc.	
Sustainability goals		Appraisal method
Short-term goals (2022)	Establish an operational risk management organization and effectively operate it to ensure that all risks affecting operations can be continuously identified and effective countermeasures can be put forward to reduce risks	
Mid-term goals (2022~2024)	<ul style="list-style-type: none"> <li>-Ensure normal daily operation, while it is expected that the risk items related to operation can be effectively controlled within the allowable range.</li> <li>-Add the issues and countermeasures of climate change risk management step by step to make the risk management structure more perfect.</li> </ul>	
Long-term goals (2025)	Set the three aspects of ESG as the management scope, enhance the competitiveness of enterprises, ensure the long-term and sustainable operation of enterprises, and create an integrated service ecosystem	
Achievements and performances in 2021		
Identify 16 risks for control and report to the Board of Directors in Q4		
Contribution to the United Nations Sustainable Development Goals (SDGs)		
8 Decent Work and Economic Growth, 13 Climate Action, 16 Peace, justice and Strong Institutions		

## Issues in this Chapter

Material issues : R&D innovation		Responding material topics GRI 201 Economic performance
<b>Manage method</b>		<b>Actual action</b>
Responsibility	RD & Technical Center	-Provide R&D and customized services
Resources	-Manpower: 75 members of the center -Budget: Prepared and reviewed according to R&D needs -Technology: R&D and innovation of products, patents, and technologies shall be conducted	-Professional software, hardware, firmware, industrial design, mechanism designing team -Set up five material patent themes with regular inspections of the progress -Explicitly establish related incentive measures to encourage the commercialization of patents
Communication Approach	A Patent Development Committee and a Patent Review Team are established to conduct internal invention patent prosecution and business opportunity planning	
<b>Sustainability goals</b>		<b>Appraisal method</b>
Short-term goals (2022)	Research and develop innovative products, cultivate technological development, accumulate patent quantity and expand innovation depth	The number of licensed patents in Taiwan, China, and the United States
Mid-term goals (2022~2024)	Utilize R&D and innovative technologies for actual business benefits	
Long-term goals (2025)	Spur the growth of R&D momentum and maintain the sustainable operation of the enterprise	
<b>Achievements and performances in 2021</b>		
Product development :	-Patented SSD heat dissipating device: Easy-Installation Heat dissipation M.2 SSD has obtained a patent for achieving a cooling effect of 25%. -The spectrophotometer AL250 with an elastic replaceable light receiving port, has obtained a patent for the can replaceable light receiving port module which enables the measurement of different luminous ranges. -Vulcanization-resistant SSD: It has passed the top ANSI/ISA 71.04 G3 air corrosion accreditation of the industry. This product is the best choice for indoor and outdoor monitoring, 5G cell sites, petrochemical and mineral worksites, high-speed networking servers, and edge computing applications, remaining resistant to any highly polluted environments. -Touch conductor vocabulary machine: The iKeepP intelligent vocabulary machine was launched with the patented touch pad conductor bridge button. The total number of new patents in 2021 is 244 (including the approved and the ones under application)	
<b>Contribution to the United Nations Sustainable Development Goals (SDGs)</b>		
8 Decent Work and Economic Growth		

## Issues in this Chapter

Material issues : Economic performance

Responding material topics  
GRI 201 Economic performance

### Manage method

Responsibility Formulate the operation plan, strive to achieve the operation goals, and established the sustainable operation of the enterprise

Resources The management team with abundant practical experience and professional background

### Sustainability goals

Short-term goals (2022) Develop the three major business momentum and promote the operating efficiency

Mid-term goals (2022~2024) Become the leading brand providing integrated service and innovative value

Long-term goals (2025) Become the leading brand in the integrated value ecosystem

### Appraisal method

Financial performance according to items of the annual financial report

### Achievements and performances in 2021

The consolidated operating revenue of the company in 2021 was NT\$8,682,393,000, an increase of 26% compare to the previous year; with the after-tax net profit being NT\$485, 781,000, an increase of 67% compared the previous year. Concerning operation management, management efficiency has been improved continuously with the timely implementation of the latest technology, to meet the rapidly growing market demand.

Project	Financial performance in the past two years (Unit: NT\$ 1000)	
	2021	2020
Operating revenue	8,682,393	7,152,222
Operating costs	7,229,509	6,026,320
Operating gross profits	1,452,884	1,125,902
Operating Expenses	879,824	780,483
Net profit before-tax	577,273	370,669
Income tax expense	91,492	80,209
Consolidated net profit after-tax	485,781	290,460

Project	Profitability in the past two years	
	2021	2020
Gross profit margin (%)	16.73	15.74
Profit margin(%)	5.60	4.06
Return on assets (%)	10.94	7.03
Return on equity (%)	16.46	10.34
Basic earnings per share(NT\$)	4.81	2.88

### Contribution to the United Nations Sustainable Development Goals (SDGs)

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

# 1.1 About Apacer

Founded in 1997, Apacer was listed on the Taiwan Stock Exchange in 2010 (Stock Code: 8271). The business scope of the company is mainly focused on industrial control memory modules, along with consumer memory products, E-sports memory products, and E-sports peripheral products;

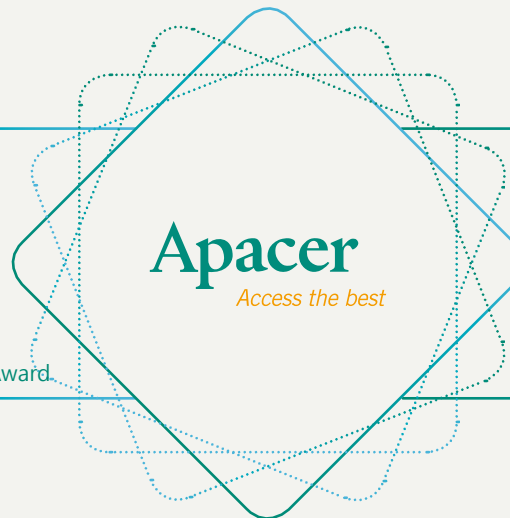
In response to the smart IOT integration trend, the Smart Application Division was established to provide IOT integration solutions and optical detection products.



Won the 30th Taiwan Excellence Award and was recognized with the Silver Award



The 2020 Sustainability Report won the Gold Award of TCSA Taiwan Sustainability Report Award.



Won the nomination of the "Best Taiwan Global Brands" for 4 years continuously



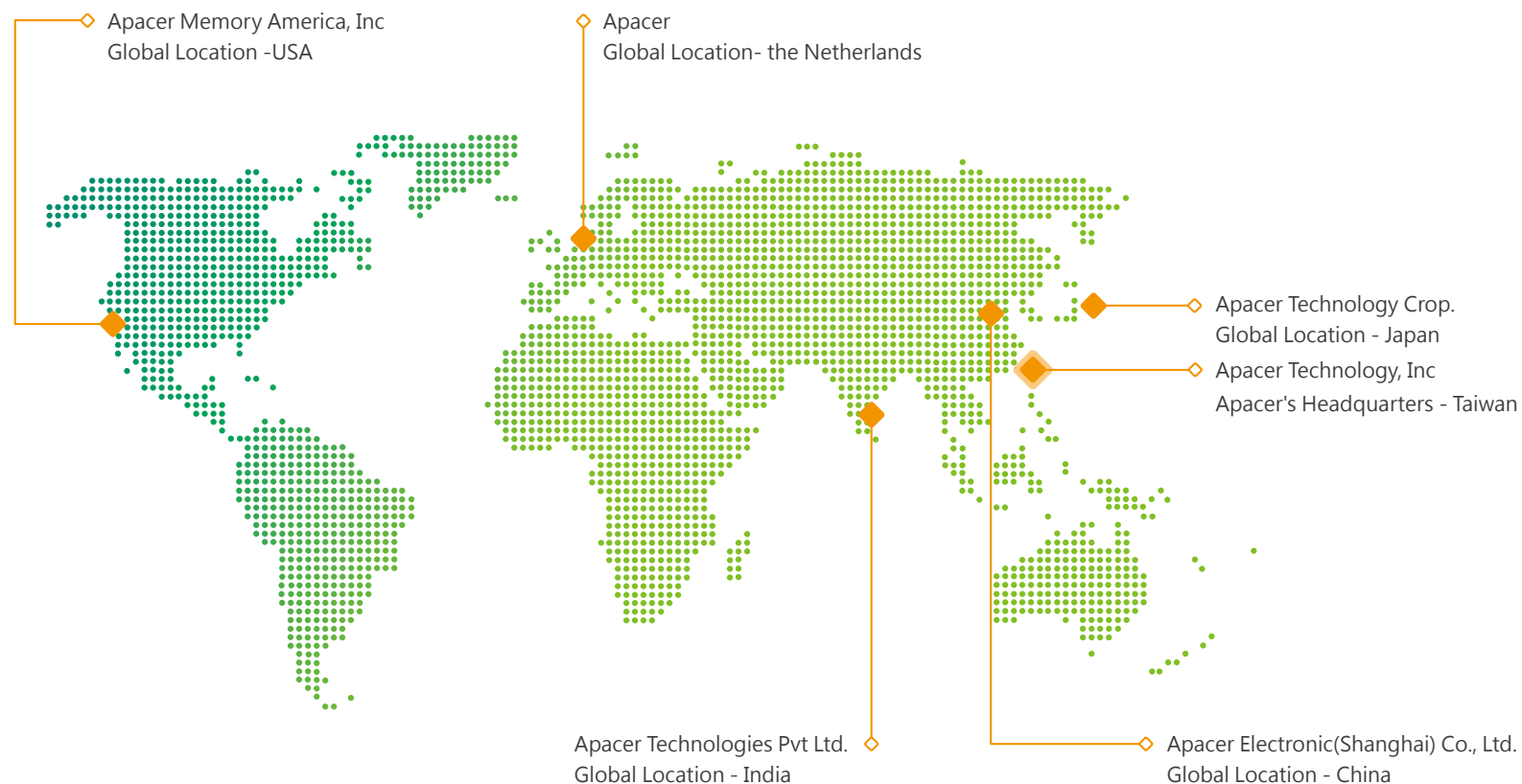
Ranked 9th in global DRAM module plant revenue



More information about the award records <https://www.apacer.com/zh/Company/Award>



Apacer possesses the abilities to integrate R&D, design, manufacturing, and marketing. Apacer's global operation headquarters is located in New Taipei City, Taiwan, and has subsidiaries in China, the United States, the Netherlands, Japan, and India. Its business scope covers global demands, while its customer types include major international dealers, equipment manufacturers, system integrators, and retail customers.



Company Name	Apacer Technology, Inc.	Main Products	-Industrial solid-state drive (SSD)	-Flash disk/External hard drive
Company Address	1F., No.32, Zhongcheng Rd., Tucheng Dist., New Taipei City 236		-Memory modules	-Smart application solutions
Date of Establishment	April 16, 1997		-Consumer digital products	-Optical inspection applications
Listing Information	Taiwan Stock Exchange, Stock Code: 8271	Total Employees <sup>1</sup>	536	
Capitals	NT\$ 1.008 billion			

Note 1: Data taken from global operational locations as of December 31, 2021

## Brand spirit

Apacer's development vision is "Pioneering the technicalized information services integration with digital storage as the core." With the lean digital storage technology and the brand commitment to "Access the best," Apacer provides high-quality products and services for customers. The core value of the brand, "Deliver on our promises, Strive for constant improvement, Advance with our partners," has been ingrained as the cornerstone of the corporate culture through the three concepts combined as "Becoming Better Partners", which is our core momentum for sustainable operation implementation.

To allow employees to familiarize themselves with the importance of "Becoming Better Partners" and practice the concepts in their daily work, we constantly emphasize the idea through activities, decorations in public areas, and announcements to the public. We hope that through the systematic method of conveying such messages, our employees will be inspired to practice and convey the concept of "Becoming Better Partners" for our customers and partners.

### Brand commitment

**Apacer**  
Access the best

### Brand core value

**做好伴**  
Becoming Better Partners

2021 Supplier Conference



Apacer  
Thank You  
Day

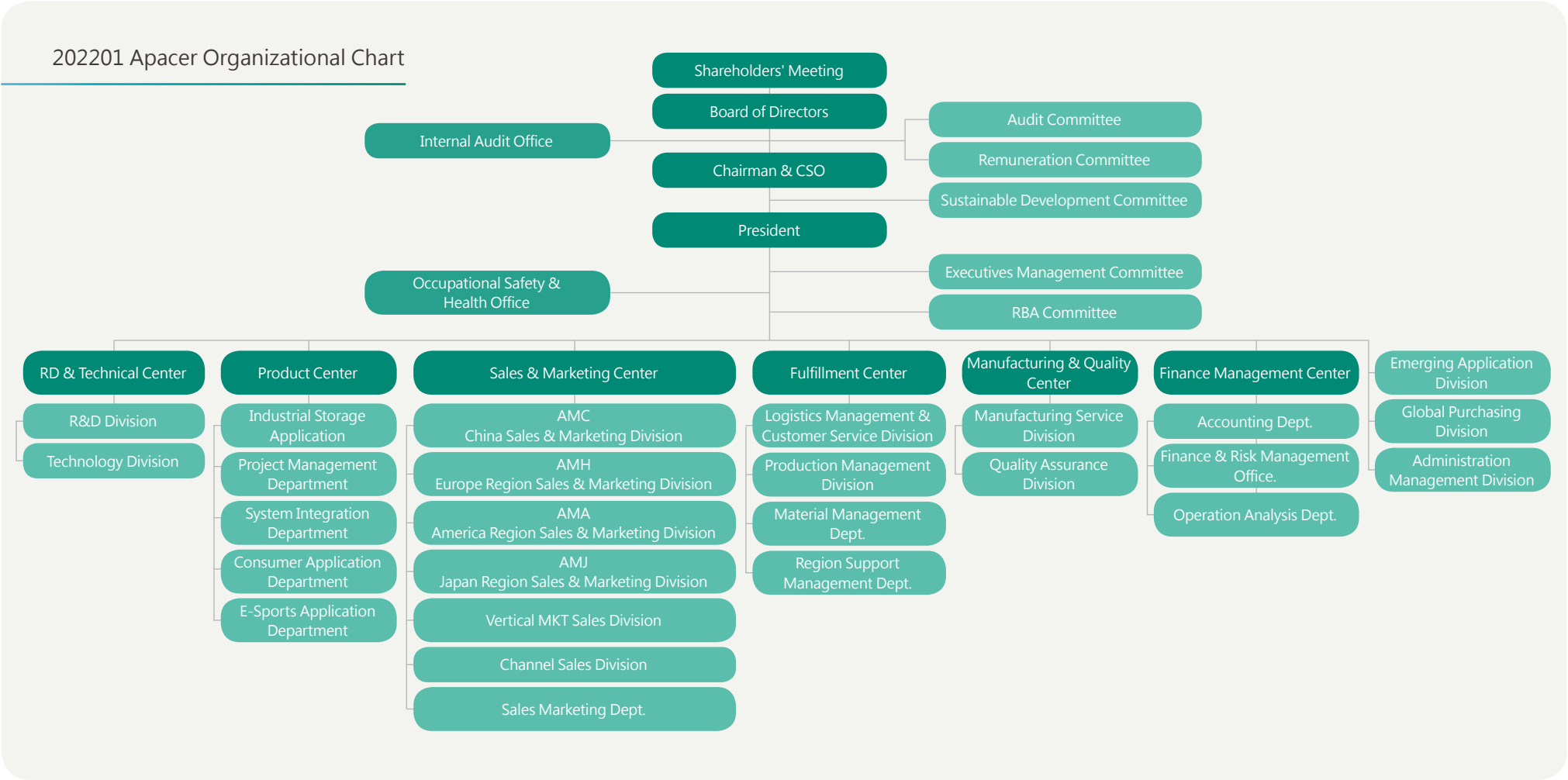
The "Becoming Better Partners" exhibition in the company Hall



Apacer  
Thank You  
Day

■ Corporate organization and culture: Creating a friendly and healthy workplace that is people-oriented

To tackle the era of speed economy, Apacer has been implementing multiple business innovation modes, utilizing the comprehensive effect of the operation to pursue the performance growth of the company. Currently, 6 functional centers, 3 new business/support divisions, and 1 marketing office has been established under the president.



## ■ Apacer considers "Apacer" brand as the focus of development

Brands owned by Apacer provide up to 90% of the total revenue of the company. Over the past 25 years since its foundation, Apacer has accumulated abundant experience in the digital storage field and provided innovative products with solid R&D capabilities. To expand diversification and lay out a long-term business roadmap, Apacer offers not only consumer digital storage products, but also products for E-sports. Meanwhile, we continue to cultivate the vertical application market. For smart IOT, Apacer has always been focusing on the future technology trend. Therefore, related business divisions were already established early in 2017 to deploy the long-term plan for sustainable innovation.



**Vertical market application**  
Secure the pioneering position in the industrial control field with leading technology and highly customized software, hardware, and firmware integration services



**Consumer product applications**  
Acquire insight into the consumption trends, provide the best user experience, and fully fulfill the demands emerging from life and entertainment



**Smart IOT application**  
Utilize the business model of offering comprehensive solutions and provide AIoT planning and construction service



**Highend e-sports applications**  
Utilize the low energy consumption and high-performance luminous storage products to create choices of personality for e-sports players

### Material Issues 1.2

# Ethical Management and Corporate Governance

## Strengthening corporate governance

In response to the core values of Apacer's corporate governance, the company's performance in the Corporate Governance Evaluation has continued to improve in recent years. From the top 36~50% in the 2016 Corporate Governance Evaluation, to the top 21~35% in the 2017 Corporate Governance Evaluation, Apacer has reached the top 5% for two consecutive years. In the 2020 Corporate Governance Evaluation, Apacer's performance decreased slightly and reached the top 6%-20%.

### Apacer's corporate governance improved items in 2021:

1

Organize training on money laundering prevention, creating a transparent and orderly trade environment

2

Continue to accurately and timely disclose major information in Chinese and English on the company's official website and MOPS to improve information transparency

3

Continue to combine ethical management into the company's business strategy

## Corporate Governance Structure

### Board of Directors

#### Election and Nomination

Apacer's Board of Directors adopts a candidate nomination system, with elections held by the shareholders' meeting for selecting from the list of candidates, and each term of office is 3 years. The Board of Directors is composed of nine directors with abundant experience in various professional fields, and three independent director seats (accounting for 33.33%) are determined, which is more than the requirements of the regulations, with one independent director seat being exclusive to female.

#### Functions of the Board of Directors

Apart from supervising the company's operation and providing business suggestions, the Board of Directors also discusses issues related to operational sustainability, where the decisions were passed down to the Sustainable Development Committee Secretariat for execution.

#### Diversified Backgrounds

The members of the Board of Directors have different professional backgrounds, such as operation and management, accounting and finance, engineering science and technology, etc. Based on the different professional backgrounds, such as accounting and financial analysis, business and management, venture capital, engineering technology, as well as leadership and decision-making, complementary results are achieved with diversity. The directors' professional background and industrial experience shall enable the company to accurately implement its operation and future development strategies.

#### Principle of Interest Avoidance

7 meetings were held by the Board of Directors in 2021, with an average attendance ratio of 95%. Apacer values the transparency, professionalism, and efficiency of the Board of Directors to strengthen the performance of corporate governance. The Board of Directors supervises the company's material decisions based on the international situation, market observation, and financial appraisal, while protecting the shareholders' rights and interests, improving operation performance, ensuring proper function of independent directors, strengthening risk management, and implementing information transparency with their professional knowledge. All actions were taken under the principle of interest avoidance, effectively safeguarding the interests of all stakeholders of the company.

Title	Name	Gender	Professional Background	Industry Experience					Actual Attendances	Actual Attendance ratio(%)
				Accounting and Financial Analysis	Business and Management	Venture Capital	Engineering Technology	Leadership and Decision-Making Ability		
Chairman	Austin Chen	Male	Management		V		V	V	7	100%
Director	Li-Da Lu	Male	Management, Engineering		V	V	V	V	6	86%
Director	Chia-Kun 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	7	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	Jing-Shih Han	Female	Finance	V	V		V	V	4	100%
Independent Director	Hui-Chuan Hsieh(Note)	Female	Finance	V	V		V	V	2	67%

Note:

1. Stepped down during the re-election of the general meeting of shareholders on July 14, 2021.

2. For the concurrent positions of related board members, please refer to the annual report, which can be downloaded at <https://www.Apacer.com/zh/Investor/Financial>

## ● Functional Committee

### Remuneration Committee

Establishment / August 2011

**Function /** The main responsibilities of the Remuneration Committee are to faithfully perform the following functions and powers with the great prudence of fiduciary, and submit the suggestions to the Board of Directors for discussion:

- To formulate and regularly review the organizational procedures of the Remuneration Committee and propose amendments.
- To formulate and regularly review the annual and long-term performance goals of directors and managers, as well as the policies, systems, standards, and structures of remuneration.
- Regularly evaluate the achievement of performance goals of directors and managers, and determine the content and amount of their remuneration respectively.

Attendance ratio for committee meetings /

Title	Name	Actual attendances	Attendance ratio(%)
Convener	Kuang-Yi Wu	3	100%
Member	Chin-Pin Peng	3	100%
Member	Jing-Shih Han	2	100%
Member	Hui-Chuan Hsieh(Note)	1	100%

### Audit Committee

Establishment time / May 2018

**Function /** Review and supervise the following issues

- Fair presentation of the company's financial statements
- Appointment (dismissal) and remuneration of certified accountants
- Independence of certified accountants
- Effective implementation of the company's internal control
- Compliance with related laws and regulations and controls of existing or potential risks of the company

Attendance at committee meetings /

Title	Name	Actual attendance	Attendance ratio(%)
Convenor	Kuang-Yi Wu	4	100%
Member	Chin-Pin Peng	4	100%
Member	Jing-Shih Han	2	100%
Member	Hui-Chuan Hsieh(Note)	2	100%

Note 1: Stepped down during the re-election on July 14, 2021. Note 2: Attendance ratio = Actual attendance times / Holding times

## ● The cornerstone of enterprise sustainability – ethical management

### Apacer Ethical management policies

Implement ethical management, prohibit unjust enrichment, openness and transparent information, respect intellectual property rights, fair trade competition, and identity confidentiality and anti-retaliation



Apacer takes compliance with laws and regulations as the basic premise of ethical management, and its global operation sites all comply with the laws and regulations of the region. To ensure the compliance with laws and regulations and the implementation of interest avoidance, the Board of Directors has formulated the ethical management policies, the "Ethical Management Code", the "Ethical Management Procedures and Conduct Guidelines," and other related approaches, strictly requiring employees to avoid personal interest conflicts or possible involvement in the interests conflict of the whole company, with the operation status of the ethical management being reported to the Board of Directors annually. Meanwhile, the company appointed the Human

Resources and Administration Dept. to concurrently serve as the responsible unit for ethical management, and properly evaluate the effectiveness and reasonableness of the compliance with the internal control system.

To actively prevent the dishonest behavior of enterprise operations, a reporting system has been established in Apacer for reporting the violations of the company's finance, regulations, policies, moral standards, etc., as well as any form of fraud.

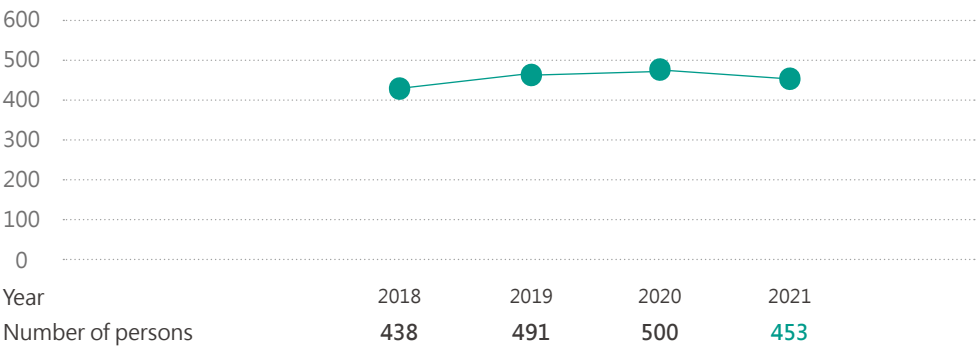
## ■ Related standards for ethical management

### Ethical management education and training

The code of conduct related to ethical management is also released on the enterprise intranet to be promoted and advocated toward employees. In 2021, the annual ethical management education training was held, covering issues related to Responsible Business Alliance(RBA), such as labor, health and safety, environmental health, ethics, and management system, with a total of 453 hours of session participants recorded, and the employee training rate reaching 100%.

The implementation results in recent years are as follows /

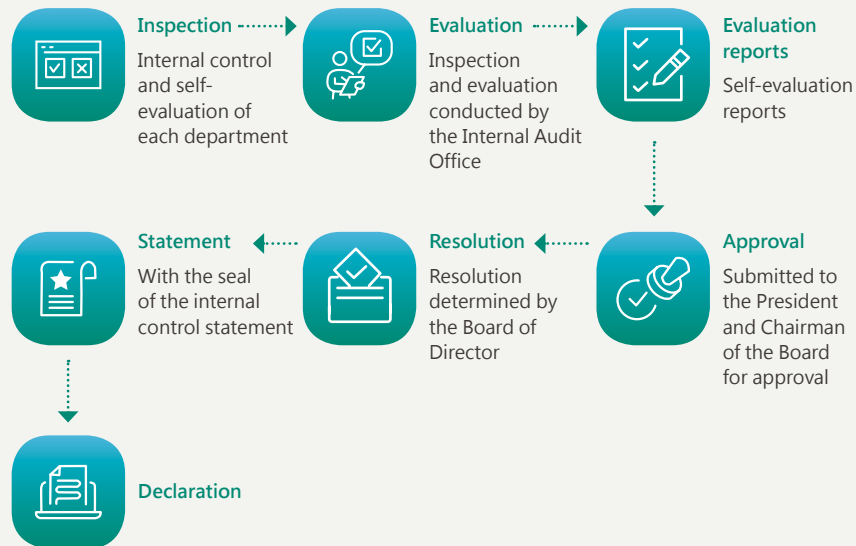
The number of employees trained for ethical management



In addition, Apacer also values ethical interaction with the customers, suppliers, contractors, and other business partners. Apacer publicizes the company's ethical management philosophy and anti-corruption policies to suppliers and contractors through approaches such as holding annual supplier conferences, supplier audits, etc. By taking signed RBA commitment letters as evidence, Apacer has communicated with 249 companies over the years, with 158 finally signed, accounting for 63% of the total.

## Internal audit

Apacer established an internal audit system under laws and regulations, and an Internal Audit Office subordinate to the Board of Directors was established with two designated personnel to perform internal audit operations. The internal auditors formulate an annual audit plan (including self-evaluation) according to the risk evaluation results and regulations, to perform constant audits on the risk items through the implementation of the audit plan and self-inspections, while the results will be regularly submitted to the Audit Committee and the Board of Directors. Apacer conducts internal control through 7 procedures to comply with provisions of laws and strengthen internal risk control:



Note: Internal audit organization and operation: [Click here to learn more.](#)

## Reporting system

Apacer puts heavy emphasis on the prevention of any events of corruption, fraud, and violation of the company's ethical management. For this reason, the rules and procedures of the "Reporting System" have been formulated. When suspicious behaviors are found, any improper practices can be reported through the exclusive channels, and will be processed by the designated personnel for investigation and resolution.

The company will ensure the informant's identity and reported contents to remain confidential, and protect the whistleblower and employees involved in the investigation from retaliation or unfair treatment. The contact personnel for reports and complaints is the "Reporting Committee". During 2021, the disclosure period of this report, no related events occurred.

### Contact information for reporting violations of professional ethics



- Reporting contact window / Ms. Hsu
- Reporting hotline / (02)2267-8000#5980
- Reporting e-mail / [whistleblower@apacer.com](mailto:whistleblower@apacer.com)
- Reporting address / 6F., No. 32, Zhongcheng Rd., Tucheng Dist., New Taipei City 236, to the Reporting Committee

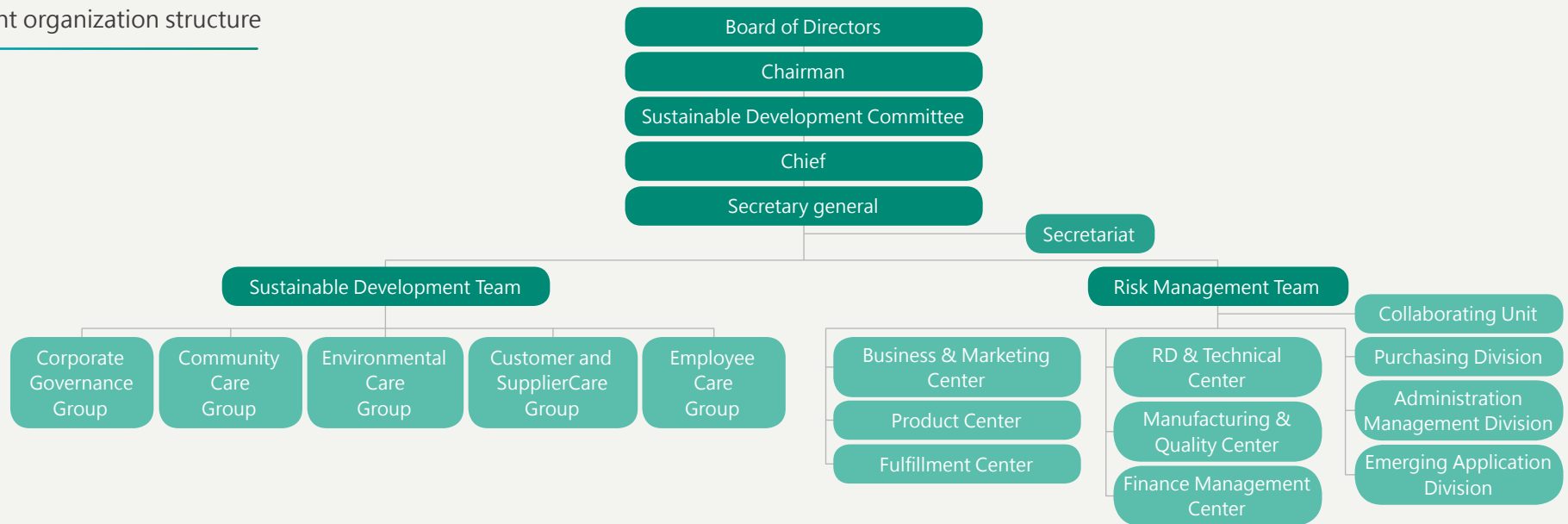
Note: Reporting system: [Click me for details](#)



## Material Issue Organizational risk management approach

To promote the intact operation of the company and the sustainable development of the enterprise, Apacer has stipulated the "Risk Management Policies and Procedures" to cautiously inspect all possibilities of potential internal and external risks from the perspective of the enterprise's sustainable operation, implement the risk management mechanism, and enhance the effectiveness of collaborated risk management, ensuring reasonable certainty in the achievement of the company's strategic goals.

### Risk management organization structure



#### Board of Directors :

The Board of Directors is the highest decision unit of the company's risk management, which is in charge of approving the risk management policies and related measures, supervising the implementation of the system, and ensuring the effectiveness of the management mechanism.

#### Sustainable Development Committee :

The Sustainable Development Committee of the company is led by the chairman of the Board of Directors. The Sustainable Development Committee is the implementation and management unit of the risk management policies, which is responsible for promoting the company's risk management operations.

- Formulate risk management policies and related measures.
- Implement the risk management policies approved by the Board of Directors.
- Review issues related to the company's risk control.
- Supervise the overall implementation and cross-department coordination.
- Focused analysis, prevention, and monitoring of the overall risks or material risk control issues.
- Report to the Board of Directors at least once a year.

#### Risk Management Team :

The team is subordinate to the Sustainable Development Committee and consists of the designated contact persons appointed by the company's centers and direct subordinate divisions, and is responsible for the implementation of risk management operations. The team's responsibilities include the basic risk identification of the company's various operational aspects, the proposal of improvement or response strategies and control plans, and the execution of daily risk management operations.

## CSR/ESG training for mid and high-level executives

Apacer believes that the employee's faith in sustainability is an important indicator for the successful implementation of ESG, this is why a solid foundation must start from the basics. Apacer started hosting CSR/ESG courses in 2020, which were first attended by mid and high-level executives, allowing the concepts to be extended to the general employees. In 2021, in response to reorganizing the CSR Committee into the Sustainable Development Committee, the topic of the course was adjusted to ESG introduction, and the attending mid and high-level executives were invited for discussion. As a result, a total of 29 feasible ESG projects for Apacer were proposed, and their feasibility will be further discussed at the ESG quarterly review meeting in 2022. If determined as enforceable, the plan will be implemented at once in 2022.

Mid and high-level executives participated in ESG courses



## Risk management scope

The company carries out risk management based on the following risk category:

Members of the Risk Management Team shall identify, measure, and respond to the risk items observed by the internal and external units of the company, and perform subsequent improvement and tracking operations for the identified risk items, to effectively control the risk within the acceptable range.

ESG Type	Risk category	Definition
G	Operational risks	Also called business risks, it is related to the impact of uncertain factors on links such as supply, production, and sales in the production and operation process of an enterprise.
G	Market risks	Market risks can be divided into interest rate risk, exchange rate risk, stock price risk, raw material price risk, etc.
E、S	Environment, safety, and health risks	Risks of occupational injuries/environmental pollution/public health events (such as the pandemic).
G	Financial risks	Risks related to the enterprise failing to pay the interest or principal of debt financing in due course, causing the risk of bankruptcy. It is also known as the default risk.
S	Human resources risks	Labor-related risks in various aspects, including recruitment, job analysis, career planning, performance evaluation, remuneration management, welfare/incentive, employee training, employee management, etc.
G	Information security risks	Risks related to the information assets of the company being attacked by internal and external threats, causing failure in operation and resulting in losses.
E、S	Emerging risks	Emerging risks are related to failure in performing risk identification and assessment for new business or new risks, such as the climate change risks.

## Operation contents of risk management

Content	Description
Confirming goals	Each unit shall confirm their respective annual goal
Risk identification	Inspect the risks that cause failure in achieving the goals, categorize and describe the risk sources, then confirm the potential impact
Risk measurement	Establish risk evaluation standards: probability and influence level Establish risk baseline: establish a risk distribution map by marking the probability (axis of abscissa) and influence level (axis of ordinate) of each risk
Risk response	Focusing on extremely severe and confirmed risk issues: acknowledging whether the existing control mechanism is capable of controlling the risk, such as formulating countermeasures to avoid the risk (transfer, accept, exclude, etc.)
Improvement tracking	Continue to track whether the risk can be effectively reduced by the above-mentioned measures.

## Risk identification and measurement

Risk shall be classified according to the materiality principle and the determined risk categories, while members of the Risk Management Team and the high-executive level shall identify and measure the internal risks of the company, as well as compile a risk matrix as the following example.

Extremely high					
High			4.Inventory management		
Moderate				3.Supply chain management	
Low		12.Exchange rate/Interest rate 13.Hazardous substance control	9.Market competition 10.Trade restrictions 11.International tax		1.information security incident
Extremely Low		14.Solvency 15.Money laundering control 16.Responsibilities of director and supervisor		5.Customer credit 6.Business development 7.Intellectual property rights 8.Significant information management	2.Material infectious diseases
Occurrence rate/ Impact level	Extremely slight	Slight	Moderate	Material	Extremely material

## Risk response

Following the materiality principle, the company responds to the four identified items with the highest occurrence rate/extremely material impact in the above table. The response method is as the following "Operation status."

### Operation status

- The "Risk Management Policies and Procedures" was stipulated by the company on August 4, 2021, and was approved by the Board of Directors.
- In October of the same year, the former "Corporate Social Responsibility Committee" was reorganized as the "Sustainable Development Committee", and a "Risk Management Team" was established under the committee to carry out affairs related to risk management.
- The "Risk Management Team" conducted risk identification, measurement, response, and improvement tracking according to the aforementioned risk categories and items of the company's operation, and report to the Board of Directors after summarizing the risk countermeasures.
- The latest report date: 2021/12/16

Table: Risk management summary table

ESG Type	Risk type	Key issues	Problem description / Background statement	Possible impact	Responding method	Responding strategies
G	Information security	Information security incident	Material information security incidents impacted the operations	Causing leakage of the company's secrets, dilution of reputation, and the interruption of the company's daily operation and production	Risk reduction	<ul style="list-style-type: none"> <li>-Simultaneously and constantly optimize the management and technology for information security</li> <li>-Continuously educate and train the IT personnel with information security skills and knowledge</li> <li>-Combine with internal major information SOP system</li> </ul>
E & S	Environment, security, and health	Important diseases	The pandemic spread, causing the production sites to shut down, failing to manufacture	With production sites shutting down and ceasing production, delayed order delivery may occur and impact the operation.	Risk reduction	Inspect the backup and emergency contingency plans of production sites every 6 months.
G	Operations	Supply chain management - raw material shortage	Global raw material shortage, causing insufficient material inventory	Unable to fulfill customers' orders	Risk reduction	Staff in charge of procurement shall actively look for substitute materials and adjust the safety stock level according to the demand. Also, the reporting mechanism for urgent raw materials under shortage was established.
G	Operations	Supply chain management - inventory management	High material inventory with low demand lead to slow turnover	Poor financial performance of the company	Risk reduction	RD/PM shall confirm whether the materials without long-term demand can be transferred into other materials' substitutes to increase compatibility; if no compatibility can be developed, the materials without long-term demand will be resold

## Information Security Risk Management

### Apacer's information security policy

To ensure information security, Apacer has implemented a variety of control measures focusing on information assets, including the classified categories of information security management system, employee information security management, information asset rating management, system development and maintenance, system security management, communication network management, access security control, vulnerability detection management, incident response management, continuous operation management, etc., which are constantly updated in response to new risks and requirements of the information security framework; the continuous circulation of PDCA is performed in the major categories, including

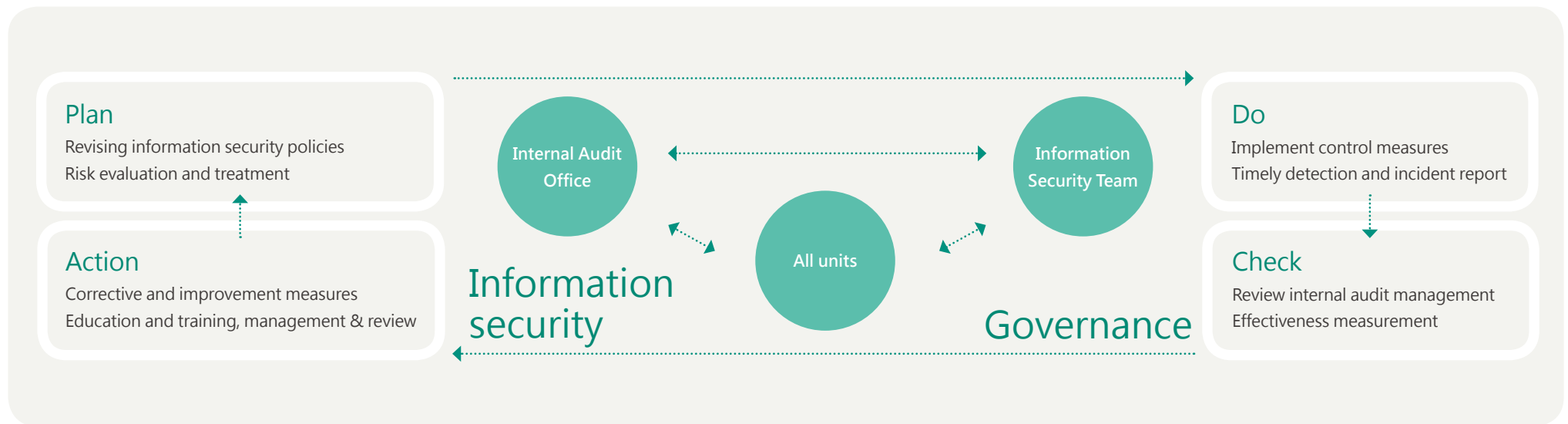
1.Planning stage: Information assets rating and classification, risk evaluation, and risk treatment plan

2.Doing stage: The "defense in depth" model includes physical security implementation, system/device security implementation, account authority management, and asset security monitoring and maintenance

3.Audit stage: Internal audit, information assets sampling audit, and technical defense effectiveness measurement

4.Improvement stage: Corrective and improvement measures, as well as managing review meetings

5.Information security awareness: Announce and advocate, while conducting information security education and training for the new recruits



Through the annual inspection of the security policy, its contents shall be updated along with the evolution of information technology, and further strengthen the information security awareness of employees. By organizing information security training for the new staff, as well as announcements and advocacies, the employees will be reinforced with the correct information and knowledge, achieving the goal of information security.

Information security incidents inventory and related risk evaluation are carried out annually, and there was no major security incident in 2021. In the future, internal information asset risk inventory will be performed based on the latest international and domestic information security incidents, with risk management and control being planned. However, as external information security threats evolve, current measures may not ensure the integrity of information security in the future. The improvement measures implemented by Apacer will help reduce the risk of external threats, but a zero-risk environment is still not guaranteed.

#### Related control measures for information security

##### Information security goals

Ensure that information operations can be performed correctly, completely, and continuously

##### Information security management unit

Information Security Team was established to confirm the effectiveness of the information security management operation

##### Information security control measures

Authority management	Management and review of personnel account
Access control	Personnel access control management, data leakage management, remote access behavior restriction, and external storage device control
External threats	Regular virus scans and malware detections, with Internet firewalls set up
Operation maintenance	Alarm for abnormal system operation under monitoring, regular data backup stored in multiple physical locations, redundancy information facilities in different physical locations, and regular disaster recovery drill
information security advocacy	Training courses for recruits and irregular promotions of information security-related information

## 1.3 Diversified Products and Operational Performance

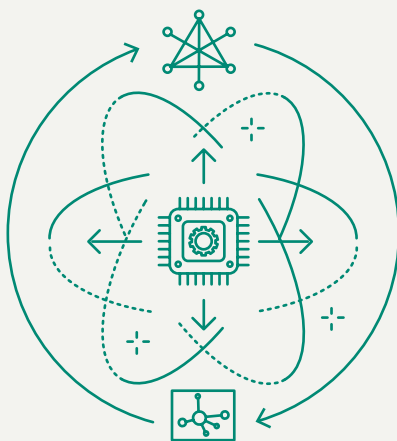
### Material Issue Operational strategy planning

Apacer's business model consists of a memory module plant with parallel product types of industrial control and consuming products. The reason for adopting this parallel model is that the memory industry is sensitive to external impacts, which may lead to sharp price fluctuations. To maintain balance, the prices of industrial control products with fewer price fluctuations and consumer products

with rapid price changes can be adjusted timely and generate stable profits. In addition, direct communications with consumers through consumer products support the accumulation of brand value and create more opportunities, generating positive momentums for the sustainable operation of the enterprise.

### Short-term operational strategy

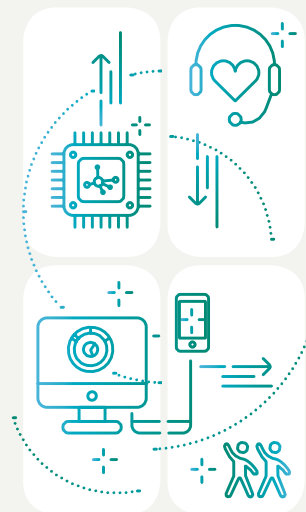
Focus on the core business and develop the smart IoT Market



Apacer continues to focus on the development of its main business - digital storage. By strengthening its core products and R&D technologies, cultivating key markets, while also continuing the market development in the smart IoT application field, Apacer will always stay ahead of market trends, offering further value-added profits to customers and partners, as well as creating better operational performance together.

### Long-term operational strategy

Take "Pioneering the technicalized information services integration, with digital storage as the core," and implement sustainable operation transition



- Continue to invest in ESG for sustainable development and fully take on the corporate social responsibilities
- Actively reinforce R&D momentum and fortify the professional technology fields
- Make the most of all marketing tools to expand brand performance
- Perform early deployment for digital transition to enhance enterprise competitiveness
- Improve talent retention rate and construct a talent supply chain system

## ■ Products and services

### B2B industrial control products

A series of stable and durable digital storage solutions specifically designed for vertical application markets such as industrial production, cloud data center, vehicle, military, gaming, health care, etc.

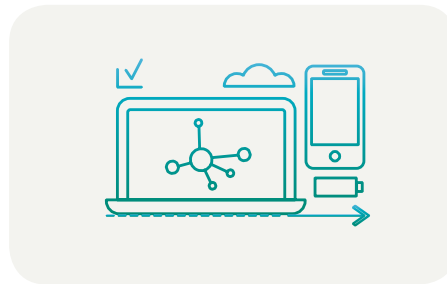


#### Provide integrated solutions for all problems

Apacer has served thousands of customers worldwide and has gained abundant experience in industrial control products and R&D. With Apacer's integration and technical capabilities, it can always resolve the customers' problems, then further offer trustworthy products and services, implementing complete solutions through collaboration while establishing deep partnerships with customers. Apacer has been ranked as the No.1 global industrial SSD supplier for five consecutive years.

### B2C consumer products

Based on consumers' life experiences, a full range of digital storage and mobile peripheral products were developed, such as SSDs and memory modules, to fulfill the demands for information storage and protection.

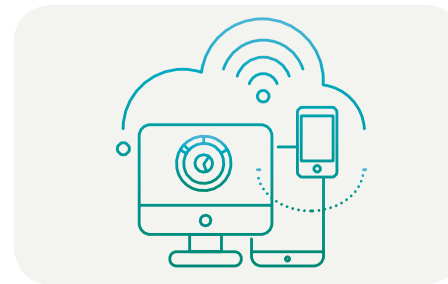


#### Meet consumer's needs

With accumulated experience over many years in digital storage products R&D, whether it is a memory module, USB flash drive, high-level fingerprint identification drive, memory card, SSD solid-state drive or military specification level external storage device suitable for computers, Apacer can meet the needs of consumers for digital storage.

### Smart IoT applications

Provide design, integration, and implementation services for the environmental control system of the Internet of things, as well as optical detection. Apacer will stand by your side when you made your first step toward smart IoT innovation.

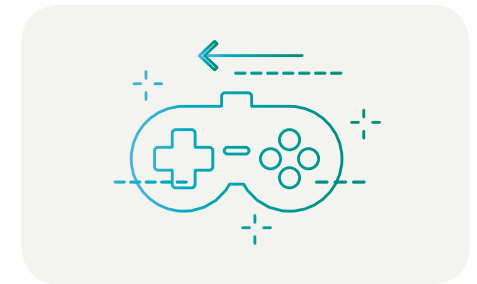


#### Smart IoT landing partner

Apacer integrates software and hardware firmware technology and optical detection technology to provide the best solution for small and medium-sized enterprises in the deployment of the Internet of things, saving immense construction time and manpower cost while lowering the threshold of such transitions. Apacer has application achievements in both the smart care and environmental control fields, and is currently developing solutions to support customers in accelerating the smart upgrade and realizing the landing of smart IoT.

### Highend e-sports products

Advance customized water-cooled case, all-in-one water-cooled heat dissipaters, as well as e-sports memory and SSD, enabling consumers to enjoy the infinite fun of creating the perfect gaming system of their dreams.



#### Create the optimized experience

Apacer has been actively developing the e-sports market while creating a high-end image with ZADAK the brand, targeting the thirst for personality style from e-sports players. The brand has become internationally renowned for its highly distinctive e-sports products and components for PC building, earning the testament of its professional products being extremely competitive in the e-sports market.



## ■ Product case

### Case 1 / Intelligent disaster prevention system in the central kitchen, a significant upgrade for heat source management!



The heat source design of the central kitchen varies from plant to plant. The designs are mainly divided into gas stoves and large electric heating equipment. To prevent the risks, the Apacer team discussed with the client and analyzed retrospectively, discovering that accidents occurred most frequently when the food was still being heated in the kitchen, but the person in charge left temporarily for other issues, resulting in negligence to the heat source.

To tackle the problem, the team designed a disaster early warning mechanism: All gas stoves and large heating electric equipment are put under control by the system. If no personnel is present in the control zone for over 1 minute, the intelligent disaster prevention system will immediately send out an early warning. If such a situation lasts for 3 minutes, the gas supply and electricity for the cooking devices will be automatically cut off, and the alarm will be broadcasted through Line push notifications.

The solution not only alerts the site supervisor but also directly controls the heat source. A microwave sensor is used to confirm the staff's presence in the control zone, and an early warning or power source shutdown will be activated when no person was detected in the zone for a designated time. In the past, the response mechanism would only be activated after the accident has occurred, as the automatic fire extinguisher only started to work when the fire has devoured the whole area. Now, the client is always one step ahead of any fire accident.

The Apacer team installed the disaster early warning system in the central kitchen in a plant (and in kitchens of a food court chain store), and provided the intelligent disaster prevention system management platform featuring Line group notification warning, enabling the client's management team to log in via a PC and track the current fire and power consumption of each cooking station in the central kitchen. Now the client can also confirm the management status of each cooking station through the system, and perform auditing and controlling.

Apart from the central kitchen of the electronics plant, the central kitchen of various large-scale shopping malls, hotels, hospitals, and campuses can also apply this system to safeguard the building assets.

### Case 2/ Intelligent automatic defect detection, relieving manpower and cost for a biotechnology pharmaceutical company effectively



For the biotech pharmaceutical industry, Apacer possesses the ability to develop automatic detection machines for various types and sizes of containers, including infusion bottles, pillow bottles, powder injection bottles, ampoule bottles, etc., no matter the defects in the bottle appearance, internal foreign object, or liquid level, all product features can be detected rapidly and effectively.

In the current actual applications, the detection system has successfully reduced more than 50% of the required testing manpower for the pharmaceutical plant.



## Material Issue Financial performance

Project	2019	2020	2021
Operating revenue	7,485,821	7,152,222	8,682,393
Operating costs	(6,085,578)	(6,026,320)	(7,229,509)
Operating margin	1,400,243	1,125,902	1,452,884
Operating profit	483,595	345,419	573,060
Profit after-tax	376,629	290,460	485,781
Earnings per share (NT\$)	3.73	2.88	4.81

Note 1: The source of the financial figures is the Annual Consolidated Financial Report, which has been reviewed and certified by the accountant

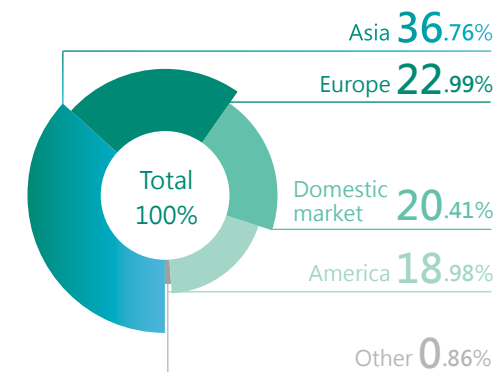
Note 2: Unit: NT\$ 1000

## Rooting in Taiwan and visioning the world

Apacer's customer base includes major global distributors, information equipment manufacturers, system integrators, and retail customers, and the sales network has been expanded to all continents.

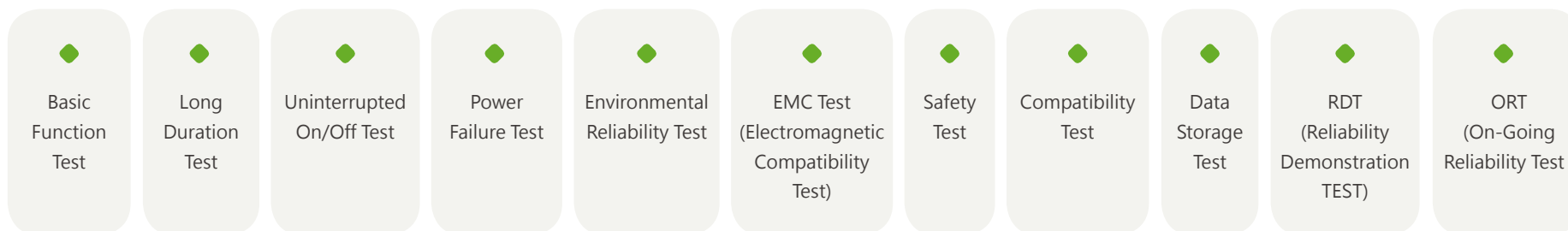
Through a sound dealer system and partners, Apacer deeply cultivates markets around the world to provide digital storage application products and integration services of high efficiency, high stability, and high value, striving for perfection as we share our abilities for memory with the world.

The sales area ratio of main products



## Product quality assurance

Product  
quality  
assurance



We deem quality assurance our most fundamental commitment to customers. Apacer insists on the highest standard for our product quality. From R&D, design, and service duration to after-sales service, all processes have undergone strict and prudent design and inspection, passing multiple safety tests to ensure the high efficiency and stable performance of the product.

All of Apacer's products have been evaluated under the laws and regulations, complying with RoHS of EU, REACH prohibition/restriction of hazardous substance specifications, and WEEE (Waste Electrical and Electronic Equipment Directive of EU) recycling specifications to provide products with low hazard and low toxicity for the consumers. Apacer has fully implemented green manufacturing processes and promises to conform to international conventions, as well as domestic regulations related to environmental protection, safety and health, energy, etc, ensuring the products fully comply with international standards.

#### Complete Design Review and Verification

- Design verification in the R&D stage
- Design inspection in the mass production stage

#### Quality Policies

Deliver products and services that are competitive, defect-free, and HSF on time to satisfy customers

#### International Quality Verifications

Comply with ISO 9001, ISO 14001, and IECQ QC 080000

## Product labeling

All Apacer products are explicitly labeled following the customers' requirements, providing complete information of the product and the manufacturer, such as the content ingredients, instructions, international certification marks, the content of the EU RoHS restricted substances (lead, mercury, cadmium, hexavalent chromium, PBBs, PBDEs, DBP, BBP, DIBP, DEHP), etc. The consumers' rights and interests are protected through transparency, and the products are also labeled following the EU WEEE specifications.

Apacer also performs Electromagnetic Compatibility (EMC) tests according to the characteristics of different regions before the product is allowed to be exported, ensuring the stability and safety of the product during usage. The test contents include BSMI of Taiwan, FCC of the USA, CE of the EU, RCM of New Zealand and Australia, and VCCI of Japan, while regulatory symbols are labeled on the product.

#### WEEE Recycling Label



#### EMC Label



# Innovative R&D

Apacer deems "Pioneering the technicalized information services integration with digital storage as the core" as its corporate vision. Based on this, Apacer focuses on developing the main business of digital storage, continuously accumulating the momentum of product and technology R&D, so that competitive advantage of sustainable operation of the enterprise can be established. To strengthen R&D momentum, Apacer has organized abundant education and training courses and lectures, with internal incentives to nurture employees' critical thoughts for innovation. Meanwhile, through collaborating with strategic partners, new inspiration can be stimulated and enhance the performance for both sides, earning mutual benefits for our partners.

## ■ Accumulative sustainable momentum of R&D

Apacer possesses independent R&D and customization abilities for software, hardware, and firmware, integrating human/machine through the R&D technology of our professional industrial design team, which can fulfill customers' demand for products and services and drive the enterprise growth. R&D expenditures are one of the pivotal expenditures of the enterprise. The company determines and reviews the related annual budget according to the R&D requirements. From the following table, readers may observe that the proportion of R&D expenditures in operating revenue has been increasing each year, showing how Apacer values that R&D design and future investments.



### R&D and Customization

Apart from accelerating product development, increasing product design flexibility, and enhancing product added value, we also customize products with the required specifications tailored for our customers



### Professional design team

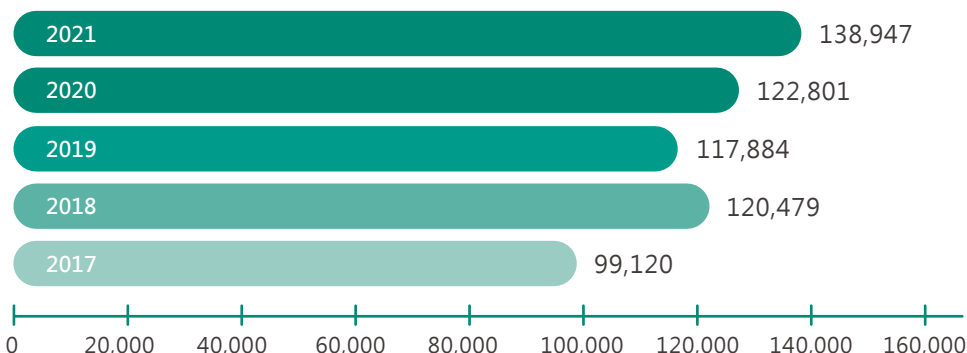
Armed with transboundary thinking and abundant experience in materials, technology, and craftsmanship, products with both practical and electromechanical functions can be designed



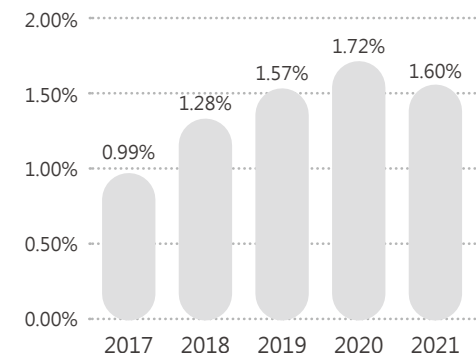
### Innovative thinking

Innovative products and services are designed with the digital storage foundation combined with technology trends.

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



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



Year	2019	2020	2021
R&D expenditures	117,884	122,801	138,947
Operating revenue	7,485,821	7,152,222	8,682,393
R&D ratio (Unit: Percentage)	1.57%	1.72%	1.60%

## ■ Patent deployment and Future technologies

To strengthen the R&D momentum of the company, Apacer officially established the Patent Development Committee under the president with a Patent Review Team to conduct internal invention patent reviews. Apart from including the number of patent R&D in the performance evaluation and appraisal, patent output incentive measures are also enacted to encourage employees to develop patent commercialization. Apacer also hires patent engineers to manage,

apply for and maintain patents and gives suggestions on whether there is any infringement of the products under development or establish designing around strategies. Meanwhile, a patent map is established, which provides information competitors' patent application, to gain a comprehensive understanding of the development of competitors' technology fields or patent application status.

## ■ Innovative R&D for Environment-friendly products

### Product R&D goals

Adopt the latest manufacturing process, and equip the product with higher frequency and lower voltage, reducing the power consumption of the product

### Raw material selection

- Following environmental protection principles and the EU RoHS directive, the six toxic substances are listed as prohibited substances, and halogen-free materials (including printing ink) are adopted
- Conflict minerals are forbidden, as materials such as gold (Au), tantalum (Ta), tungsten (W), and tin (Sn), are ensured to not originate from conflict areas controlled by criminal organizations
- FSC accredited materials are used for carton box production, with packaging materials being reduced
- The packaging shall be labeled with recycling marks for their categories for easier waste recycling

### Manufacturing process aspect

- Comply with the EU WEEE (Waste Electrical and Electronic Equipment Directive)
- Products can be disassembled and recycled
- Reduce the post-processing manufacturing process
- Standardization of materials and parts, achieving maximum usability to reduce the resource waste from the production

### Professional verification

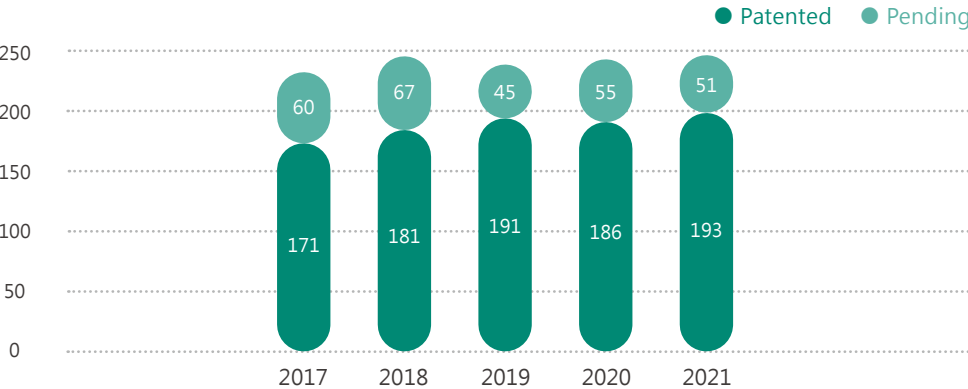
- ISO14001 environmental management system - reduce chemical and waste pollution
- QC 080000 hazardous substance management system - prohibit the use of hazardous substances



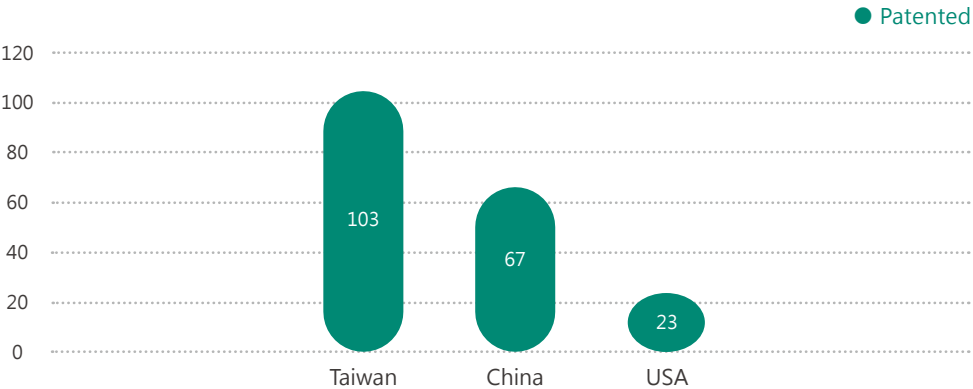
- R&D achievements

As of the end of December 2021, the total number of patents acquired by Apacer had reached 244, including 51 pending applications and 193 patents that have been and are under effective maintenance. According to the above statistics of patent applications and obtained patents, it is proven that the number of Apacer's obtained patents each year has been growing slowly but steadily. On the other hand, Apacer obtained a relatively large number of patents in Taiwan, with China and the United States being the second and third when classifying the application countries.

Statistics of Patent Applications & Obtained Patents



Statistics of Obtained Patents in 2021 with Classification



### Relevant public associations

To strengthen the company's sensitivity to market fluctuations and trends, Apacer participates in industry-related public associations listed in the following table, maintaining industry relevance and expanding business opportunities.

Participating Associations	Form of participation
Taiwan Stock Affairs Association	Member, attending the meetings and seminars of the association irregularly
Responsible Business Alliance	Member
GS1 Taiwan	Member
SATA-IO (The Serial ATA International Organization)	Member
JEDEC (Global Standard for Microelectronics Industry)	Member
SDA (SD Association)	Member
CFA (CompactFlash Association)	Member
PCI-SIG (Peripheral Component Interconnect Special Interest Group)	Member
DRAM EXCHANGE	Member
INSPECTRUM	Member
Taipei Computer Association	Member
Taiwan External Trade Development Council - Taiwantrade.com	Member

## Chapter II

# A Better Partner for Green Environment

### Vision

To take on social responsibilities and protect the Earth's environment, Apacer has introduced an environmental management system, formulating supplier management specifications, promoting green products design, conducting internal environmental protection education, and internalizing the concept of environmental protection into the whole value chain of the enterprise, to implement the top-down "Policies" and bottom-up "Actions" and practice the green sustainable enterprise operating philosophy.

### Policies and Commitments

Apacer has formulated the Environmental Safety, Health, and Energy Policy: "comply with laws and regulations, prevent pollution, participate in the consultation, control the risk, green design, continuously improve, and facilitate environmental friendliness." Under this policy, Apacer shall deliver competitive, defect-free, and hazard-free products and services on schedule and bring satisfaction to our customers.

### Contribution to the United Nations Sustainable Development Goals (SDGs)



## Issues of the Chapter

Material issues : Green products design		Responding material topics GRI 302 Energy
Manage method		Actual action
Responsibility	<ul style="list-style-type: none"><li>- RD &amp; Technical Center Supervisor</li><li>- Global Purchasing Division Supervisor</li></ul>	<ul style="list-style-type: none"><li>- Update the management system continuously</li><li>- Sustainable supplier management</li><li>- Green products design</li><li>- Improve energy-saving in the manufacturing process</li><li>- Promote environmental protection education and training</li></ul>
Resources	Budget: Expenditure invested in updating management system accreditation is NT\$ 150,000/year	
Communication approach	<ul style="list-style-type: none"><li>- <a href="#">Apacer's official website</a></li><li>- ISO 14001 Environmental Management System</li><li>- The Sustainable Development Committee holds meetings quarterly, submitting project planning, reviewing performance, and conducting horizontal cooperation and communication between departments</li><li>- Provide advocacy cards on the EHS and energy policies to all employees</li></ul>	
Sustainability goals		
Short-term goals (2022)	<ul style="list-style-type: none"><li>- The parts of newly developed industrial control products are all halogen-free</li><li>- The new consumer product development mechanism uses halogen-free parts completely</li></ul>	<ul style="list-style-type: none"><li>- The raw materials of newly developed industrial control products meet the halogen-free requirements completely</li><li>- Hold the quarterly Sustainable Development Committee review meetings</li><li>- The percentage of green products design</li><li>- Evaluate environmental pollution in the manufacturing process</li></ul>
Mid-term goals (2022~2024)	100% compliance with green design, strengthening the power-saving mode design of products	
Long-term goals (After 2025)	<ul style="list-style-type: none"><li>- Improve the automation of special operations</li><li>- Reducing environmental pollution in production operations</li></ul>	
Achievements and performances in 2021		
Achieved goals:	<ul style="list-style-type: none"><li>- Inventoried the materials of industrial control products comprehensively, with the halogen-containing parts checked and the system state adjusted to ensure that new products can be developed under the correct method</li><li>- Completed the tracking review of the ISO 14001 environmental management system, with the certification maintained as valid</li></ul>	
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 issues : Raw material management		Responding material topics GRI 301 : Material
Manage method		Actual action
Responsibility	<ul style="list-style-type: none"><li>- Quality and Customer Service Division</li><li>- Global Purchasing Division</li></ul>	<ul style="list-style-type: none"><li>- Establish supplier appraisal mechanism</li></ul>
Resources	Human Resources: A total of 30 persons in the Quality and Customer Service Division and Global Purchasing Division	<ul style="list-style-type: none"><li>- Implement supplier RBA policy</li></ul>
Communication approach	<ul style="list-style-type: none"><li>- Supplier AGP (Apacer Green Products Web System) platform</li><li>- Annual Supplier Conference</li></ul>	<ul style="list-style-type: none"><li>- Hold annual supplier conferences</li></ul>
Sustainability goals		Appraisal method
Short-term goals (2022)	<ul style="list-style-type: none"><li>- The supply chain shall carry out the management of the water resources, wastes, carbon emissions, and GHG in collaboration</li><li>- Conduct supplier satisfaction survey</li></ul>	<ul style="list-style-type: none"><li>- Implementation performance of supplier Conference</li><li>- Annual appraisal results of suppliers</li></ul>
Mid-term goals (2022~2024)	<ul style="list-style-type: none"><li>- In the evaluation/audit/management, the supply chain is required to reach 75 or points more under the RBA VAP (Validated Assessment Program) regulations</li><li>- Supplier conferences shall be held annually to advocate important issues</li><li>- Add ESG-oriented terms to supplier policies to build sustainable supply chain management</li></ul>	
Long-term goals (2025)	<ul style="list-style-type: none"><li>- Develop green intelligent management</li></ul> <p>Internally: Apacer develops green products design and manufacturing process</p> <p>Externally: Update green products and environmental protection laws and regulations continuously through the AGP (Apacer green products) system, while advocating and demanding the related supplier partners follow</p>	
Achievements and performances in 2021		
Achieved goals:	<ul style="list-style-type: none"><li>1.Completed the regular supplier quality audit</li><li>2.Held the supplier conference and advocated important issues</li><li>3.In 2021, a total of 332.2 tons of non-renewable raw materials were used for products and packaging materials, with no renewable materials used</li></ul>	
Additional achievement:	<ul style="list-style-type: none"><li>1.Completed sustainable management and coaching for suppliers</li><li>2.Completed a supplier GHG inventory course</li></ul>	
Contribution to the United Nations Sustainable Development Goals (SDGs)		
SDGs 12 Responsible Consumption and Production		



## Issues of the Chapter

Material issues : Compliance with environmental-friendly laws and regulations

Responding material topics : GRI 307 Environmental Compliance

### Manage method

Responsibility	Human Resources & Administration Management Dept.
Resources	A total of 10 persons in the Human Resources & Administration Management Dept.
Communication approach	<ul style="list-style-type: none"> <li>- The Sustainable Development Committee quarterly review meeting</li> <li>- Management review meeting</li> <li>- Internal audit process of the company</li> </ul>

### Actual action

Perform environmental protection regulations identifications quarterly to ensure compliance with the laws and regulations

### Sustainability goals

Short-term goals (2022)	Improvement of constructions to reduce noise within peripheral boundaries
Mid-term goals (2022~2024)	Implement energy management policies
Long-term goals (After 2025)	Comply with environmental regulations

### Appraisal method

Meet Class 3 noise control standard requirements of the plant  
  
The quarterly Sustainable Development Committee review meetings

### Achievements and performances in 2021

There were no violations of environmental laws and regulations in 2021

### Contribution to the United Nations Sustainable Development Goals (SDGs)

SDGs 12 Responsible Consumption and Production



Material  
Issues  
2.1

# Commitment to the Environment and Compliance with Laws and Regulations

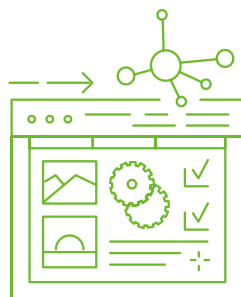
Apacer follows the Environmental Safety, Health, and Energy Policy of "comply with laws and regulations, prevent pollution, participate in the consultation, control the risk, green design, continuously improve, and facilitate environmental friendliness," and avoids substances endangering and causing damage to the environment. Also, Apacer utilizes existing resources properly, reducing energy resource consumption by practical actions including energy-saving, carbon reduction, and resource reusing, and has marked "becoming a prestigious green enterprise" as the company's operating goal.

## Apacer's commitment to the environment



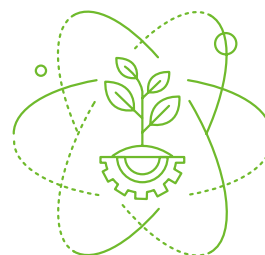
### Legal aspect

Check the updated status of laws and regulations quarterly and comply with the domestic laws and regulations for environmental protection and energy management. There were no events related to an environmental penalty in 2021.



### Institutional Aspect

- Introduce ISO 14001:2015 environmental management system to systematically manage the negative environmental impact of the manufacturing process and products
- The procurement and manufacturing process shall comply with the international environmental protection standards for electronic products and comply with the Hazardous Substance Free (HSF) specification, also the QC 080000 Hazardous Substance Process Management System was introduced
- Advocate and implement the requirements of RoHS 2.0
- Minerals related to conflicts and are from high-risk areas are 100% avoided



### R & D aspect

Develop green products and reduce the use of energy resources from the perspective of product design



### Actual action

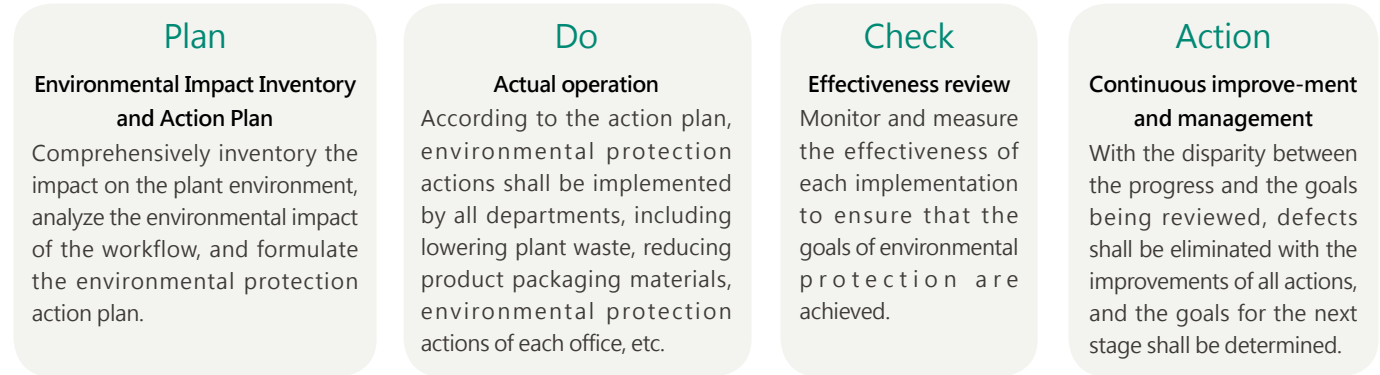
- Formulated carbon emission reduction goals which are reviewed annually. In 2021, the air-conditioners on the 1st to 6th floors of the operational headquarters were replaced with water-cooled ones, and the energy-saving and carbon reduction effects of this project will be continuously reviewed
- Conducted environmental protection education and training annually to strengthen employees' awareness of environmental protection and energy-saving actions
- Established the short-term, mid-term, and long-term environmental sustainability goals, insisting on green sustainability actions

## ● Introduce Environmental Management System

To progress toward the goal of transforming into a green enterprise, Apacer introduced Quality Management (ISO 9001) and Environmental Management System (ISO 14001), and following the P-D-C-A (Plan-Do-Check-Act Cycle) management cycle, it was ensured that all stages of operation and production comply with policies and achieve established goals; also, ensuring product quality and environmental assurance with systematic management methods reduced the negative impact of products and their manufacturing processes on the environment.



## Apacer's Environmental Management System P-D-C-A promotion focus

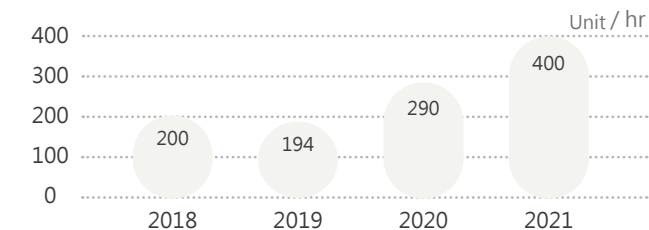


In 2017, Apacer introduced the ISO 14001:2015 environmental management system, establishing a risk-oriented thinking model and a life cycle perspective on environmental management to ensure that the environmental requirements are included in various life cycle stages, such as product design, manufacturing, etc. Apacer started from the source management, introducing QC 080000 Hazardous Substances Process Management System and ensuring the raw materials comply with the EU's RoHS and REACH regulations on prohibition/restriction of environmentally hazardous substances and chemical substances. Not until the raw material suppliers have signed the Environmental Protection Commitment Letters, provided the raw material test reports, as well as completed the material investigation, will they be qualified as certified suppliers, ensuring that the environment and consumers are free from toxic substances.

## ● Environmental protection education and training for employees

To inspire employees to internalize the knowledge of environmental protection and energy-saving, apart from imparting new knowledge through announcements irregularly, Apacer also strengthens environmental protection and energy-saving knowledge and trends through physical courses. All the recruits of Apacer are required to pass the general course of environmental protection and energy-saving, which includes general environmental protection knowledge, as well as ISO 14001 environmental management system, and the policies and indices of ISO 14064-1 GHG inventory standard. Employees whose duties are related to product design are required to undergo education and training on Hazardous Substance Process Management (HSPM) yearly to ensure their familiarity with professional environmental protection knowledge and their ability to design environmentally friendly products.

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



## 2.2 Climate Change Risk Management

In response to the potential risks and impacts climate change may cause, in 2020, referencing the framework of the Task Force on Climate-related Financial Disclosures (TCFD) provided by the Financial Stability Board (FSB), Apacer carried out the identification and management of the risks and opportunities of climate change.

### Management strategy and action plan

#### Governance

- **Sustainable Development Committee:** The highest climate change risk management organization of Apacer, with the chairman as the chief, reviews the execution and planning of climate change-related work quarterly, and reports to the Board of Directors annually
- **Environment Care Group:** Subordinate to the Sustainable Development Committee, it is in charge of planning and promoting the responding work to climate change

#### Strategy

- Perform identification of climate change risks in each department, discuss climate risks and opportunities of material concern inter-departmentally

#### Risk management

- Find out the factors which impact Apacer more in climate risks and opportunities according to the framework of TCFD
- Establish risk precaution and management targets in advance according to the climate risk identification results
- Incorporate climate risk identification and evaluation into operational risk management

#### Target and Goals

- Set the management goals and performance targets of climate change, and track and manage the implementation progress
- Conduct GHG inventory every year

### Execution state



- In 2021, a total of 4 inspection reports on the implementation effectiveness of measures including energy-saving and carbon reduction, waste management, environmental sanitation, and environmental protection have been conducted
- Implemented and monitored the rehabilitation of power-saving equipment, and the power-saving benefits as equipment rehabilitation are tracked quarterly

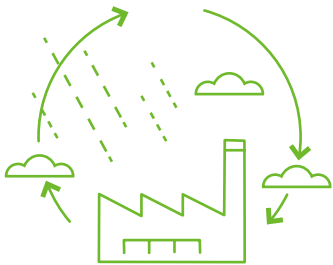
- The Environmental Care Group developed projects and coordinated interdepartmental promotion of energy-saving and carbon reduction activities according to the results of climate change risk evaluation

- Discussed and evaluated the identification of climate-related risks/opportunities interdepartmental, and evaluated the possible impact on the company's financial condition
- Reported to the Sustainable Development Committee on the possible impact of climate-related risk/opportunity identification results
- For more details, please refer to the "Organizational risk management approach" section in Chapter I of this report

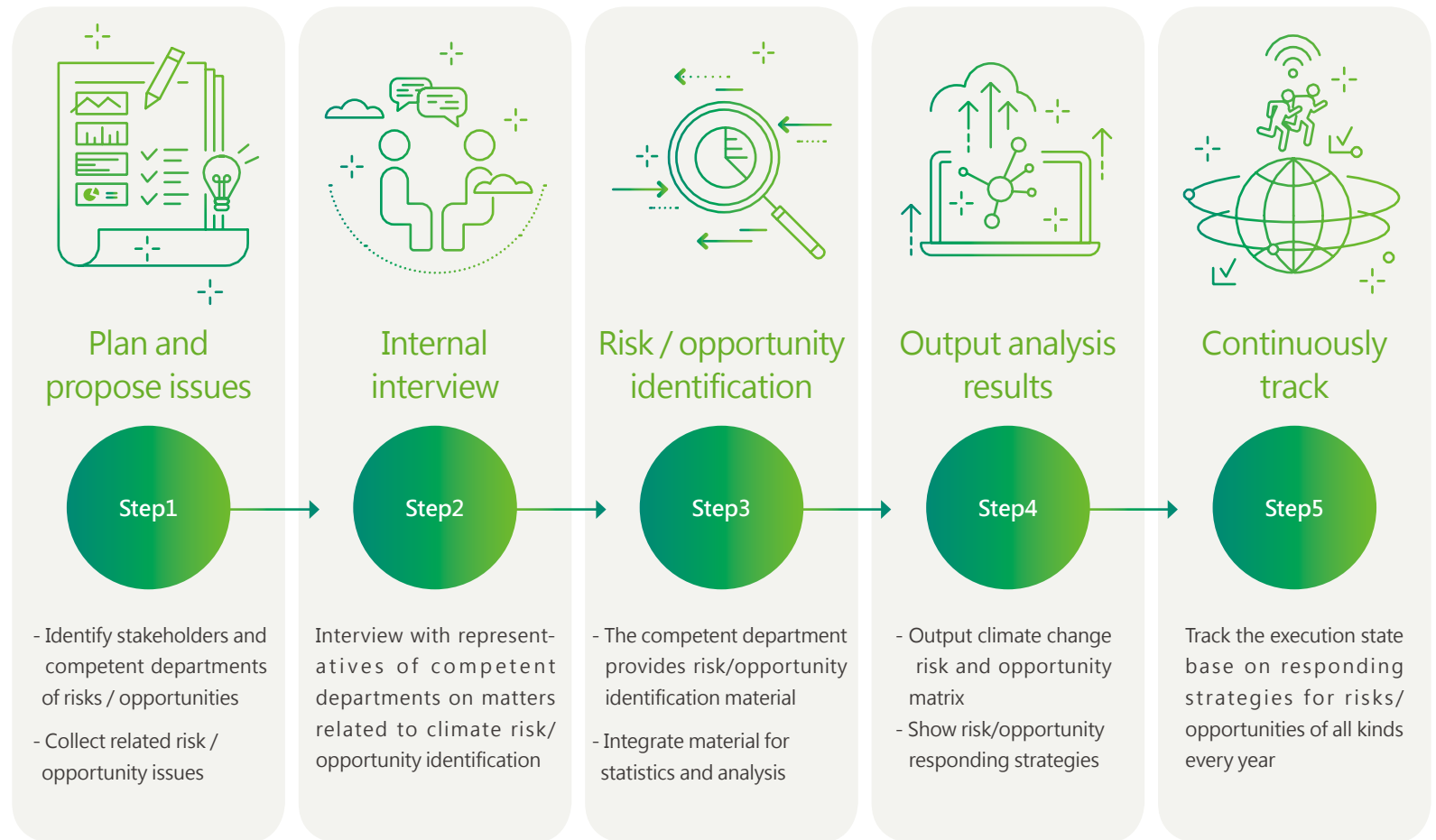
- Continued energy-saving measures to reduce carbon emissions in Scope 2. For more details, please refer to the chapter "Effectiveness from Energy-Saving Improvements in 2021"
- Planned energy-saving and carbon reduction measures based on the GHG inventory results, and submitted them to the Sustainable Development Committee for regular implementation performance reviews

## ■ Climate risk matrix

To comprehend the risks that climate change may bring to the company, Apacer performed the identification and ranking of climate-related risks/opportunities according to TCFD to acknowledge the risk and opportunities that may impact Apacer. Apacer will reference the Climate Change Research Report published by international organizations, combining the climate risk and opportunity matrix, adding sustainable management plans including energy-saving, carbon reduction, and water-saving in the company's business policies. Risk identification identifies the materiality of the impact of the related risks through The level of impact × The probability of occurrence.



### Risk/opportunity identification process

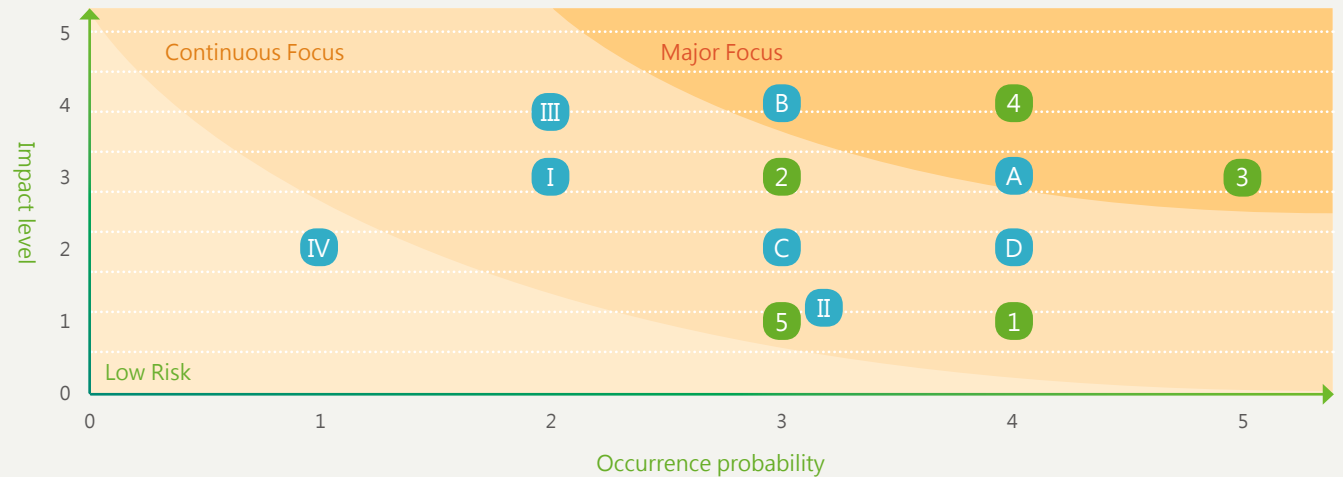


## Climate Change Risk and Opportunity Matrix



Opportunity		Risk	
		Substantial risk	Transformation risk
1	Be able to cooperate with and obtain incentives from government agencies	I Typhoon and flood	A Restrictions of environmental protection laws and regulations are increasingly stricter
2	Promote energy-saving and carbon-reducing production	II Drought	B Carbon emission management cost increases
3	Enter the green products market	III Temperature rise	C Unstable supply of energy resources
4	Improve the positive image of the enterprise	IV Sea level rise	D Potential damage to the company's corporate image
5	Create a green building environment		

Risk category	Risk level (Note 1)	Apacer's management method
Major Focus	Score above 9	Formulate responding strategies and review the execution state of the strategies every year
Continuous Focus	Score between 3~8	Take the initiative to collect related news at home and abroad and international cases, and review this issue every year
Low Risk	Score under 2	Observe continuously



Note 1: Impact level - 5 points (very high)/ 4 points (high)/ 3 points (moderate)/ 2 points (low)/ 1 point (minimum); Occurrence probability - 5 points (very high)/ 4 points (high)/ 3 points (moderate)/ 2 points (low)/ 1 point (minimum)

## Risks and Opportunities

In 2021, Apacer conducted climate-related risks/opportunities identification, identifying 2 material climate risks under major focus and 3 material climate opportunities, and put forward responding strategies according to the nature of risks and opportunities. We manage risks in advance as much as possible to reduce the possible negative influence in the future; For opportunities, we invest resources and plan in advance to master the business opportunities that climate change may bring.

	Type of risk/ Opportunity	Risk description	Financial impact (Direct or Indirect)	Description of major potential financial Impact	Responding strategies
Risk	Risk 1	Restrictions of environmental protection laws and regulations are increasingly stricter	Direct	Being punished for failing to comply with environmental protection policies timely, operating costs increase and energy or resource supply limitation due to the strict laws and regulations	Continue to pay attention to changes in laws and regulations, and comprehend the trend and possibility of changes in laws and regulations in advance through external consultants, knowledge from connections in the industry and international cases to develop responding strategies
	Risk 2	Carbon emission management cost increases	Direct	To control carbon emissions, equipment rehabilitation and reduction in production may be necessary, resulting in higher operating costs and lower revenues	While conducting the equipment rehabilitation, low energy-consuming equipment that will not affect compromise the quality shall be prioritized for procurement
Opportunity	Opportunity 1	Promote energy saving and carbon reducing production	Direct	For production behavior, reduce the energy and resources consumption to save production costs	Through the diigitalization, process optimization, and other projects, the production process shall be more efficient, saving energy and resource consumption, thereby saving production costs
	Opportunity 2	Get access to the green products market	Indirect	Under the international trend of customers having an increasing demand for green products, environmentally friendly and energy-saving products can be developed to meet customers' needs, which will help explore potential markets and increase revenue	Develop the markets of green products and low-carbon products, as well as apply the technical advantages of the core business to become a member of the emerging energy or low-carbon product supply chain
	Opportunity 3	Improve the positive image of the enterprise	Indirect	Meeting the expectations of stakeholders will improve the positive image of the enterprise and bring potential business opportunities	Strengthen the positive image of Apacer's green manufacturing by advocating energy-saving and carbon reduction production and entering the green products market

## Energy management

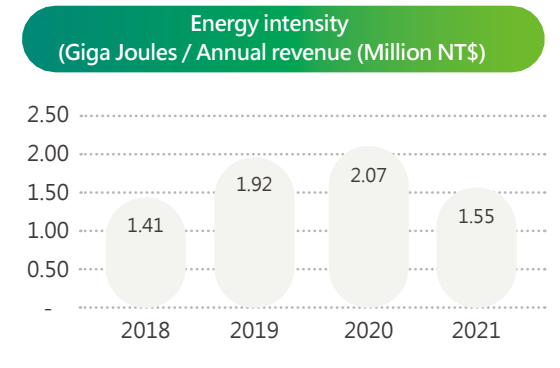
Apacer has established a pollution prevention and improvement mechanism that saves energy and reduces the environmental impact of business operations under the accreditation of ISO 14001 Environmental Management System. The energy used in the company is mainly the power consumption of the operation headquarters, and the purchased power (indirect energy) of the plant and office accounts for more than 99% of the total energy consumption. In 2021, the water-cooled air conditioning was fully installed, allowing the power consumption to reduce significantly, and the energy intensity also decreased slightly.

Energy consumption over the years				
Energy category	Direct energy		Indirect energy	
Energy usages	Diesel forklift		Electricity used in plants and offices	
Year	Energy consumption		Energy consumption	
2019	20 Liters	702.24 Mega Joules	3,968,706 KWH	14355741.6 Mega Joules
2020	0 Liter	0 Mega Joules	4,112,765 KWH	14,805,954.0 Mega Joules
2021	20 Liters	702.24 Mega Joules	3,748,997 KWH	13,496,389.2 Mega Joules

Note 1: 1 Liters of diesel =8,400 Kilocalorie ; 1 Calorie = 4.18 Joules (Referenced from the [Energy Product Unit Calorific Value Table](#), Bureau of Energy, Ministry of Economic Affairs)

Note 2: 1 KWH =3.6 Mega Joules

Note 3: Due to the low usage of diesel forklifts in 2020, no diesel was procured in that year, so the direct energy consumption was zero



Note: Energy intensity =Total energy consumption (Giga Joules, GJ) / Annual revenue (Million NT\$)



## GHG management

To acknowledge the impact of the operation on the environment, Apacer has been initiating GHG self-inventories since 2013, setting 2012 as the inventory benchmark year to truly keep track of the company's GHG emissions, and become devoted to reducing GHG emissions.

In February 2022, Apacer completed the GHG inventory of Scope 1 and Scope 2, 2021, taking the operation headquarters in Tucheng District, New Taipei City as the boundary, the accounted sources of emission include equipment placed in and out of the plant premise and the purchased power. In 2021, the GHG emissions increase is 662.7360 tons of CO<sub>2</sub>e/ year compared with the total emissions in 2020. The main reason for the increase was the replacement of the old "ice water chillers" with two "water-cooled chillers" in 2021 to reduce GHG emissions, which should consume less power in theory. However, due to the lack of direct GHG monitoring equipment installed in the plant, the emission of the new machines could not be directly calculated.

We could only apply the "Refrigerant-filling amount method" in the inventory for calculation. The "Refrigerant-filling amount method" means calculating the possible GHG generated according to the actual refrigerant input to make up for the difficulty of calculating without the gas monitoring equipment. The "water-cooled chillers" replaced this time were machines in a large tonnage, which led to the massive amount of 520kg refrigerant input and a large increase in Scope 1 emissions. In fact, with an analysis of the total purchased power, it is estimated that the replacement of the machine can significantly reduce power consumption as well as GHG emissions. In the data for 2021, Apacer's revenue increased (by about 1,530 Million more compared with 2020)m but instead of increasing, the total purchased power decreased by about 351,248.71 kWh. Thus, the replacement of equipment, in this case, is actually reducing the purchased power, along with the GHG. To cooperate with the government's carbon reduction policy and the international environmental protection trend, Apacer has set 2020 as the benchmark year and set a 5-year GHG reduction target of 3%.

Note 1: Since 2019, Apacer' s air-conditioning equipment on the 7th floor has been replaced with water-cooled chillers with relatively low power consumption, and the power-saving effects were observed and recorded, leading to the confirmation of the air-conditioning power consumption reduction. In 2021, the water-cooled chillers were fully applied, and 2020 is set as the benchmark year for GHG reduction as a result.

Note 2: Apacer has changed the certification standard for GHG inventory into ISO 14064-1:2018. Therefore, Scope 1 ( 範疇 1) and Scope 2 ( 範疇 2) in the above table are changed into Category 1 and Category 2

Note 3: Since 2 "water-cooled chillers" and 6 "dehumidifiers" started operation in 2021, the refrigerant filling volume increased significantly, resulting in the increase of [Category 1: Emissions]. (GHG emission coefficient management table version 6.0.4 - purchased amount or outsourcing supplementary amount method)

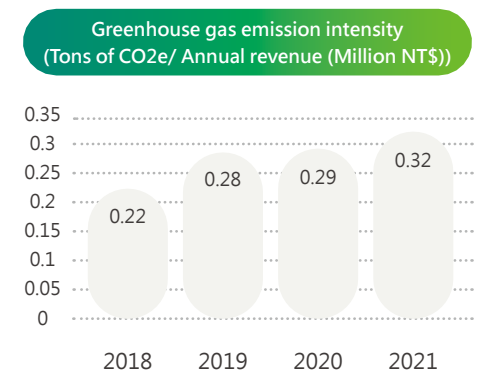
Deadline of goals (Year)	Short-term goals 2022	Mid-term goals 2025	Long-term goals 2050
Content of goals	Add Category 3 internal inventory calculation	-GHG reduction of 3% in the 5 years -Introduce low energy consumption production equipment to reduce GHG emissions	Promote low-carbon manufacturing and reduce GHG emissions
Progress of goals (Under planning / In progress / Completed)	In Progress Expected to be completed in 2023/Q1	External certification is expected to be obtained in 2024	Under planning

GHG emissions			
Category	2019	2020	2021
Category 1 (Tons CO <sub>2</sub> e)	9.11	9.05	681.39
Category 2 (Tons CO <sub>2</sub> e)	2,125.45	2,092.49	2,082.89
Total emissions (Tons CO <sub>2</sub> e)	2,134.55	2,101.54	2,764.28

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 defined as 0.509 Kg/KWH)

Note 3: Method of inventory boundary setting: Operation control method



Note: Calculation method = Total emissions (Tons CO<sub>2</sub>e) / Annual revenue (Million NT\$)



## ● Performance of Energy-Saving Improvements in 2021

Under the impact of human activities, the global warming phenomenon has resulted in abnormal climate around the world, causing the ecosystem, water and soil resources, as well as human lives and properties to be threatened. To protect the environment, reduce GHG emissions, decrease resource consumption, Apacer spend NT\$ 2.5 million on replacing the air-cooled air conditioners with a water-cooled model on the 7th floor of the plant and office. After tracking and evaluating for one year, the caculation has proven that the energy-saving performance of the water-cooled air conditioners is 30% better than the old air-cooled models. Such outstanding energy-saving results urged Apacer to further invest NT\$15 million in replacing the air-conditioning equipment on the 1st to 6th floors in 2020 and start operating the air-conditioning equipment in 2021, which not only saved the cost of electricity, but also practiced the concept of environmental protection and devote in slowing down the climate change. In addition, the manufacturing equipment reflow furnace, was replaced with a model with lower energy consumption to save electricity. In 2021, compared with the previous year, the power consumption of all plants reduced by 364K kWh, a decrease of 9%, with the saved electricity expense reaching NT\$ 437,000, a decrease of 4%.

### The complete replacement with water-cooled air conditioner

From 2019 to 2020, a total of more than NT\$17.5 million was invested in replacing the air-cooled air conditioners in the plant and offices with water-cooled model, which were be fully put into use in 2021



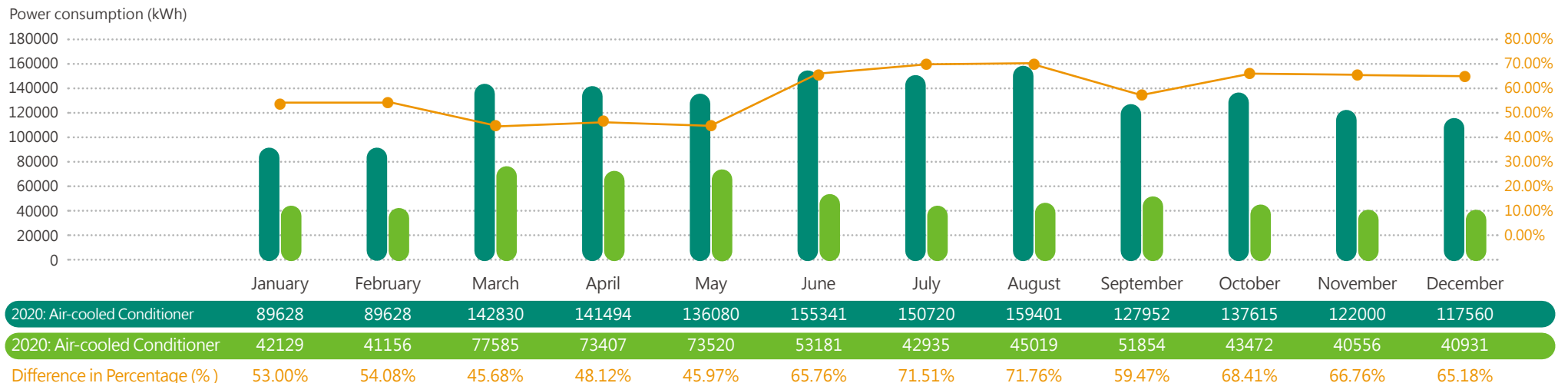
Green factory and office

Energy-saving improvement

### The air conditioning power consumption is expected to be saved by more than 30%

The tracking of the benefits of water-cooled air conditioners replacement begun in 2019. After 2 years, the recorded statistics showed that the power consumption of air conditioners is expected to be saved by more than 30%

Air-cooled/Water-cooled Air Conditioner Energy-Saving Comparison (Independent Electric Meter) January~December 2021



## ■ Energy-saving actions and benefits over the years

### Reduced power consumption in the manufacturing process

Purchased the manufacturing equipment reflow furnace with low energy consumption to save energy

### Refinement of the testing manufacturing process to reduce power consumption

The number of DRAM test stations was reduced from 4 stations to 2 stations to save power consumption in the manufacturing process

### Refinement of the testing manufacturing process to reduce the power consumption of the manufacturing process

The number of platforms decreased from 52 to 39, saving about 20%~37% of energy

### Liquid barriers were added to prevent chemical leakage

Liquid barriers of the eye-washing equipment and explosion-proof rooms were installed to avoid chemical leakage and flow entering the drainage pipeline

### Introduction of dust emission monitoring equipment

The PCB dust produced in the manufacturing process is recycled. After the dust is recycled, only the natural gases are discharged into the atmosphere. The data before and after the operations causing dust are monitored to ensure compliance with laws and regulations related to air quality and prevent hazardous air

### Apacer Energy-Saving Patrol

In 2016, employees voluntarily set up the Apacer Energy-Saving Patrol to evaluate and implement the company's energy-saving actions to avoid energy waste

### Introduction of water-saving devices

In 2016, the service water-saving devices were installed, and the water consumption decreased by 24.8% compared with 2015

2021

**In 2016, the service water-saving devices were installed, and the water consumption decreased by 24.8% compared with 2015**

water-cooled air conditioning systems started operating in 2021, which can save more than 30% of the power consumption of air conditioners, reducing the power consumption of the whole company by 364k KWH, a decrease of 9% compared with that in 2020

2020

### Complete replacement of the air conditioning equipment to save the power consumption of air conditioning

Witnessing the achievements of 2019, water-cooled air conditioners were also introduced into the 1st to 6th floors of the plant and office in 2020 and started operating in 2021. It is expected that the power consumption of air conditioners will be saved by more than 30% in the future

2019

### Optimization of air conditioning equipment to create an energy-saving office environment

Apacer introduced water-cooled air-conditioning in the office on the 7th floor in 2019, and this has saved energy by more than 30% compared with the replaced air-cooled air-conditioning

2018

### Optimization of SMT equipment with the manufacturing process power consumption reduced by nitrogen machine

The nitrogen machine has undergone equipment rehabilitation that added a 5-stage energy-saving mode. During the manufacturing process, the equipment can automatically adjust to the energy-saving modes according to the line operation status.

### Refinement of the testing manufacturing process to reduce the power consumption of the production

1. Energy-saving improvements of run-in equipment: Power consumption has been saved by 19.64%, with an annual saving of 6,920.64 megajoules
2. Energy-saving improvement of air compressor: Energy consumption has been saved by 19.35%, with an annual saving of 466,560 megajoules

2017

### Introduction of the cloud temperature monitor of the ice water chillers

The data such as power consumption, incoming and return water flow, incoming and return water temperature, and chilled water quality can all be randomly obtained. With the long-term energy consumption information monitored, energy waste shall be avoided, with energy-saving improvement goals being established.

2016

### Room temperature control measures

Air curtains are installed at the entrance and exit gates of the production line to reduce indoor and outdoor temperature exchange. The improvements in the temperature and humidity controls meet the customers' needs better and reduce the energy consumption of air conditioning.

2015

### Energy-saving measures for air conditioning

The interior windows are equipped with curtains, heat insulation paper, and circulating fans to improve energy-saving efficiency. The indoor air conditioner temperature of the office is set to 26 degrees Celsius to reduce unnecessary energy consumption.

## 2.3 Waste and water resources management

### Waste management

To effectively dispose of wastes and prevent the pollution of the environment, Apacer focuses on the reduction of production wastes while performing proper classifications, recycles, and outsourced disposal operations of the waste. The disposal of general commercial wastes and hazardous commercial wastes are all outsourced to qualified service providers. To ensure the appropriateness and legal compliance of waste disposal, Apacer has formulated related management procedures with on-site audits conducted by the responsible department at least once a year. If the audit results fail to meet the standards, the operation will be ordered to stop with improvements progress required within a time limit. If after the improvements, the service provider still fails to meet the requirements, the contract shall be terminated, and another qualified service provider shall be chosen to ensure the fulfillment of corporate responsibility for waste management. As for the waste solution produced in the manufacturing process, liquid barriers were installed on the eye-washing equipment and explosion-proof room to prevent chemicals from leaking into the drainage pipeline.

### Waste management goals

Deadline of the goals(Year)	Short-term goals 2022	Mid-term goals 2030	Long-term goals 2050
Content the goals	The recycling rate in 2022 is expected to be 3% higher than that 2018	The recycling rate in 2030 is expected to be 6% higher than that in 2018	The recycling rate in 2050 is expected to be 10% higher than that in 2018
Target progress (Under planning / In progress / Completed)	In Progress - It is expected to be completed in 2022/Q4	In Progress	Under planning

Item	Hazardous commercial waste				General commercial waste				
Processing	Bury	Incineration	Reuse	Recycle	Bury	Incinerate	Reuse	Recycle	Unit: ton
Volume processed	0	0	0	6.1995	0	8.5	0	19.7746	
Subtotal	6.1995				28.2746				
Total	34.4714								

Note 1: The total amount of disposal and transfer is 25.9741 tons, including 6.1995 tons of hazardous commercial waste and 19.7746 tons of general commercial waste; hazardous commercial wastes include PCB breakaways and waste solutions, and general business wastes include cartons, household garbage and plastic mixture wastes.  
Note 2: The total amount of direct disposal is 8.5 tons, all of which are general commercial wastes.

Item	Hazardous commercial waste		General commercial waste		
Processing	On-site disposal	Off-site disposal	On-site disposal	Off-site disposal	Unit: ton
Volume processed	0	6.1995	0	28.2746	
Subtotal	6.1995		28.2746		
Total	34.4714				

Note: Qualified service provider: A public or a private waste removal and disposal organization that has been authorized by the competent authority to remove and dispose of specific types of waste; Data source: Industrial Waste Report and Management System of the Environmental Protection Administration, Executive Yuan.

## Water resources management

Through the certification of ISO 14001 environmental management system, Apacer has established a pollution prevention and improvement mechanism, saved energy consumption, and reduced the environmental impact of enterprise operation. The use of internal resources of the company is mainly the service water of the operational headquarters, while water is unnecessary in the manufacturing process, leading to no generation of business wastewater.

The water source of the company is provided by Taiwan Water Corporation, and the source originated from Shimen Reservoir. Service wastewater is collected by sewage pipelines to the sewage disposal plant for processing. The water withdrawal and wastewater discharge of the company have not caused significant environmental impacts. In 2021, due to the water-cooled air-conditioning equipment of the 1st to 7th floors being implemented, the total water withdrawal slightly increased.

Unit: Million liters

### Water withdrawal over the years

Year	2019	2020	2021
Total water withdrawal	5.36	5.80	9.18

Note: The water source comes from Shimen Reservoir, and after evaluation, no water withdrawal was conducted at the water resource pressure area.

## Environmental actions in the office

Apacer puts heavy emphasis on integrating the concept of energy-saving and environmental protection into the daily operation of the enterprise, reducing environmental impact while also fostering employees' habits of adopting environmentally-friendly actions.

### Water-saving faucets installment

- The faucet in 1F to 7F's restrooms of the plant and office are completely replaced with water-saving ones.
- Consumption of water at the restrooms'sink can be saved by 60%.

### Replacement with water-cooled model air conditioners

- The air-cooled air conditioners on 1F to 7F in the plant and office were completely replaced with a water-cooled model.
- Air conditioning power consumption can be saved by more than 30%

### Replacements with LED lights

- The T5 lights in the plant and office have been replaced with LED lights with relatively low power consumption. In 2021, 71 lights have been replaced
- The power consumption of each light is reduced by 35W with LED, which can save about 7,256 KWH in one year (Note 1)

### Energy-saving promotion

- Energy-saving posters were applied to encourage employees to save energy resources
- Held the "Workout Day" event for employees to accumulate their walking steps for rewards, encouraging employees to use elevators less and walk more

### Office energy-saving activities

- Compared with 2020, the consumption of A4 paper in 2021 has decreased by 173,374 sheets, which equals about 346 packages of A4 paper, as well as 36% of reduction.
- Starting from May 2021, the company has prohibited the provision of disposable tableware for lunch boxes. As of the end of the year, a total of 33,019 pairs of disposable chopsticks had been reduced.

Note 1: Calculation method: T5 lights (14w\*4=56w), with LED lights (7w\*3=21w) that each reduces 35W compared with the old lights, which reduces 0.28 KWH / day. 71 \*0.28 KWH / day =19.88 KWH / day, 19.88 KWH / day \*365 days =7,256 KWH / year.

## Environmental protection expenditure in 2021

Unit: NT\$



### Expenditure items

### Amount

Environmental management system certification expenditure	100,000
Manufacturing equipment improvement	4,007,538
General commercial waste	301,000
Hazardous commercial waste processing	127,380
Working environment monitoring	101,010
Environmental health in and out of the office	1,861,860
Environmental greening and beautifying	15,000
<b>Total</b>	<b>6,513,788</b>

Material  
Issues  
2.4

# Green products

In response to the trend of global environmental protection and to be devoted to the brand's core value, "Becoming better partners," Apacer is always striving to bring more positive influence to the global environment from the core of our enterprise operation. We extended the concept of environmental sustainability to the whole value chain of the enterprise, and implement the concept of green manufacturing and products through aspects such as introducing environmental management system, supply chain management, green products design, environmental education, etc. to comply with the latest international environmental protection specifications and ensure the green international competitiveness of Apacer products.

## Design

- Comply with RoHS and REACH directives
- Deem energy-saving, recyclable, and pollution-free as goals
- Reduce packaging materials

## Procurement

- Lead-free components
- Recyclable packaging materials
- Hazardous substance management
- Restriction management for minerals from conflict-affected and high-risk areas

## Production

- Lead-free manufacturing process
- Comply with ISO 14001 environmental management system
- Comply with ISO 14064-1 greenhouse gas inventory
- Chemical control and waste disposal

## Recycling

- Comply with WEEE specification for recycling wastes



## ■ [ Procurement ] Respond to control of hazardous substances in advance

The RoHS directives have been fully introduced by Apacer in the manufacturing process and material management. Apacer not only complied with REACH regulations and related regulations set by the customers, but also conducted supplier management, auditing component suppliers and requesting for Environmental Protection Commitment Letters to ensure all source materials comply with environmental protection regulations. Since 2007, Apacer has fully introduced the lead-free manufacturing process, and comprehensively controlled and prohibited hazardous substances from the product side to the manufacturing process, passing the QC 080000 management system. In 2011, the halogen-free manufacturing process was introduced step by step, and the component suppliers were audited and required with the Environmental Protection Commitment Letters and ROHS test reports. In 2019, four new hazardous substances of plasticizers (BBP/DBP/DEHP/DIBP) were prohibited in the RoHS directive, but Apacer had already banned these four hazardous substances of plasticizers in advance since 2017. In January 2021, the US Environmental Protection Agency (US EPA) added stricter controls on the five persistent bio accumulative toxic substances (PBTs) under the US toxic chemical substances management measures 6(h), while the Chinese GB VOCs standards restricted coatings, inks, adhesives, and cleaning agents strictly, thus Apacer also added a prohibition on the five substances and started performing controlling and monitoring of the VOCs.

2007

- Introduced lead-free manufacturing process
- Certificated by QC 080000 management system
- Full control and restriction of hazardous substances of the manufacturing process

2011

- Introduced halogen-free manufacturing process step by step
- Conducted supplier audit and required the Environmental Protection Commitment Letters and ROHS test reports

2017

- Prohibited the use of four hazardous substances of plasticizers in advance ( BBH/DBH/DEHP/IBP )

2019

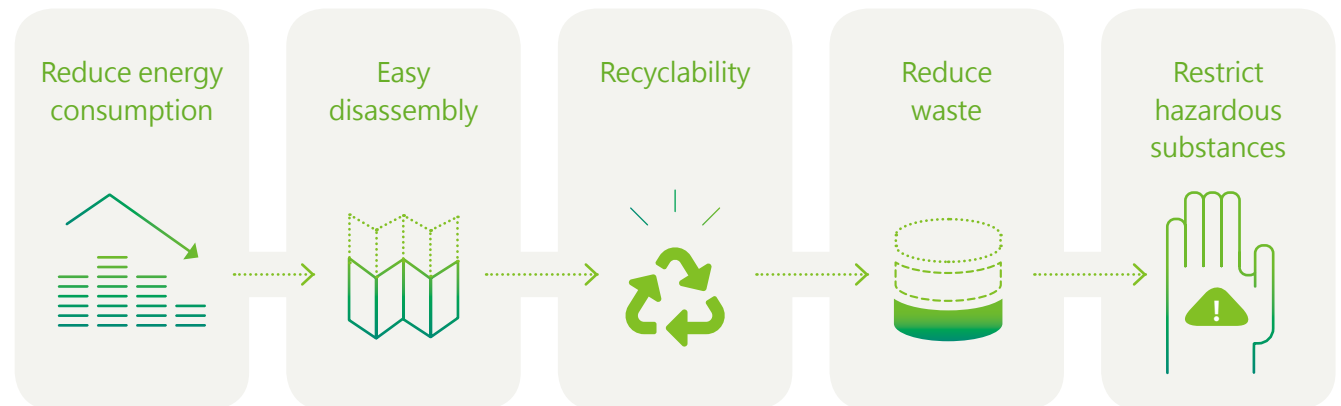
- Four hazardous substances of plasticizers were added to the RoHS directive (BBH/DBH/DEHP/IBP) to be prohibited

2021

- US TSCA toxic chemical substance management
- (DecaBDE/PIP/PCTP/HCBD/2,4,6-TTBP) are prohibited

## ■ [ Design ] Environmental-friendly products with high efficiency and low energy consumption

To meet the market demands and trends in the future, Apacer is shifting towards the direction of high efficiency and low energy consumption in development and design. For the material selection, we make the most effective use of materials through precise calculation to avoid waste of resources; the remainders and tailings left in the manufacturing process can be recycled for the reuse of resources. For the packaging designs, we aim to achieve both easy disassembly and recyclability, minimizing the volume to reduce the waste and generated impact on the environment. Hazardous substances are restricted in all Apacer's products to protect the natural environment.



## [ Manufacturing Process ] Intelligent green manufacturing

### Smart factory – Further upgrade of manufacturing process management

A "smart factory production system" was constructed by Apacer from the three aspects of automation equipment, network communication technology, and manufacturing production system, aspiring to enhance the efficiency of the whole production and competitiveness of costs. We applied IoT intelligent sensors to monitor the production and warehousing environment, reducing quality risks and improving customer satisfaction. Combining with the sophisticated production equipment, in-house R&D capability, and perfect factory management, a green production environment that meets international standards was established. Now we can not only design the most optimized process for each customer, the APS system will precisely control production scheduling and progress to ensure maximized production efficiency and optimized production capacity.

#### Apacer

#### The vision of a "smart plant"

#### Schedule monitoring of APS

Forecast order demand, timely schedule and dispatch, control production progress, and ensure on-schedule warehousings and deliveries



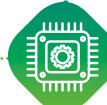
#### Manufacturing environment monitoring

Comprehensively equip the production environment with sensors, monitoring the production space conditions through intelligent technology



#### Automation and communication of production equipment

Strengthen the networking communication capability of production equipment, cooperate with an intelligent production software system to perform production management, providing parameter correction and abnormality prevention



#### Introduce the intelligent production software system

The system can record the data of each manufacturing process and production line precisely, and perfectly combine with production equipment to provide comprehensive and complete production traceability as well as analysis of relevant data, refining production measures



### Reduction of packaging materials

To practice energy-saving and carbon reduction in routine work and avoid waste of resources, Apacer reexamined multiple production processes to pinpoint the idling or wasted resources. We adjusted the standard operation process of product warehousing in 2019, stipulating that after a batch of products is divided and packed into boxes, the remainders not enough for a box shall be directly warehoused, and will not be packed until more products are ready to be packed, avoiding the waste of packaging materials; in 2020, about 3,600 sets of packaging materials were saved with this method. In 2021, we further simplify the process, reducing the average monthly use of stickers by 13,816, and recycling 291,647 pcs of Tray/Carton for reuse.

2019

Reduce packaging boxes

2020

Plan for recycling and reusing Tray

2021

Plan for recycling and reusing Tray/ Carton

Apart from reducing packaging materials, we are also planning to evaluate the reuse efficiency of the tray. It is expected that after the statistics of the usage and demand frequency of various trays are completed, the waste of resources can be reduced by redesigning the SOP. In the future, Apacer will continue to actively seek methods to save energy, reduce carbon emissions, and protect the earth, fulfilling our responsibility of environmental protection.

## [ Recycling ] Compliance with EU's WEEE regulations

If the electronic product wastes are not properly disposed of, hazardous substances may be released, causing severe pollution. Apacer upholds the spirit of "manufacturer responsibility" and participated in the waste electronic recycling system following the EU's WEEE specification. The WEEE (Waste Electrical and Electronic Equipment Directive) recycling labels shall be marked on products, with the goal of a 80% recovery rate and 70% re-using and recycling rate. Apacer is progressing toward the goal of sustainable responsibility with the consumers. All products of Apacer in Europe can be properly decommissioned and processed through the local qualified recycling service providers to protect the earth and enable the recycling of resources.

WEEE compliant



#### Percentage of products and their packaging materials in 2021

Year	Main products	Percentage of recycled packaging materials
2021	73.43 Tons	6.2%

Note 1: The main products of Apacer have not been recycled yet

Note 2: Percentage of recycled packaging materials = Recycled packaging materials during the reporting period / Products sold during the reporting period \*100



## Chapter III

# A Better Partner for Making Progress

### Vision

Apacer insists on providing products and services of the finest quality, complying with international environmental regulations, and establishing a trustworthy international green brand. Apacer also aspires to become the pioneer of the industry, driving the growth and progress of the whole industrial chain. Therefore, Apacer has formulated multiple management policies related to suppliers and customers, aiming to achieve cooperative growth and make progress together with others, facilitating Apacer's brand core value, "Deliver on our promises, strive for constant improvement, advance with our partners."

### Policies and Commitments

Apacer upholds the quality policy of "delivering competitive, defect-free and HSF products and services on time to satisfy customers," and promises to fulfill its social responsibility and provide consumers with safe and reliable green products.

### Contribution to the United Nations Sustainable Development Goals (SDGs)





## Issues of this Chapter

### Material Issues : Customer Relationship Management

#### Responding material topics GRI 416 Customer Health Safety

Manage method	Actual action
Responsibility	<ul style="list-style-type: none"> <li>- Quality and Customer Service Division</li> <li>- Sales Marketing Dept</li> </ul>
Resources	Human resources: A total of 52 persons in the Quality and Customer Service Division and Sales Marketing Dept.
Communication approach	<ul style="list-style-type: none"> <li>- Customer management system: CRM (Customer Relationship Management) system</li> <li>- Customer service system: eRMA</li> <li>- Annual customer satisfaction survey</li> <li>- Customer hotline</li> </ul>

Sustainability goals	Appraisal method
Short-term goals (2022)	Improve according to the results of the customer satisfaction survey conducted on 2021 Implement an annual customer satisfaction survey via the CRM system
Mid-term goals (2023~2024)	<ul style="list-style-type: none"> <li>- Customer breadth / depth enhancement</li> <li>- Width enhancement: Raise the number of customers who trade with Apacer more than 3 times from 628 to 650</li> <li>- Depth enhancement: Promote grade B/C customers to grade A, raising the percentage of grade A customers from 9.7% to 12%</li> </ul>
Long-term goals (2025)	Ensure high-value customers account for more than 80%

#### Achievements and performances in 2021

A customer satisfaction survey was completed, resulting in 86.14 points for satisfaction

#### Contribution to the United Nations Sustainable Development Goals (SDGs)

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

### Material Issues : Hazardous substance management

#### Responding material topics Industrial issues

Manage method	Actual action
Responsibility	<ul style="list-style-type: none"> <li>- RD Division</li> <li>- Global Purchasing Division</li> <li>- Quality and Customer Service Division</li> </ul>
Resources	<ul style="list-style-type: none"> <li>- Budget: A total of NT\$115,000 were invested in updating the accreditation of the management system and holding the supplier conferences</li> <li>- Human resources: A total of 50 persons in the RD Dept., Global Purchasing Division, and Quality Assurance Division</li> </ul>

Communication Approach	<ul style="list-style-type: none"> <li>- Apacer's official website</li> <li>- Management review meeting</li> <li>- Internal audit process of the company</li> <li>- QC 080000:2017 hazardous substance process management system</li> <li>- Provide all employees with advocacy cards of the EHS and energy policies</li> </ul>
------------------------	---

Sustainability goals	Appraisal method
Short-term goals(2022)	Ask the supplier to completely comply with the prohibited/restricted substances of the Apacer's environmental specifications The Environmental Protection Commitment Letters are 100% signed
Mid-term goals (2022-2024)	Hold annual supplier conference to advocate Conduct a satisfaction survey after the supplier conference
Long-term goals (after 2025)	Enhance specialized automated operations to reduce environmental pollution in production operation

#### Achievements and performances in 2021

- Waste management: Hazardous commercial waste decreased by 3%
- Comprehensively prohibited suppliers to use toxic substances under TSCA released by the US EPA
- The certification of QC 080000 hazardous substance management system has been renewed

#### Contribution to the United Nations Sustainable Development Goals (SDGs)

SDGs 12 Responsible Consumption and Production, SDGs 13 Climate Action

Material  
Issues  
3.1

# Sustainable Supplier Management

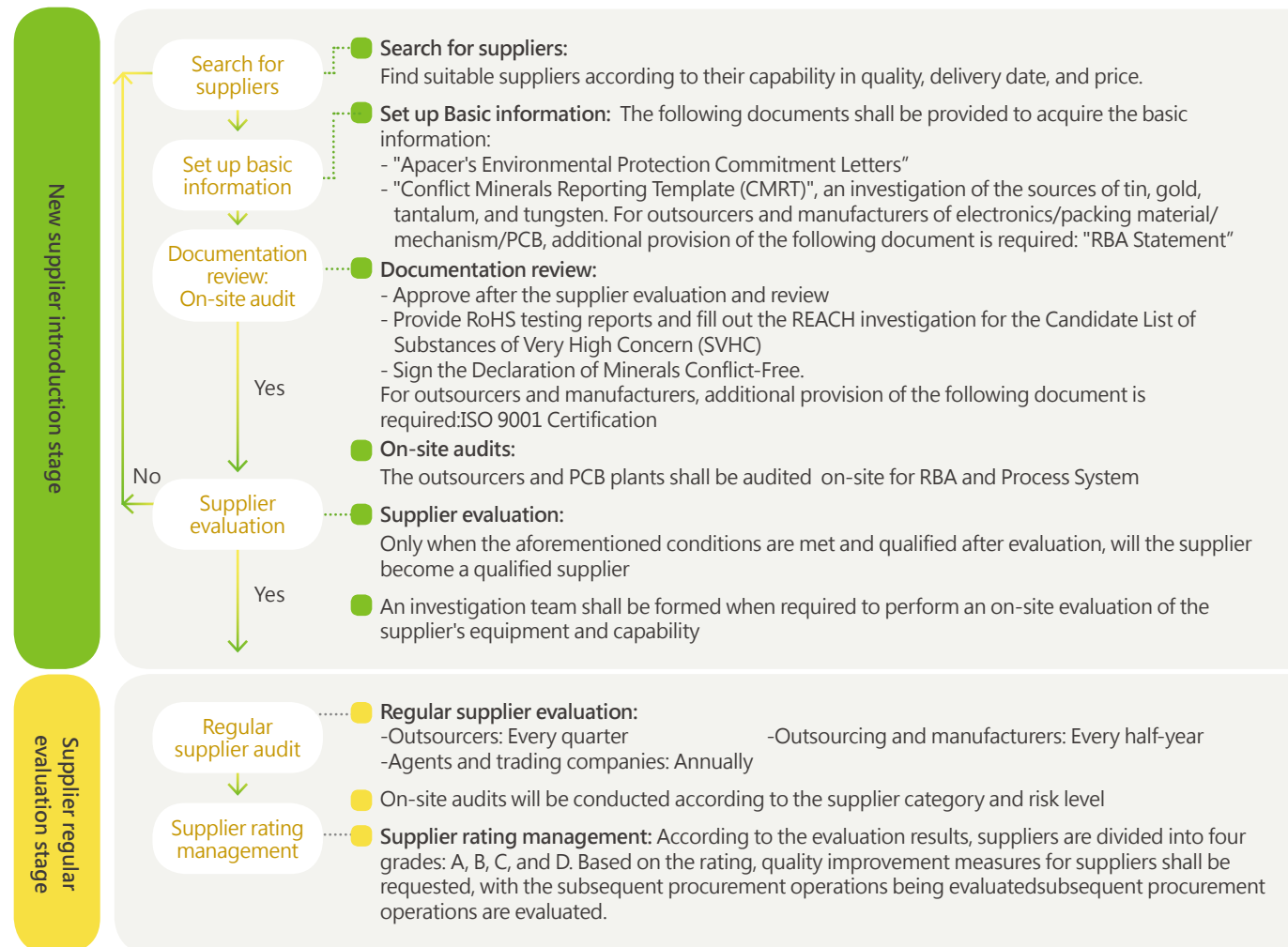
## 3-1.1 Supplier management strategy

Apacer is not only devoted to fulfilling its corporate social responsibilities and responding to the needs of stakeholders, but also expects to grow together with its supplier partners, achieving continuous progress in laws compliance, human rights, and environmental safety and health to reduce risks, building a strong enterprise constitution, realizing sustainable management and development together with partners, and establishing a "sustainable supply chain."

Apacer has set "promoting sustainable supply chain management" as a mid-term and long-term goal. Apart from the original 4 management aspects of QDCS (quality, delivery date, cost, and service), three aspects of ESG (environment, society, and corporate governance) were also added. We have begun planning in 2020 to gradually add ESG-oriented consideration to the systems for supplier selection, evaluation and rating, audit, coaching, and giving recognition to implement the sustainable ethos.



### Supplier management process



Note: General affairs suppliers are not included in this management process.

## New supplier introduction evaluation

All newly introduced suppliers must be reviewed. The main evaluation items cover the economic and environmental aspects (as shown in the table below). We also conduct on-site audits according to the category and risk of suppliers, also, related departments such as production management, engineering, and quality assurance shall be convened to form a survey team to evaluate the suppliers' equipment and capabilities on site. For instance, outsourcers and PCB plants shall be audited on-site for RBA and process systems. The supplier introduction evaluation system encourages the supply chain partners to value and implement the sustainable operation of enterprises.

## Regular evaluation of existing suppliers

Apacer continuously conducts annual evaluations on all raw material suppliers. The evaluation is conducted every quarter, every half year, or annually according to the supplier's category. Suppliers with material abnormalities or high risk shall receive on-site audits at least once a year.

For the evaluation methods, Apacer mainly conducts reviews on items including incoming inspection, production material abnormality, delayed delivery date, external customer complaints

and the subsequent problem-solving attitude, and the improvement efficiency of the suppliers, dividing the suppliers into the 4 grades of A, B, C, and D according to the evaluation scores.

We incorporate the five specifications of RBA: labor, health and safety, environmental protection, code of ethics, and management system in the annual evaluation items. At the initial stage, suppliers with plants of considerable scale that are

willing to cooperate with the RBA requirements are prioritized in the introduction. In the future, evaluation candidates will be expanded, ensuring the supplier's alignment with international standards, and gradually improving the sustainable management ability of suppliers. In the 2021 RBA evaluation, all evaluated suppliers (outsourcers and PCB plants) achieved grade A and 100% compliance with RBA specifications.

### Apacer's newly introduced supplier appraisal items

Economic ( 79% )	Environmental ( 21% )	Social (Mandatory)
Business management	Hazardous Substance Free (HSF)	Declaration of Minerals Conflict-Free
Quality management	Environment, Health and Safety	Statement of RBA Compliance
Manufacturing ability		
Equipment management		
Delivery date		



### Suppliers' annual evaluation items

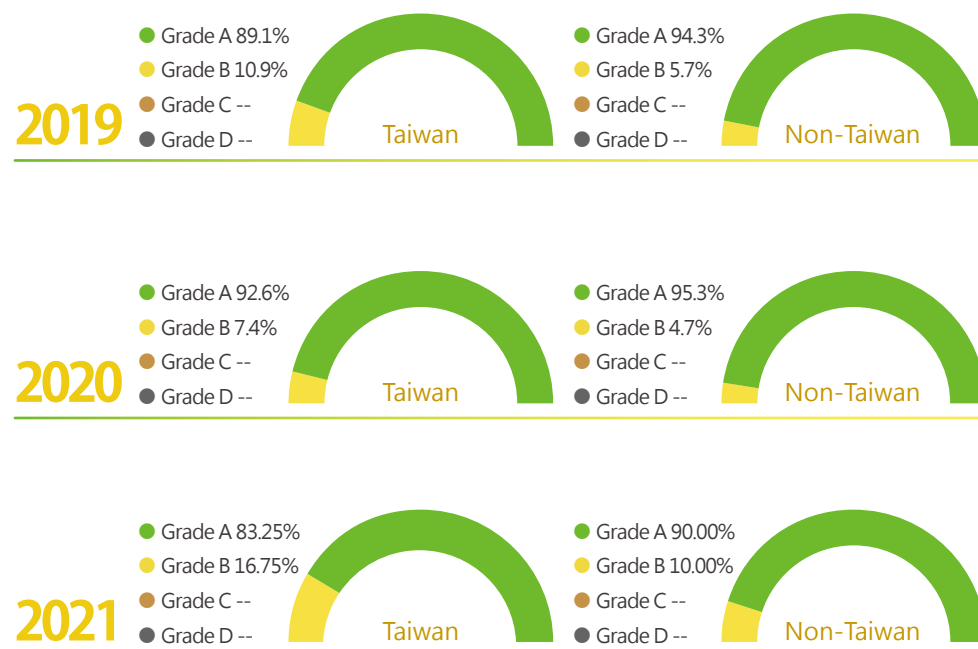


### Supplier evaluation and rating management

Suppliers Level	Evaluation Standard	Management System
Grade A	90 – 100 points	Increase order quantity or give incentives as appropriate
Grade B	80 – 89 points	No incentives or punishments will be given
Grade C	70 – 79 points	Reduce order quantity and require improvement within a time limit
Grade D	Below 69 points	Removing the HSF-qualified supplier's qualification

## Evaluating and rating results of suppliers in 2021

Since the implementation of the evaluation system, Apacer has not only continued to conduct the audits but also provided related coaching activities, yearning to drive the progress of our partners as well. In 2021, Apacer began to implement an online real-time evaluation system. Instead of manual evaluation conducted every three months or one year, the system can automatically conduct real-time evaluation every month. In 2021, all suppliers are ranked above grade B, which shows that suppliers have been maintaining positive interactions with Apacer.



## Supplier procurement policy

Apacer simultaneously conducts risk evaluations by referring to the supplier's overall conditions, such as supply quality (ISO 9001), delivery date, price, green products capability (QC 080000), RBA policy implementation, etc., as we procure raw materials from suppliers in different regions and conduct supplier evaluation regularly. With the support of these policies, the stability of Apacer's product supply quality is ensured, allowing the satisfaction of customers' needs and the specification of Hazardous Substance Free (HSF).

Apacer deems local procurement as the principle, and is eager to keep the economic benefits of enterprise operation in Taiwan while reducing the carbon emissions generated by the transportation of raw materials. Currently, the number of local suppliers in Taiwan accounts for 87% of Apacer's suppliers, while the procurement budget allocated to local suppliers in Taiwan accounts for 50%.

Region	Suppliers Category	Number of Suppliers	Proportion of Suppliers	Budget Ratio
Taiwan	Agent	50	87%	50%
	Outsourcer	16		
	Outsourcing Vendor	10		
	Trading Company	27		
	Manufacturer	100		
Non-Taiwan	Agent	7	13%	50%
	Outsourcer	0		
	Outsourcing Vendor	2		
	Trading Company	15		
	Manufacturer	6		
Total		233	100%	100%

Note: The contents of supplier policy mainly disclose information about raw material suppliers, and the general affairs suppliers are not included.

### 3-1.2 Responsible supply chain

Supplier Sustainability Management actions over the years:



#### Supplier signed RBA statement

Apacer is devoted to fulfilling its social responsibilities. Apart from self-regulating, it is also hoped that Apacer can play a promoting role in the industrial chain. Since 2017, RBA specifications have been implemented for the first-tier suppliers, regulating labor-intensive suppliers such as iconic raw material manufacturers, outsourcers, intermediaries, and waste disposal firms to sign and submit the RBA Statements. Valuing labor human rights, environmental protection, and transparent ethical operation together with our supplier partners an outstanding 100% submission rate of the statement has been achieved. In the future, Apacer will continue to observe the implementation status of the suppliers' RBA policies, achieving the goal of fulfilling our corporate responsibility together with our supplier partners.

#### Supplier and hazardous substance management

Apacer has introduced the QC 080000 Hazardous Substance Process Management System. Through the supplier management process, we ensure that the quality and stability of the company's products and our Hazardous Substance Free (HSF) management comply with international specifications and customers' needs. The raw materials provided by the supplier shall comply with the EU's RoHS and REACH specifications on prohibition/restriction of environmentally hazardous substances and chemical substances. Meanwhile, the supplier must also sign the Environmental Protection Commitment Letters, provide raw material test reports, and complete the material survey reports to earn the qualification. Through the supplier management process and supplier environmental specifications, the quality/HSF policy of "delivering competitive, defect-free, and HSF products and services on time to satisfy customers" can be achieved.

## Conflict Minerals-Free

According to the Conflict Minerals Reporting Template (CMRT) of the Responsible Minerals Initiative (RMI), Apacer investigates the 3TG mineral resources of first-tier suppliers. All suppliers were required to fill in the Conflict Minerals Reporting Template while signing and submitting the Declaration of Minerals Conflict-Free to ensure all minerals used by Apacer's related products come from Europe, Asia, and the Americas, avoiding minerals in high-risk areas listed by OECD, with the related trading activities complying with the code of conduct of Responsible Business Alliance.

Currently, all qualified suppliers have signed and submitted the Declaration of Minerals Conflict-Free or provided certificates proving that their plants do not use conflict minerals, while 80% of suppliers have filled in the Conflict Minerals Reporting Template. In the future, Apacer will continue to require suppliers to implement conflict minerals investigations, fulfilling the corporate responsibility of all of us to protect human rights cooperatively.



Note 1: The definition of Conflict Affected and High-Risk Areas by OECD: Areas where risks of armed conflicts, widespread violence, or other risks threatening to harm the people exist. Armed conflicts may be presented in many forms, including international or non-international conflicts where two or more countries may be involved, or in the way of liberation wars, rebellions, or civil wars. High-risk areas may include areas with political instability or repression, weak state structure, insecurity, failure of civil infrastructure, and widespread violence. Residents of such areas tend to suffer from frequent human rights infringements and violations of national or international law. Conflict Minerals indicate minerals mined in the Conflict-Affected and High-Risk Areas. 3TG indicates a total of 4 minerals, which are tin, gold, tantalum, and tungsten.

Note 2: Among qualified suppliers, pure OEM suppliers and intermediaries are not required to sign and submit the declaration.

## Suppliers' green rating system

Apart from rating the grades of suppliers' according to the five major evaluation items, to evaluate the supplier's management ability for hazardous substances, in 2016, Apacer launched the "Supplier Green Rating System" based on the original supplier management process. The "Approval Rate" and "Completion Efficiency of Expired Updates" from the uploaded supplier's RoHS test report are used as the basis for score calculation. The personnel in charge of procurement can adjust the evaluation and rating of suppliers according to the green rating results, thereby requiring suppliers to improve their Hazardous Substance Free (HSF) management ability to meet the latest international specifications and customer demands.

In 2021, Apacer encouraged suppliers to improve their green rating through channels such as the online real-time evaluation system and supplier conferences. Under persistent advocacy, suppliers who obtain grade A and grade B at the green rating are increasing through time.

### Green rating results of suppliers over the years

Level	Score	2019 Number of suppliers	2020 Number of suppliers	2021 Number of suppliers
Grade A	90 points or above	87.2%	87.3%	88.4%
Grade B	75~89 points	2.4%	3.9%	5.9%
Grade C	60~74 points	1.4%	0.5%	3.2%
Grade D	Below 59 points	9.0%	2.9%	2.5%
Unrated	Unrated	-	5.4%	-
Total		100%	100%	100%

Note: Those who are unrated are suppliers that provide only outsourced services only or were just introduced.

### 3-1.3 Sustainable interaction and recognition for suppliers

#### Annual supplier conference: communication and coaching

We learn and grow with our supplier partners on environmental sustainability issues continuously, stimulating the management ability of the industrial chain on green environmental issues, and turning the global environmental sustainability initiatives into real actions.

##### 2021 Supplier conference key performance

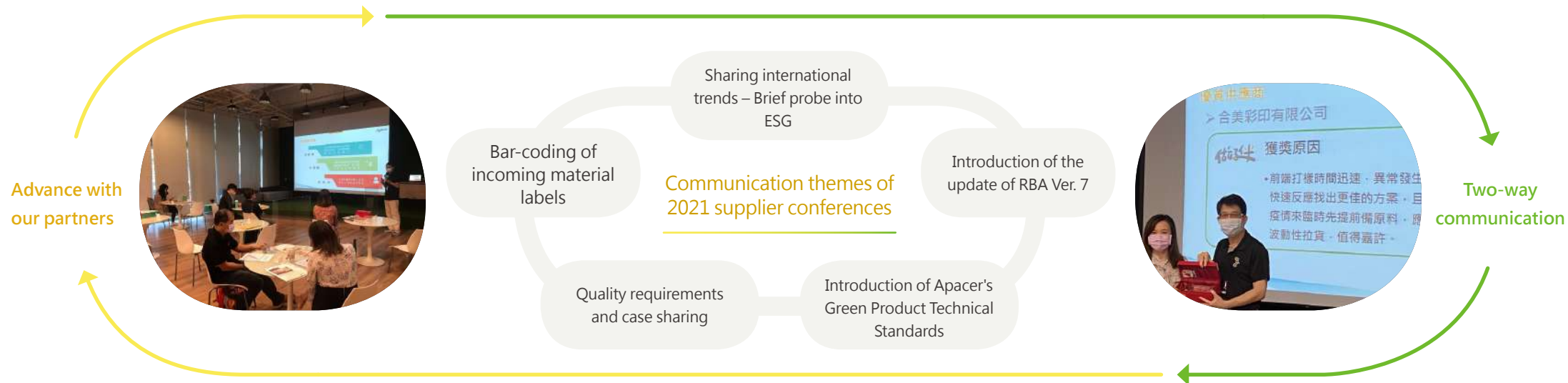
Attendance rate **96.15 %**

**QR code** adopted for  
e-questionnaires in response to  
environmental protection policies

Return rate **84%**

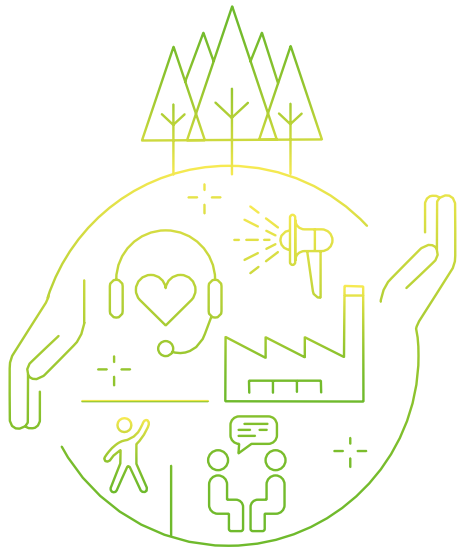
Satisfaction rate  
reached **87** points

Excellent supplier  
**Award  
ceremony**



## Supplier sustainability survey and coaching

To achieve the goal of sustainable development with our partners, Apacer conducted a supplier sustainability survey in 2021, to understand the ESG-oriented policies of our supplier partners and their execution status through questionnaires. We compiled the responses of supplier partners to find out the top four ESG issues with relatively more cases of failure in action, then offered advice and coaching.



ESG related issues	Action in 2021	Implementation results						
GHG inventory	GHG inventory courses were set up, and supplier partners who have not conducted GHG inventory are invited to participate	<p>The number of suppliers who do not understand the GHG inventory has decreased</p> <table><tr><th>Year</th><th>Number of suppliers</th></tr><tr><td>2020</td><td>22</td></tr><tr><td>2021</td><td>17</td></tr></table>	Year	Number of suppliers	2020	22	2021	17
Year	Number of suppliers							
2020	22							
2021	17							
Formulate recycling policies for products and product packaging materials	Offered advice to supplier partners with no recycling policies formulated, suggesting that they can conduct recyclable materials inventory and stipulate the policies	<p>The number of suppliers with no recycling policies has decreased</p> <table><tr><th>Year</th><th>Number of suppliers</th></tr><tr><td>2020</td><td>34</td></tr><tr><td>2021</td><td>29</td></tr></table>	Year	Number of suppliers	2020	34	2021	29
Year	Number of suppliers							
2020	34							
2021	29							
Devote resources to charity or participate in community activities	Offered kind advice to the supplier who fail to devote resources to charity or participate in community activities	<p>The supplier who has not invested resources in charity or community activities has decreased</p> <table><tr><th>Year</th><th>Number of suppliers</th></tr><tr><td>2020</td><td>28</td></tr><tr><td>2021</td><td>24</td></tr></table>	Year	Number of suppliers	2020	28	2021	24
Year	Number of suppliers							
2020	28							
2021	24							
The policies of caring for employees from minority groups (such as indigenous people, new immigrants, physically challenged persons, and foreigners)	Offered kind advice to the supplier partners who have not formulated policies to caring for minority employees	<p>The number of suppliers without policies caring for minority employees has decreased</p> <table><tr><th>Year</th><th>Number of suppliers</th></tr><tr><td>2020</td><td>21</td></tr><tr><td>2021</td><td>14</td></tr></table>	Year	Number of suppliers	2020	21	2021	14
Year	Number of suppliers							
2020	21							
2021	14							



## Feedback from the Supplier Partners

World Peace Industrial Co., Ltd.  
Yong-Sheng Zhang/ Chief director

As of now, almost 17 years have passed since World Peace Industrial Co., Ltd first started our partnership with Apacer. Thanks to Apacer's support and care for World Peace Industrial over the past decade, our wonderful relationship has only grown closer over the years. Together, we have witnessed the development and achievements of Apacer, and now it has become a significant force on the market and made many contributions to society.

As one of the excellent suppliers of Apacer, World Peace Industrial will continue to follow the footsteps of Apacer, providing premium products and maintaining our good reputation and considerate services, to repay the immense support, trust, and help offered to World Peace Industrial by Apacer over the years. We hoped that we can continue to gain mutual developments with Apacer in the future, making the sky the limit and strive for excellence! We also look forward to collaborating with Apacer even closer, creating a new era in the industry together.

Material  
Issues  
3.2

# Customer Relationship Management

## Customer relationship and quality management

To provide customers with products of high quality and meet customer's requirements, Apacer introduced quality management (ISO 9001) to ensure that all stages of operation and production comply with provisions of policies and achieve established goals according to the P-D-C-A (Plan-Do-Check-Act Cycle) management cycle, guaranteeing product quality with systematic management methods.

### Quality commitment



## ● The niche of customer service provides the best service experience

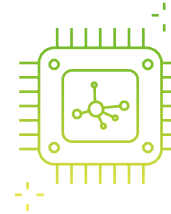
### Global marketing channels

Cooperating with the traits of local markets to comprehend market dynamics while actively establishing global marketing channels, operating sites have been set up in the United States, the Netherlands, Japan, Hong Kong, mainland China, and India to market the self-owned brands and deeply cultivate the local market.



### Provide customized services

With the growth of memory demand for different mobile devices and equipment, Apacer is devoted to providing customers with tailor-made products and services, prioritizing the customers' needs, and jointly occupying the advantage point in the industry.



### The premium customer service team

In response to the frequent emergence of diversity and compatibility of different platforms and applications, Apacer offers comprehensive technical analyses centering on the customer's requests. In addition to the existing customer service system, Apacer further cooperates with customers to develop platforms for more advanced generations, which brings unparalleled benefits for product development and customer communication.



## ● To always stand in customers' shoes from R&D to after-sales processes

"Access the best" is Apacer's commitment as a brand. We immerse ourselves into the users' experience, focusing on every last detail of product design, and cherish every customer feedback as a crucial cornerstone of progress, struggling for nothing other than perfection. The stipulated quality and HSF (Hazardous Substance Free) policy have expressly stated that we will be "delivering competitive, defect-free and HSF products and services on time to satisfy customers," offering our customers the finest service experience.

### R&D design



Listen to customers /  
Start from the standpoints of users' experience and assist in planning the best-selling product portfolio to create a convenient, high-quality, and abundant digital storage life for the consumers.



Insight into new technologies /  
Applying the most visionary insight into the evolution of the cutting-edge technologies, industry dynamics, and customers' needs, we support our customers in finding the best solutions tailored for their demands, enhancing market competitiveness together with customers.

### After-sales service



Global after-sales service /  
Provide localized and real-time sales and technical services through the local sales and technical personnel to ensure customers' access to user experience with 100% satisfaction.



Global logistics system /  
Integrate all interface technologies of logistics and transportation, enabling customers to know real-time shipment status, providing the fastest and most efficient logistics services.

## Multifaceted customer communication approaches

Apacer insists on the spirit of "Service First", putting great importance on communication with customers and actively establishing smooth and diverse communication channels to understand customers' needs and provide perfect services in real-time. Our customer communication approaches can be divided into three categories, standing, regular and irregular. Listening to customers' feedback and opinions is a pivotal nutrient for Apacer to improve and develop customer relations.

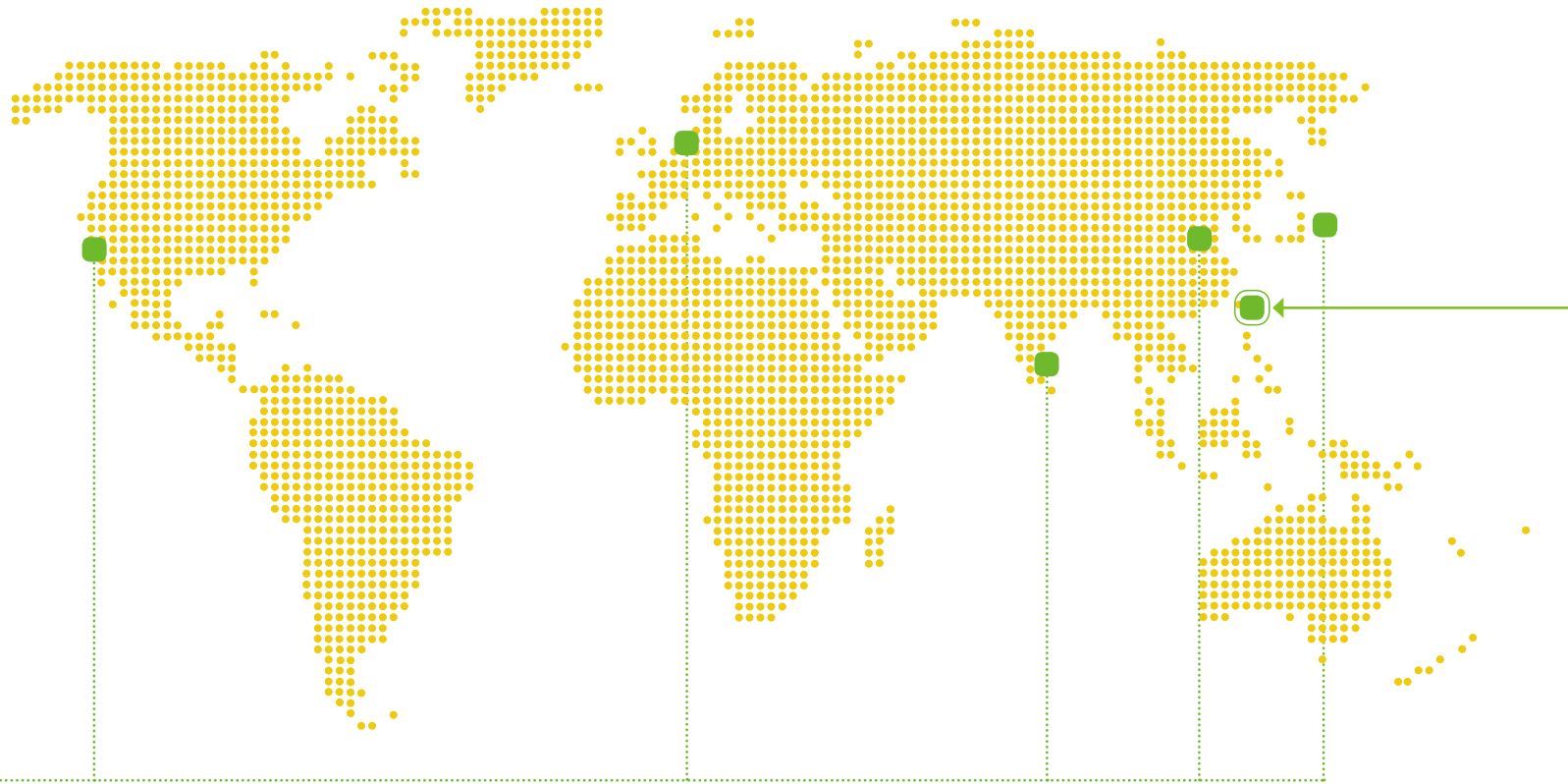
Categories	Communication approach
Standing	- Official website
	- Official social media (YouTube / LinkedIn / Facebook / Instagram)
	- Customer service mailbox
	- After-sales service website
Regular	- Sales/customer service team
	- Customer satisfaction survey/annually
	- CSR report / annually
Irregular	- Sales review with major customers/quarterly
	- Press release
	- Promotional video release
	- Tracking customers' needs and product progress through the CRM system
	- Customer visits
	- Customer audits

## Customer privacy protection

The privacy of each customer is always valued by Apacer with the highest standards. Apacer has developed comprehensive procedures and specifications to protect the customers' privacy and data. In 2021, 0 complaints about data breaches or infringement of customer privacy were recorded. We aim to maintain our excellent performance as we prepare for future risks in advance.

	Customer privacy protection measures
Regulations	- Contracts warranties: Non-disclosure agreement specified in the contracts
	- Customer code system: Customer codes are applied to conceal the customers' real names
	- Independent manufacturing process specification: Ensuring that customers wouldn't breach each other's product privacy due to any identical manufacturing process
Technologies	- Information equipment security control: Avoiding the leakage of customer privacy caused by virus or hacker intrusion
	- Documentation control: Restricting the read and access permissions of data
	- System permission control: Restricting the inquiry and operation on the customer data
	- Access control: Access control system is applied to the information computer facilities and production line

## ● Global After-sales service system



### Global

- Provide localized, real-time sales and technical services through local sales and technical personnel
- Provide customers with professional logistics solution offering real-time status report , efficient process planning, and competitive costs. Customers will enjoy the most rapid and convenient logistics services on the market

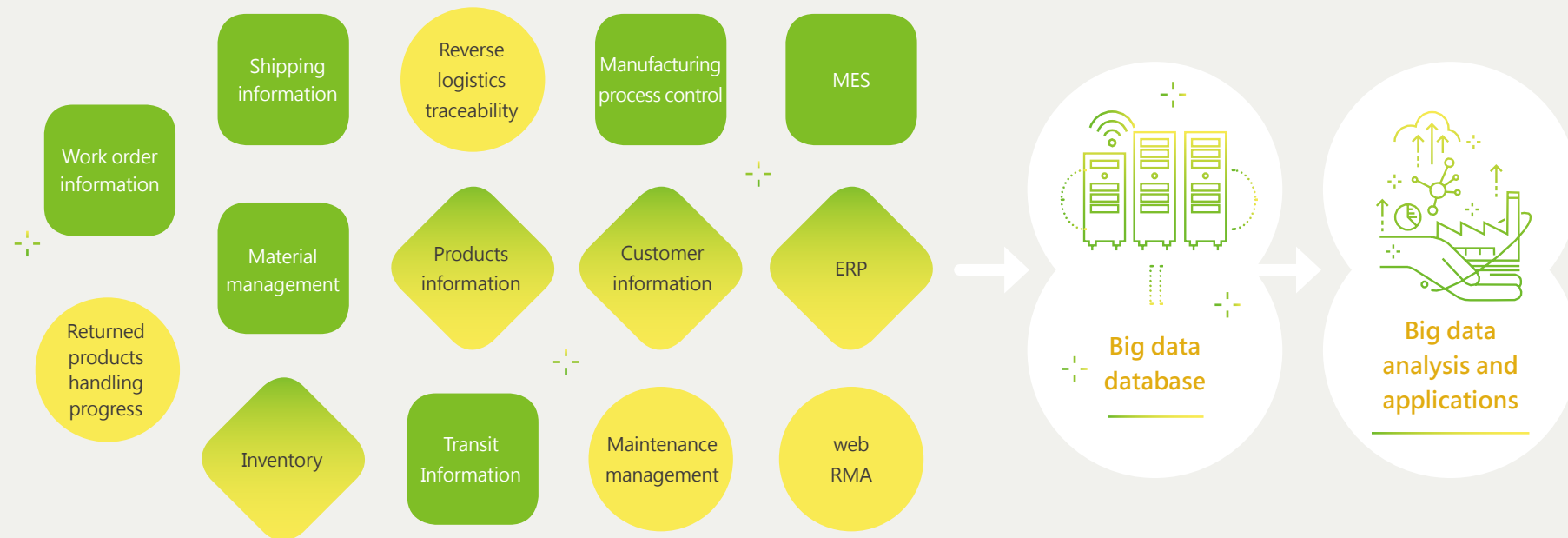
### Taiwan

- The Customer Service Department and the Sales Department are in charge of the after-sale technical supports, customer complaints processing, and the Return Merchandise Authorization (RMA) process
- Service centers are established in northern, central, and southern Taiwan, while agents are also available to provide after-sales services such as product maintenance or replacement

## Serial service system providing better services

To provide customers with more comprehensive services, Apacer integrated systems including ERP (Enterprise Resource Planning), MES (Manufacturing Execution System), webRMA (web Return Merchandise Authorization) to complete the connection of information and databases, strengthening the traceability of information such as manufacturing process, maintenance, shipment, and after-sales service, to provide customers with more comprehensive services that take care of all needs.

Furthermore, the integration of cross-system data is beneficial to the allocation and analysis of data. For instance, through the connection of information and database, big data such as parts management, manufacturing process, customer information, inventory, maintenance, shipment, and after-sales service can all be collected, where subsequent analysis and application can be performed to reveal the needs of different customer base, upgrading the product design, enhancing the manufacturing process capability, and providing products and services that are way beyond customers' expectations to fortified the company's competitive strength.



Description: Orange, green, and blue represents items related to webRMA, ERP, and MES respectively

## ■ Annual customer satisfaction surveys

We conduct customer satisfaction surveys every year to collect customers' opinions. In 2021, we initiated a customer satisfaction survey improvement project and adjusted the questions, which are now divided into six aspects: service, quality, delivery date, R&D design, ESG compliance, and brand impression to understand customers' satisfaction and concern level about the six aspects, enabling adjustments for improvements according to the verdicts and suggestions from our customers. The latest customer satisfaction survey was conducted with the sampled 126 customers who have made business transactions with Apacer in the current year, with the questionnaire return rate reaching 100%, and the overall average satisfaction score was 86.14 points, achieving our goal for customer satisfaction. In the future, we will take the customer satisfaction survey score of this year as the benchmark for further reviews, analyses, and improvements initiated by the sales departments, to ensure the provision of products and services meets the customers' needs better and generates more customer satisfaction.

### 6 Aspects of the customer satisfaction survey

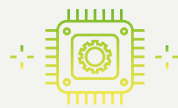
Brand Impression



Service



Quality



Environmental Protection



R&D design



Delivery date



### 2021 Customer satisfaction survey key performance



**126** customers surveyed



Questionnaire return rate



Satisfaction reached  
**86.14** points

## ■ Affirmation from customers

Grace, Senior Procurement Specialist

Many joyful years have passed by in a flash since we started collaborating with Apacer. During these years, Apacer's high-quality service and stable product supply have also left an outstanding impression on us, and they've proven themselves as trustworthy partners throughout the journey. Especially when suffering the limited material supply caused by the pandemic in the past two years, Apacer continued to spare no efforts to communicate and coordinate with us on all the required materials to maintain the stable supply, and we truly appreciate their reliable support during the difficult times.

Thinking back on the most special thing about my interaction with Apacer, it's definitely Apacer's attitude toward their service. After fully understanding our needs, they always give in everything they have to satisfy us. Therefore, I have strong faith in them will continue to offer collaboration opportunities to them. As long-term partners, I hope to continue our fascinating relationship with Apacer in the future as we progress forward and grow together, sharing our experience on ESG sustainability issues, and earning our status as the leaders of our industries.

## Chapter IV

# A Better Partner for a Friendly and Healthy Workplace

### Human resources Vision

Human resources administrative mission: Be a passionate, innovative, and reliable human resource and administration professional team.

Human resources administrative vision: An Apacer learning organization for creating a friendly and healthy workplace.

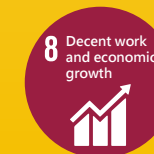
Apacer insists on the core value "Becoming better partners" to "Deliver on our promises, strive for constant improvement, advance with our partners," combining corporate sustainability and human resource development, enabling learning opportunities to emerge among employees and organizations, which shall enhance employees' knowledge and experience, stimulate organizational performance, while also focusing on the health and family life of employees to create a friendly and healthy workplace, achieving a work-life balance.

### Policies and Commitments

Talent development strategy: Introduce excellent talents to accumulate future technologies, setting up a reliable employer brand.

Apacer has established a double-track talent development system, presenting a double-track talent cultivation framework based on competency, driving the talent supply chain mechanism while establishing Apacer Academy, while maintaining the decent remuneration level of the industry, as Apacer insists on the A+ EAPs Employee Assistance Program for the creation of a friendly and healthy workplace, enhancing talents and building a win-win situation.

### Contribution to the United Nations Sustainable Development Goals (SDGs)



# Issues of this Chapter

Materiality issues : Occupational Health and Safety		Responding material topics (2018) GRI403 Occupational Health and Safety
Manage method		Actual action
Responsibility	Occupational Safety & Health Office	<ul style="list-style-type: none"> <li>- Disaster prevention measures</li> <li>- Safety and health education plan</li> <li>- Automatic inspection mechanism</li> <li>- Health management system</li> <li>- Monitor and improve the operational environment, and plan the progressive return to work for occupational accidents</li> </ul>
Resources	<ul style="list-style-type: none"> <li>- Human resources: Occupational Safety and Health Management Committee</li> <li>- Budget: The budget is allocated by the Sustainable Development Committee and the Occupational Safety and Health Management Committee for each year</li> </ul>	
Communication approach	<ul style="list-style-type: none"> <li>- Regularly convene the quarterly meetings of the Sustainable Development Committee and the Occupational Safety and Health Management Committee</li> <li>- Promote related knowledge and activities through Apacer's Intranet</li> </ul>	
Sustainability goals		Appraisal method
Short-term goals (2022)	Implement the health-promoting and community sports instructor mechanism	The reward for sports instructors employed by enterprises
Mid-term goals (2022~2024)	Create a friendly and healthy workplace by A* EAPs	Less than 1 occupational accident every 6 months
Long-term goals (2025)	Set up a reliable employer brand	The annual withdrawal rate of all employees remains under 3%
Achievements and performances in 2021		
<ul style="list-style-type: none"> <li>- Acquired the Healthy Workplace Accreditation from the Health Promotion Administration</li> <li>- Less than 1 occupational injury disaster: (the actual case number is 0)</li> <li>- The annual labor withdrawal rate of all employees remains below 3% (the actual withdrawal rate is 1.9%).</li> </ul>		
Contribution to the United Nations Sustainable Development Goals (SDGs)		
SDGs 3 Good Health and Well-being		

Materiality issues : Employee welfare / Talent Attraction and Retention / Talent cultivation		Responding material topics GRI 401 Employment GRI 404 Training and Education
Manage method		Actual action
Responsibility	Human resources & Administration Dept.	<p>Employee welfare:</p> <ul style="list-style-type: none"> <li>- Welfare system with benefits superior to the standard specified in the Labor Standard Act</li> <li>- Maintain the remuneration level in the manpower market of the same trade</li> <li>- Apacer A* EAPs Employee Assistance Program</li> <li>- Create a friendly and healthy workplace</li> </ul> <p>Talent cultivation:</p> <ul style="list-style-type: none"> <li>- Apacer's double-track talent cultivation system</li> <li>- Apacer's talent supply chain mechanism</li> <li>- Apacer Academy (training development system, training framework, learning map)</li> </ul>
Resources	<ul style="list-style-type: none"> <li>- Human resources: Human resources &amp; Administration Dept.</li> <li>- Expenditure: The budget is allocated annually by the Sustainable Development Committee, the Executives Management Committee, the Employee Welfare Committee, and the Responsible Business Alliance Committee</li> </ul>	
Channels of Com-munication	<ul style="list-style-type: none"> <li>- Regularly convene the quarterly meetings of the Sustainable Development Committee, the Executives Management Committee, and the Employee Welfare Committee</li> <li>- Promote courses and activities through the Apacer's intranet</li> </ul>	
Sustainability goals		Appraisal method
Short-term goals (2022)	<ul style="list-style-type: none"> <li>- Analyze the talent graps to improve the consistency of talent supply chain members</li> <li>- Competency inventory of Apacer Academy, as well as the planning and implementation of required course</li> </ul>	<ul style="list-style-type: none"> <li>- The consistency of the talent supply chain and double-track talent reaches 60%</li> <li>- The retention rate of talent supply chain and double-track talent reaches 80%</li> <li>- Appraisal rate of competency reaches 100%</li> <li>- The implementation rate of talent cultivation courses reaches above 90%</li> </ul>
Mid-term goals (2022~2024)	<ul style="list-style-type: none"> <li>- Maintain the remuneration level in the manpower market of the industry</li> <li>- Create a friendly and healthy workplace with A* EAPs</li> </ul>	<ul style="list-style-type: none"> <li>- External remuneration survey report results maintained at P50~P75</li> <li>- Satisfaction of employee activities reaches above 80%</li> </ul>
Long-term goals (2025)	<ul style="list-style-type: none"> <li>- Introduce excellent talents to establish future technologies</li> <li>- Set up a reliable employer's brand</li> </ul>	<ul style="list-style-type: none"> <li>- The competency availability rate reaches above 90%</li> <li>- The annual withdrawal rate of all employees remains below 3%</li> </ul>
Achievements and performances in 2021		
<ul style="list-style-type: none"> <li>- Apacer academy and learning map construction rate reached 100%.</li> <li>- The percentile of the external remuneration survey report maintained above P50</li> <li>- The annual growth rate of double-track talents in the talent supply chain reached above 2% (the actual result is 20%)</li> <li>- The implementation rate of talent cultivation courses reached above 90% (the actual result is 97%)</li> <li>- The competency availability rate reached 92% in the first year.</li> <li>- The annual labor withdrawal rate of all employees remained below 3% (the actual result is 1.9%)</li> </ul>		
Contribution to the United Nations Sustainable Development Goals (SDGs)		
SDGs 3 Good Health and Well-being, SDGs 4 Quality Education, SDGs 5 Gender Equality, SDGs 8 Decent Work and Economy Growth		



# 4.1 Employee Overview

## Employee rights and interests

Apacer safeguards employees' rights and interests following the Responsible Business Alliance (RBA) standards that offer benefits superior to the standard specified by laws and regulations. In 2017, Apacer joined the Electronic Industry Citizenship Coalition (EICC), and has been to cooperating with EICC in organizing re-branding since then. With our continuous participation in the Responsible Business Alliance (RBA), we have won the Silver Award for certification two consecutive times.



### Protect the rights and interests of employees

- All of Apacer's employees enjoy the same human rights protection, and shall not be discriminated against because of their ethnicity, skin color, age, gender, sexual orientation, or nationality, disability, pregnancy, belief, political stance, marital status, educational background, etc.
- Labor contracts shall be signed by all employees on the day very of employment to protect their rights and interests
- Put importance on labor issues such as employment at will, young workers, working hours, remunerations and welfares, humane treatment, anti-discrimination / anti-harassment and freedom of association of employees
- There was no discrimination or forced labor in 2021



### Protect the freedom of association

The company expressly specifies the Management Measures for Trade Union Organization and Assembly Place. Employees have the freedom of association and have the right to freely establish or join trade unions



### Prohibit illegal employment of child labor

Workers less than 16 years old are never illegally hired. Minor employees are strictly prohibited from engaging in dangerous work, and "Remedial Measures for Employment of Child Labor" and "Management. Measures for Minor workers " are expressly formulated



### Diverse communication approaches

- Expressly specify the Compliant Handling Measures to solve problems related to employees' rights and interests and unfair treatment
- Regularly hold labor coordination meetings to strengthen mutual trust between the labor side and management side

● Apacer's Workplace

Apacer regards the principle of "Deliver on our promises, strive for constant improvement, advance with our partners" as the core value of creating a friendly and healthy workplace for employees. For us, Apacer employees are not only valuable working partners but also our family members. We hope that employees can be comfortable and at ease in the office, feeling just like they're at home. Therefore, we've set up the Employee Lounge, the Pressure-Relieving Workout Area, Leisure Reading Area, Leisure Entertainment Area, and Stress-Relieving Massage Area on the first floor of the operational headquarters, to provide creative pressure-relieving leisure spaces with multiple functions, while offices on each floor also have several independent chatting spaces with different styles for employees' to use freely. We hope to reduce the sense of restraint in the office space and inspire limitless creativity with the diverse space designs.



Apacer operational headquarters lobby



Employee Lounge



Pressure-Relieving and Workout Area



Stress-Relieving Massage Area



Leisure Reading Area

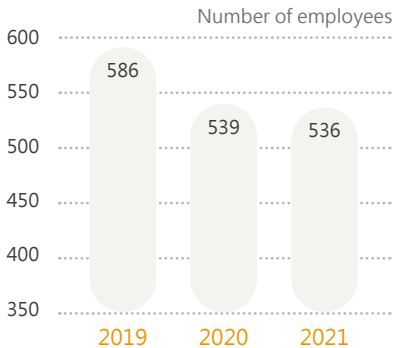


Leisure and Entertainment Area

● Overview of global employees

Number of global employees in recent 3 years

As of the end of 2021, Apacer has a total of 536 employees worldwide, with management positions accounting for 14% of the global employees, the direct employees of the production line accounting for 25%, and the indirect employees who are not in the production line accounted for 75%.



Global employees distribution in 2021

According to the gender distribution statistics of Apacer's global employees worldwide, female employees account for about 51% while male employees accounted for about 49%. The gender distribution ratio can be considered average.

Item	Category	Female		Male		Total	
		Number	Percentage	Number	Percentage	Number	% of the total
Headquarters	Full-time	241	51.7%	225	48.3%	466	98.3%
	Part-time	4	50.0%	4	50.0%	8	1.7%
Overseas	Full-time	31	50.0%	31	50.0%	62	100.0%
	Part-time	0	0.0%	0	0.0%	0	0.0%
Total		276	51.5%	260	48.5%	536	100.0%

Note: Overseas regions include the United States, the Netherlands, Japan, China, and India

● Overview of operational headquarters employees

Number of operational headquarters employees in recent years

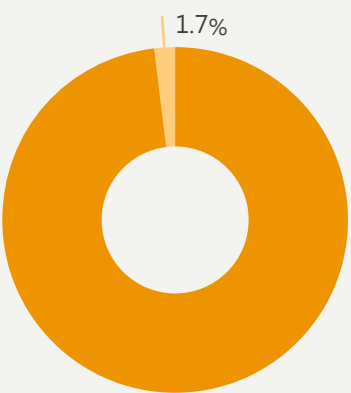
Apacer values the development of local talents. In 2021, 474 employees were working at the operational headquarters, with local employees accounting for 90% of the total employees. The executive level consists of 9 persons, including the chairman and CSO, the president, the vice president, and the head of each center, and all are local employees from Taiwan.

Analysis of operational headquarters employees in 2021

Employee category analysis

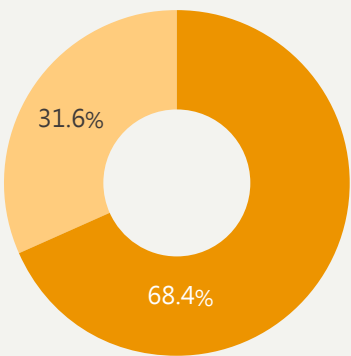
In the categories analysis in Apacer's operational headquarters employees, the contract categories mainly composed of full-time employees, accounting for about 98%; for the production categories, indirect employees account for about 68%; as for the duty categories, professional employees account for about 46%, which occupy the largest proportion, followed by technical employees (direct) accounting for about 32%. The gender ratio at the executive level is 1:1.

Contract category of employees in the operational headquarters



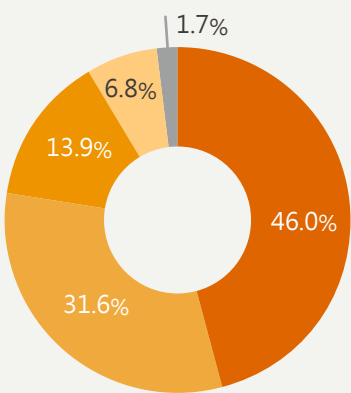
- Full-time employees 98.3%
- Contractors 1.7%

Production category of the operational headquarters employees



- Indirect employees 68.4%
- Direct employees 31.6%

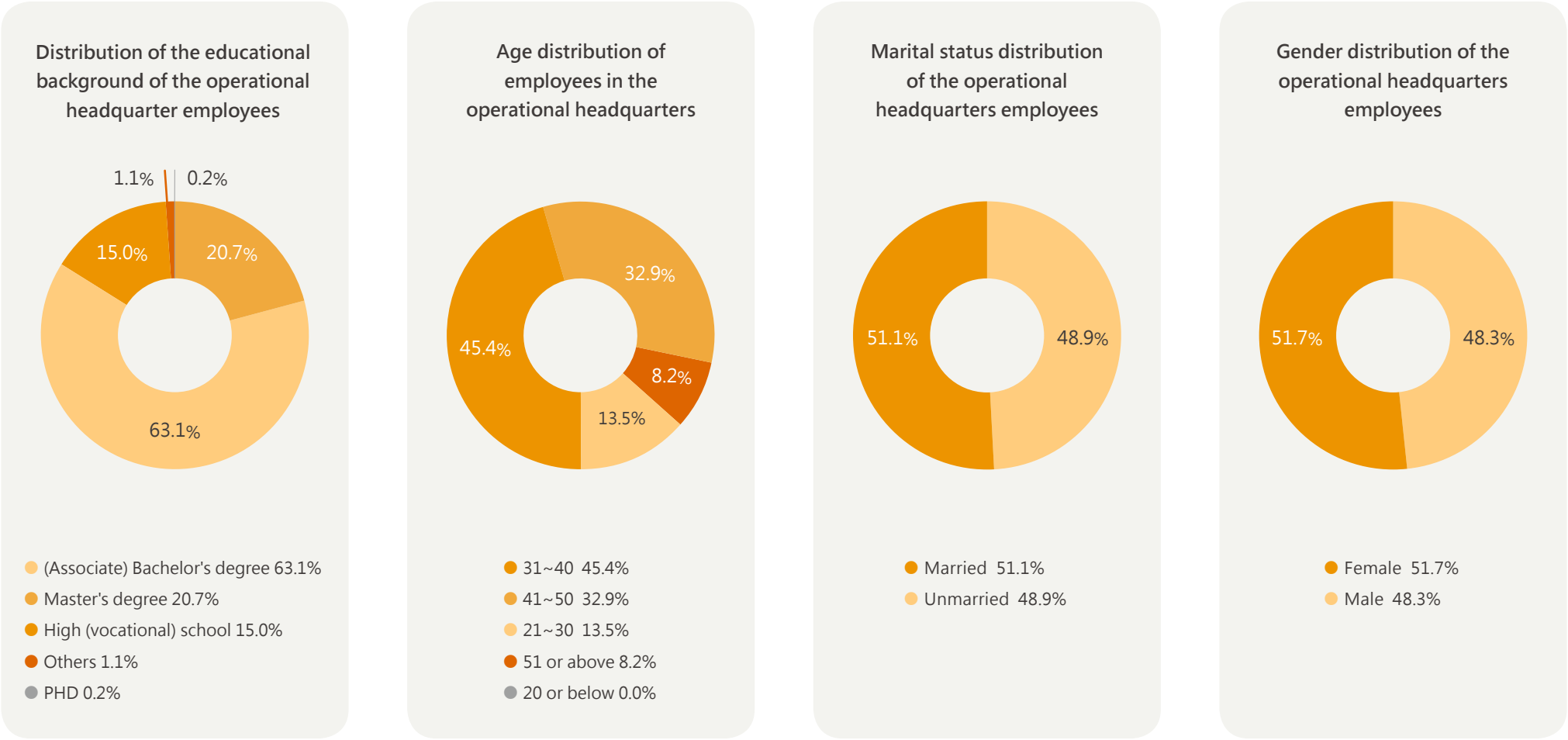
Duty category of the operational headquarters employees



- Professional employees 46.0%
- Technical employees 31.6%
- Managers 13.9%
- Sales employees 6.8%
- Executive-level 1.7%

### Employee basic profile analysis

Apacer analyzed the basic profile of the operational headquarters employees in Taiwan, and it can be seen that about 63% of the employees own (Associate) Bachelor's degree, which accounts for the majority; 45% of employees are aged 31-40, which is the main age distribution, followed by those who aged 41-50 which account for 33%. For marital status distribution, about 51% of employees are married, while unmarried employees account for 49%, and the marriage distribution ratio can be considered average; The gender distribution is about the same as the employees worldwide, and the gender distribution ratio is also average. Apacer analyzes employee categories and basic profiles annually to design the most ideal A+ EAPs employee assistance programs that meet the needs of employees. For details, refer to [4.3 Employee Welfare and Communication](#).



### Employee statistics

Over the years, Apacer has abided by the laws and regulations promulgated by the government and has been protecting ethnic minorities and the physically and mentally challenged with reserved job position quotas. The detailed related statistics of employees are as follows:

2021 Statistical Data on Employees in Taiwan							
Item	Category	Female		Male		Group subtotal and ratio	
		Number	%	Number	%	Number	% of the total
Contract categories	Full-time	241	51.7	225	48.3	466	98.3
	Part-time	4	50.0	4	50.0	8	1.7
Production categories	Direct	101	67.3	49	32.7	150	31.6
	Indirect	144	44.4	180	55.6	324	68.4
Duty categories	Executive level	4	50.0	4	50.0	8	1.7
	Management	19	28.8	47	71.2	66	13.9
	Professional	107	49.1	111	50.9	218	46
	Sales	14	43.8	18	56.3	32	6.8
	Technical	101	67.3	49	32.7	150	31.6
Educational background distribution	PHD	0	0	1	100	1	0.2
	Master's degree	35	35.7	63	64.3	98	20.7
	(Associate) Bachelor's degree	149	49.8	150	50.2	299	63.1
	High school (vocational)	56	78.9	15	21.1	71	15
	Others	5	100	0	0	5	1.0
Age distribution	20 or below	0	0	0	0	0	0
	21~30	38	59.4	26	40.6	64	13.5
	31~40	107	49.8	108	50.2	215	45.4
	41~50	77	49.4	79	50.6	156	32.9
	51 or above	23	59	16	41	39	8.2
Marital status distribution	Married	116	47.9	126	52.1	242	51.1
	Unmarried	129	55.6	103	44.4	232	48.9
Protected ethnic minority	Indigenous peoples	2	66.7	1	33.3	3	0.6
Reserved quota	Physically and mentally challenged	2	50.0	2	50.0	4	0.8
Total		245	51.7	229	48.3	474	100.0%

Note 1: Technical employees are the direct employees working in the production line  
 Note 2: In the event of any vacancy due to staff turnover, apart from paying the money substitutions following the law, Apacer takes the initiative to publicly recruit ethnic minorities as well as physically or mentally challenged individuals to join Apacer on the recruitment website.

### Turnover of employees in the operational headquarters in 2021

Apacer's annual employee withdrawal rate has always been lower than 3%. This will continue to serve as Apacer's goal in the future to maintain a stable manpower supply and fair talent cultivation and development.

Statistics of recruited and withdrawal of employees of the operational headquarters in 2021							
Category	Group	Recruited employees		Withdrawal employees		Total	
		Number	Percentage	Number	Percentage	Number	Percentage of the total
Gender	Female	65	47.8%	71	52.2%	136	62.1%
	Male	46	55.4%	37	44.6%	83	37.9%
Age	20 or below	0	0.0%	0	0.0%	0	0.0%
	21~30	40	58.0%	29	42.0%	69	31.5%
	31~40	54	48.2%	58	51.8%	112	51.1%
	41~50	17	44.7%	21	55.3%	38	17.4%
	51 or above	0	0.0%	0	0.0%	0	0.0%
Total		111	50.7%	108	49.3%	219	100.0%

Annual employees' withdrawal rate in operational headquarters						
Average employees at the beginning of the year	Recruited employees	Withdrawal employees			Average employees at the end of the year	Withdrawal rate
		Management position	Non-management position	Subtotal		
466	111	5	103	108	467	1.9%

Note 1: The withdrawal rate formula is calculated according to the standard of the Work-Life Balance Award of the Ministry of Labor, which is the number of withdrawal persons over the whole year / (the annual average number of employees recruited every month \*12) \*100%

Material  
Issues  
4.2

# Employee Safety and Health

## Occupational Safety and Health Management System



In 2013, Apacer passed the OHSAS 18001 Occupational Safety and Health Management external system certification. In cooperation with the version update of OHSAS 18001 and its name change for ISO 45001:2018 Occupational Safety and Health Management System, Apacer has once again passed the ISO 45001 Occupational Safety and Health Management accreditation in 2020 and continued to conduct external certification to ensure system validity in 2021.

Apacer utilizes the PDCA cycle to achieve occupational safety and health management through methods such as risk evaluation, risk control and management, regular improvement, etc.

Internal audit	<ul style="list-style-type: none"> <li>- Irregular internal audit: Irregular internal audits are conducted every quarter, with the audit results reported to the quarterly Occupational Safety and Health Committee meeting</li> <li>- Regular internal audit: Regular internal audits are conducted every year, with self-inspection conducted before the external audit to ensure the sound operation of related management mechanisms</li> </ul>
External audit	Regular external audits are conducted every year, with the renewal, re-certificate, or certificate transfers performed according to the certification expiration date of the management system

Note 1: The Occupational Safety and Health Management System includes the workers and the plant area of the Apacer operational headquarters, excluding overseas employees.  
 Note 2: The aforementioned workers include: all Apacer operational headquarters employees, resident customer representatives, property security personnel, outsourcers, and contractors.

## Occupational Safety and Health Management Committee

### Operating status of Occupational Safety and Health Committee in 2021

To ensure a friendly and healthy workplace and reduce occupational accidents, Apacer has established an "Occupational Safety and Health Committee" following the "Occupational Safety and Health Act", which is in charge of reviewing, coordinating, and suggesting safety and health-related actions. The Occupational Safety and Health Committee is directly subordinate to the president, which shall convene the regular committee quarterly to review occupational safety and health affairs.

Number of the labor and management representatives	5 labor representatives and 5 management representatives
Election method of labor representatives	Elected by all of the full-time employees
Term of the labor and management representatives	2 years
Frequency of meeting	Quarterly (4 times each year)
Discussion affairs	<ul style="list-style-type: none"> <li>- Occupational safety and health-related issues/management plan/operational environment inspection</li> <li>- ISO 45001 Occupational Safety and Health Management System issues</li> <li>- RBA system issues</li> <li>- Fire fighting system management issues</li> </ul>

Note 1: According to the law, labor representatives shall account for more than 1/3 or more of the Occupational Safety and Health Committee  
 Note 2: The operation of the Committee covers all employees and provides related occupational safety and health training and advocacy for those whose work takes place in the plant

### Occupational Safety and Health Committee's specific measures

The Occupational Safety and Health Committee completely implements occupational safety and health management following four specific measures, namely "disaster prevention," "operational environment monitoring," "operational security control," and "health management system."

Operational control focusing on operation procedures that may generate high risks was conducted, and the operational risks of employees are minimalized through actions including

disaster prevention, education and training, regularly entrusting external qualified institutions to perform operational environment monitoring, implementing special operational control and work permit system according to Occupational Safety and Health Act and safety risk evaluation results, implementing automatic inspection, as well as health management system. Over the years, no work delay has occurred due to occupational diseases.



### Disaster prevention

To prevent operational disasters, Apacer formulated the Occupational Safety and Health Management Plan and established an occupational safety system to manage all potential risks. Through implementing the Occupational Safety and Health Management Plan, and conducting irregular dynamic audits at the operational environment of the plant, all injury, non-injury, and false alarm accidents have been reported, tracked, and improved, which is combined with regular education, training, and advocacy toward all employees. No false alarm events occurred at

Apacer in 2021. In addition, through the ISO 45001 system risk identification, the high-risk areas are found and set as the targets for improvement projects to eliminate potential hazards. The management goal of less than one occupational accident every 6 months is anticipated to be achieved through the related precautions.



Statistics of occupational safety and health education and training in 2021

Course	Total participants	Total hours
Occupational safety and health education and training for recruits	94	282
Occupational safety and health education and training for current employees	453	453
Initial training/retraining of occupational safety and health-related licenses	29	109.5

Note: Occupational safety and health-related licenses include: Occupational safety and health business supervisors, occupational safety and health staff, organic solvent operation supervisors, radiation protection, fire prevention manager, first-aidler, nurse, etc.

Statistics of the number of occupational injuries and diseases among employees in 2021

In 2021, no work-related injuries occurred in Apacer. The related statistical data are as follows:

- Note 1: Total working hours: Roughly estimated based on "the annual total number of employees x total working days x 8 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 occupational injury incidents / Total working hours) 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 working hours) x 200,000\*
- Note 6: Definition of absent: Employees are absent from work due to a loss of their capability to work, including but not limited to reasons such as occupational injuries or diseases (for example, occupational diseases, sick leave, and menstrual leave).
- Note 7: Absent rate (AR)= total absent days/ (annual total number of employees x total working days)
- Note 8: Severe occupational injury incidents are defined as the incidents that cause death or make workers spend more than 6 months to return the healthy condition before injury.
- Note \*: 200,000 is calculated with every 100 employees, 50 weeks per year and 40 work hours per week

Item	Female	Male
Total working hours <sup>1</sup>	448,840	450,672
Total working days	56,105	56,334
Total number of occupational injuries <sup>2</sup>	0	0
Injury rate (IR) <sup>3</sup>	0	0
Number of work-related deaths	0	0
Number of occupational injuries <sup>4</sup>	0	0
Total lost days	0	0
Lost day rate(LDR) <sup>5</sup>	0	0
Total absent days <sup>6</sup>	7,757.5	4,221
Absent rate (AR) <sup>7</sup>	0.055%	0.034%
Number of severe occupational injury incidents <sup>8</sup>	0	0
Severe occupational injury rate	0	0

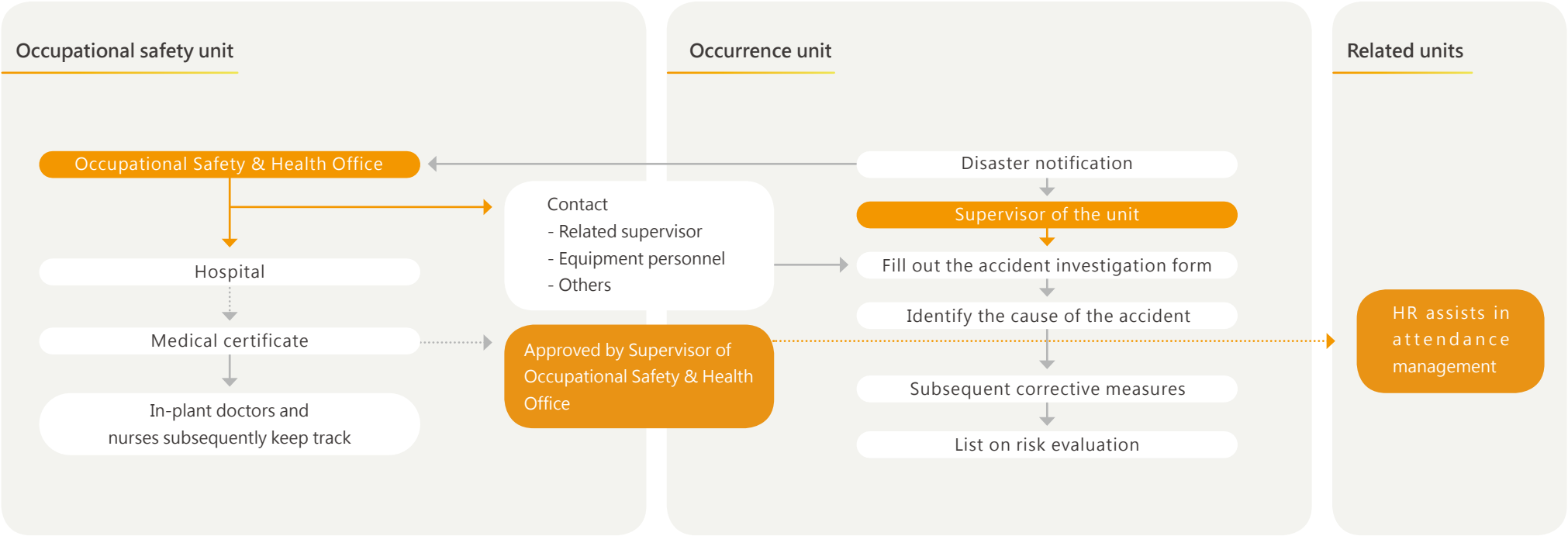
Statistics of occupational injuries and occupational diseases of workers (excluding employees) in 2021

Item	Female	Male
Total number of occupational injuries	0	0
Injury rate (IR)	0	0
Number of deaths	0	0



Apacer has also stipulated a detailed "Occupational Injury" Investigation Process, which applies to all workers. The investigator shall investigate the reason for the accident together with the labor representative, and the report generated shall be reviewed and signed by the president, with assistance to be provided to the injured employee for healthy recovery. To support the injured

employees returning to the workplace as soon as possible, a gradual return-to-work system has been established. When employees are injured and unable to perform their duties, the in-plant medical workers shall provide medical care and related medical suggestion, and also assist in the application for insurance premiums.



According to the "Occupational Safety and Health Act," all workers are entitled to the right to halt. If all workers unanimously agree that there is imminent danger in the workplace, they can immediately withdraw from the working environment and gather at the emergency assembly location. For general workplace risks, related systems have been established for risk evaluation, and management and improvement are conducted for each determined

level. If the risk coefficient reaches 4 points or more, management plan goals are set for improvements to reduce the risk. If disasters such as typhoons, floods, fires, and earthquakes occur, Apacer will establish an emergency response team to formulate emergency response actions and procedures, minimizing the scope of disasters. Also, the reason for the emergency shall be investigated with the precautions reviewed to prevent the repeat of related accidents.

## Operational environment monitoring

Apacer regularly entrusts external qualified institutions to perform operational environment monitoring. The items for monitoring include dust, organic solvent, carbon dioxide, lighting, etc.

If any abnormality is shown in the monitoring results, we will improve and correct the defect at once to ensure the health and safety of our employees.

## Operation security control

To maintain the safety of the operational environment, Apacer implemented special operational control and work permit for overhead operations, hot work, and ionizing radiation equipment following the Occupational Safety and Health Act and the safety risk evaluation results.

Meanwhile, complying with the law requirements, automatic inspections are performed with all mechanical equipment regularly inspected and approved. Operators are required to obtain professional licenses, while regular current employee retraining sessions are held.

To prevent operational disasters, operators are required to wear protective gear according to the nature of the operation.

Furthermore, to keep operators safe from radiation hazards, Apacer implements regular equipment detections and stipulates that workers shall wear radiation badges and undergo radiation operation health examinations, to gain a proper understanding of the operators' received radiation amount and their health condition.

## Health management system

Apacer plans a health management system for its employees based on the four aspects: "Eat decently, exercise diligently, know your body, and always stay healthy." For details, please refer to: [4.3 Employee Welfare and Communication](#).

To comprehensively acknowledge the employees' health conditions and prevent occupational diseases, Apacer regularly conducts health examinations for operators and divides the examined items into "for general operations" and "for special hazardous operations" according to the category of operation.

For workers exposed to ionizing radiation and organic solvents, whose health and safety are at higher risk, we also prepare special examination items and implement rated management. In 2021, a total of 8 employees tasked with special hazards operations underwent special health examinations, with all the results being normal. If any work-related abnormal health condition is discovered, we will evaluate and manage it at different levels.

Meanwhile, the "personnel health risk evaluation form" prepared by the nurse will help individuals in noticing their health conditions. In addition, Apacer's A+ EAPs employee assistance program has also planned a series of activities regarding health and exercising in the y-axis "A+ Health" program and the x-axis "Action" program, to strengthen the health management of employees and workers and to promote sustainable healthy workplaces.

For details about Apacer's healthy workplace actions, please refer to: [4.3 Employee Welfare and Communication](#).

# Employee Welfare and Communication

Apacer promises to create a friendly and healthy workplace that is worthy of long-term dedication for employees

## ● Developing Apacer A<sup>+</sup> EAPs employees assistance programs

Development  
of EAPs

- in 2017** **A<sup>+</sup> Well-being Enterprise Project-March toward a Well-being Enterprise** Recognized as an Accredited Healthy Workplace by the Ministry of Health and Welfare starting with the "A<sup>+</sup> Well-being Enterprise Project", Apacer planned various welfare activities from the three aspects of work, family, and health, promoted a happy workplace, and was recognized as an Accredited Healthy Workplace by the Health Promotion Administration, Ministry of Health and Welfare.
- in 2018** **Apacer A<sup>+</sup> EAPs Employee Assistance Program(18 items)-create a friendly workplace** Won the Work-Life Balance Award from the Ministry of Labor. Apacer escalated the progress, marking A<sup>+</sup> work, A<sup>+</sup> family, and A<sup>+</sup> health as the axis of ordinate, and food, clothing, housing, transportation, education, and entertainment as the axis of abscissa, then present the employee assistance programs and activities of the 18 items, upgrading to "Apacer A<sup>+</sup> EAPs Employee Assistance Program" to create a friendly workplace, which earned the Work-Life Balance Award from the Ministry of Labor.
- in 2019** **Apacer A<sup>+</sup> EAPs Employee Assistance Program(28 items)-Created a friendly and healthy workplace** Received the Sports Enterprise Certification from the Ministry of Education & Recognized as an Accredited Healthy Workplace by the Ministry of Health and Welfare. Apacer continued to further improve. In response to the spirit of CSR and RBA's sustainable operation, Apacer promoted a healthy workplace and encouraged employees to exercise more for health! Apart from A<sup>+</sup> work, A<sup>+</sup> family, and A<sup>+</sup> health, the axis of ordinate is also combined with "CSR & RBA" to form a total of four aspects; In addition to food, clothing, housing, transportation, education, and entertainment, the axis of abscissa, adding with "exercising", is divided into 7 programs, developing employee assistance programs and activities of 28 items to create a friendly and healthy workplace. Apacer has not only been recognized as an Accredited Healthy Workplace by the Health Promotion Administration under the Ministry of Health and Welfare for multiple consecutive years, but has also received the Sports Enterprise Certification issued by the Sports Administration under Ministry of Education.
- in 2020** **Apacer A<sup>+</sup> EAPs Employee Assistance Program(28 items)-Created a friendly and healthy workplace** Received the Enterprise's Sports Instructor Employment Subsidy from the Ministry of Education. Apacer continued the promotion of a friendly and healthy workplace and the operation of the employee assistance programs and activities of 28 items, while also obtaining the Enterprise's Sports Instructor Employment Subsidy from the Sports Administration, Ministry of Education.
- in 2021** **Apacer A<sup>+</sup> EAPs Employee Assistance Program(28 items)-Created a friendly and healthy workplace** Received the Enterprise's Sports Instructor Employment Subsidy from the Ministry of Education & Recognized as an Accredited Healthy Workplace by the Ministry of Health and Welfare. Following the latest ESG developments, the fourth aspect of the 28-item "Apacer A<sup>+</sup> Employee Assistance Program" was reformed from "CSR & RBA" to "ESG & RBA", and Apacer continued to improve the operation of employee assistance programs and activities. Again, Apacer obtained the Enterprise's Sports Instructor Employment Subsidy from the Sports Administration, Ministry of Education. and was recognized as an Accredited Healthy Workplace by the Health Promotion Administration, Ministry of Health and Welfare.

Achievement of EAPs

### Enjoy Job /



**2018**  
Won the Work-Life Balance Award from the Ministry of Labor



A+EAP  
employees'  
assistance  
program

A+ Health

A+ Family

A+ Work

### Enjoy Life /



- Recognized as an Accredited Healthy Workplace by the Ministry of Health and Welfare in 2021
- Received the Enterprise's Sports Instructor Employment Subsidy from the Ministry of Education in 2021
- Received the Enterprise's Sports Instructor Employment Subsidy from the Ministry of Education in 2020
- Received the Sports Enterprise Certification from the Ministry of Education in 2019
- Recognized as an Accredited Healthy Workplace by the Ministry of Health and Welfare in 2019
- Recognized as an Accredited Healthy Workplace by the Ministry of Health and Welfare in 2017

● The operation of Apacer A+ EAPs Employee Assistance Program

Apacer A+ EAPs = A+ Work + A+ Family + A+ Health + ESG & RBA

In 2017, Apacer's HR team presented the design prototype and concept of Apacer A+ EAPs after years of annual analyses of the employee categories and basic profile. Setting work-life balance as the main goal, the team began to design all types of activities or programs that fulfill the needs of employees. The marriage status and gender of Apacer's employees in Taiwan are distributed averagely, while the employees aged 31-50 account for about 80%, occupying the majority, and the office desk job accounts for 90% or more (shift personnel accounts for about 30% or more), therefore, the activity plans for Apacer operational headquarters were optimized for each employee's need and nature of work as much as possible, including consideration for the day and night shifts of the employees on the production to meet each Apacer employee's needs.

Apacer's A+ 28-item Employees Assistance Program is as follows:

### Development of EAPs

<div> <div> <div>A+ EAP</div> <div>employees' assistance program</div> </div> </div>		Food	Clothing	Housing	Transportation	Education	Recreation	Exercising
A+ Work		Subsidy for three meals every day	Apacer's uniform	Relieving rest area	Flexible working hours	TTQS Certification	Paid leaves with benefits superior to law requirements	Sports Enterprise Certification
		Meal allowance	Production line uniform	Creative thinking room	Tele work	Training for recruits	Annual new-year party	Sports instructor
A+ Family		Annual department dinner party		Professional property management and cleaning	Work from home	Training for current employees	Birthday gift cards/activities	
A+ Family		Subsidy for dinner every day	Apacer employee purchases	Award-Winning breastfeeding room	Family insurance with more benefits than the laws and regulations	Handbook for Novice parents	Family Day	Workout Day
		Shop stand of firms	Shop stand of firms			Maternity pension	Company trips	
A+ Family		Appointed firms with discount	Appointed firms with discount			Childcare measures	Parent-child are exhibition	
A+ Family		Vegetarian day	Cleaning service for work uniforms	Medical center accredited for workplace safety	Exercising community	Health-promoting activities	Weekly stress-relieving massages	Sports clubs
						Health-promoting lectures	Health examinations with benefits superior to law requirements	Workout competition
A+ Family							Professional medical consultation	
ESG	RBA	Qualified Meal Provider	Free laundry room for migrant workers	Free dormitory for migrant workers	Transportation allowance for migrant workers	Promotion and training for migrant workers	Gift cards for three major festivals	Pressure-relieving workout area
			Subsidy for the agent of migrant workers				Festive activities	

## A<sup>+</sup> EAPs \_ A<sup>+</sup> Work

### Hiring sports instructors and receiving the Sports Enterprise Certification

While actively promoting a friendly and healthy workplace, Apacer also encourages employees to participate in club activities beneficial to physical and mental health, offering funds and activity subsidies to support the operation and development of the club. Currently, the company's diverse six major sports clubs include a basketball club, a badminton club, a golf club, a yoga club, a boxing aerobics club, and a muscle strength training club. Through the care and assistance of professional sports instructors, sports become a healthy way for employees to relieve stress, and every employee can enjoy a healthy and enriched life through inter-club communication. Since the Sports Administration began to actively promote sports instructors in businesses, Apacer has utilized the Sports Enterprise rewards to hire sports instructors. The sports instructors act as promoters of a healthy workplace, offering coaching and advice to sports clubs, enhancing the intensity and breadth of physical training for employees, and further advocating the health benefits of sports.



Apacer continues to strive for a better friendly and healthy workplace and has been receiving the Enterprise's Sports Instructor Employment Subsidy from the Sports Administration, Ministry of Education for several consecutive years now.

## A<sup>+</sup> EAPs \_ A<sup>+</sup> Family

Limited by the pandemic, Apacer's family day in 2021 was changed from the original outdoor activities to the lottery with a total prize of NT\$ 3 million or more. A total of 160 winners won NT\$ 10,000 cash, and those who did not win the lottery were also given a NT\$ 6,000 Happy Cash Award. In addition, the president additionally gave out added 40 department store gift certificates as surprise gifts. This time, with the concept of everyone winning the prize, Apacer made all the employees happy with their wallets full to thank them all for their efforts during the pandemic.



## A<sup>+</sup> EAPs \_ A<sup>+</sup> Health

Apacer plans the health management system for its employees in the four aspects of "Eat decently, exercise diligently, know your body, always stay healthy" as follows:

### Health management system

#### Eat decently /

**Start managing your health through diet !**  
Practice healthy diet concepts

#### Exercise diligently /

**To become healthy, one must move their body ! Integrate the fun and stress-relieving activities into work and life !**

1. Workout community
2. Sports clubs
3. Workout competition
4. Pressure-relieving workout area

#### Know your body /

**Enhance your knowledge and concepts of health !**

1. Health-promoting activities
2. Health-promoting lectures

#### Always stay healthy /

**Comprehensive achievements of health-protecting management measures !**

1. Happy health examination with benefits superior to law requirements
2. In-plant professional physician consultation
3. Provide family insurance with benefits superior to law requirements
4. Weekly stress-relieving massages



## A+ EAPs\_ A+ Health

Eat decently\_ Vegetarian day, start managing your health through diet!



To practice the concept of a healthy diet, Apacer holds regular "vegetarian day" activities every year. Even during the pandemic, we still actively promote low-carbon, environmentally friendly, and healthy vegetarian diets to all our colleagues. While seasonal and local food ingredients, as well as whole foods, are advocated for the employees and workers, the seasonings, additives, and processed food are also reduced. This will not only lighten the Earth's pressure but will also relieve the burden on our bodies.

## Exercise diligently 1\_ Work out community, to become healthy, one must move their body!

"To become healthy, one must move their body!" is a concept actively promoted by Austin Chen, Chairman of Apacer, after he recovered from meningioma surgery. The chairman profoundly acknowledged the importance of health after his surgery, he not only discipline himself with the "333 Law for Workout" advocated by the Sports Administration (do aerobic exercise for 3 days each week, 30 minutes each day, raising heart rate of each exercise session at least 130 times/minute) but also devoted himself to creating a healthy workplace for Apacer and starting encouraging employees and workers to establish regular exercise habits.



In response to the serve COVID-19 pandemic in 2021, during the domestic level 3 alert period, employees have been divided into groups to take turns entering the office or working from home. However, Apacer still upholds the concept of "To become healthy, one must move their body!", and continues to encourage employees to exercise together. Through the JooiSports APP, a workout community was established for employees to remind each other to walk at least 4000 steps per day, which is a goal that can always be achieved effortlessly even when working from home. Through the human body dashboard feature in the app, personal health information including body posture, physical fitness, and physical and mental status are recorded, enabling comprehensive personal physiological information to be reviewed. Apply the scientific data to monitor your physical condition anytime, anywhere!

As of the end of 2021, a total of 240 employees and workers have joined the workout community, achieving a participation rate of 51%. Since 2018, a total of 503,342,481 steps have been accumulated over the years, reaching 387,187 km in distance, which is equivalent to making roundtrips from Taipei to Los Angeles 18 times, how astonishing!

The achievement of all employees is recorded on the JooiSports APP's platform, encouraging members to keep exercising, making exercise a pressure-relieving part of employees' and workers' daily lives, maintaining personal healthy physical and mental state, and progressing to become a healthy workplace.



## A<sup>+</sup> EAPs \_ A<sup>+</sup> Health

### Exercise diligently 2\_ Sports clubs, to become healthy, one must move their body!

Based on Apacer Chairman Austin Chen's concept of "To become healthy, one must move their body!", President Chia-Kun Chang encourages employees to participate in club activities that are beneficial to the body and mental health by providing funding funds and activity subsidies to support the operation and development of the company's sports clubs.

Currently, there are six Apacer sports clubs with outstanding diversity, including a basketball club, a badminton club, a golf club, a yoga club, a boxing aerobics club, and a muscle strength training club, with a total of 106 persons participating in 2021, who received care and assistance of sports instructors and turned exercising into a healthy stress-relieving outlet for employees. Now every employee can enjoy a healthy and enriched life through inter-division communication in the clubs.



### Exercise diligently 3\_ Workout competition, integrate the fun and stress-relieving activities into work and life

Led by President Chia-Kun Chang, Apacer holds various interesting workout competitions in combination with the Dragon Boat Festival and the Mid-Autumn Festival each year, while Family Day and Workout Day are combined for parent-child workout competitions; in 2021, the activities were suspended due to the pandemic limitations.



### Exercise diligently 4\_ Pressure-Relieving Workout Area, integrate the fun and stress-relieving activities into work and life

The Pressure-Relieving Workout Area and Flywheel Fitness Area are set up in Apacer's operational headquarters, providing equipment such as flywheels, riding machines, a foosball table, etc., ensuring employees and workers can enjoy healthy exercises at the company every day.



### Know your body\_ Health-promoting lectures (activities) to enhance knowledge and concepts of health

Every year, Apacer holds different health-promoting activities or lectures according to the external environment and the internal demands from employees to fortify their health protection or to enhance their concept of health.



In 2021, the company earned the approval to provide the nation-funded influenza vaccine free for all employees, and sessions of "InBody" composition machine measurement, as well as the dining out skills and weight control lecture, were held. Furthermore, the company implemented the concept of a healthy workplace and regularly held technological physical fitness tests, assisting employees to understand the ideal physical condition required to tackle all daily affairs (work, pastimes, etc.).



In 2021, a total of 221 persons participated in health-promoting activities (lectures), related statistical information is as follows:

Item	Period	Numbers of participants
Health-promoting activities_ Nation-funded free influenza vaccine for all employees	Q1	109
Health-promoting activities_ "InBody" composition machine measurement service	Q3	39
Health-promoting activities_ Technological physical fitness test	Q4	50
Health-promoting lecture_ dining out skills and weight control	Q4	23

**Always stay healthy 1\_ Happy health examinations with benefits superior to law requirements / in-plant professional physician consultation are provided to achieve comprehensive health management performance.**

Every year, Apacer prepares health examinations with benefits superior to law requirements for employees of all ages to regularly check on their health condition, implementing the concept of "prevention is better than cure" while examining the health items most concerned by employees annually. In 2021, 15 examination items that were not required by laws are provided (Urine routine examination items, liver index GOT, bilirubin, kidney function examination, uric acid, cardiac function examination, inflammation index examination, colorectal cancer, liver cancer, oral mucosa screening, vascular elastic sclerosis examination, autonomic nervous system screening, abdominal ultrasound, carotid ultrasound, and physical examination). According to the result of the examination, Apacer takes the initiative to arrange interviews with the in-plant doctor for employees from abnormally high-risk groups to help them discover abnormalities, correct, or cure as soon as possible.



In 2021, a total of 438 persons underwent the examinations, and 24 persons were diagnosed with "Three Highs", (namely high blood pressure, high blood lipid, and high blood sugar) and were recorded for further tracking. Throughout the year, in-plant doctors have given professional medical suggestions to 71 employees, ensuring their access to professional assistance and services.

**Always stay healthy 2 \_ Family insurance with benefits superior to law requirements, ensuring health management progress**

Apart from providing employees with labor and health insurances, and allocating pensions to the new and old retirement system with the full amount with no delays under the laws, Apacer provides four material insurances with benefits superior to law requirements (accident insurance, medical insurance, cancer insurance, and life insurance) for all employees every year, completely protecting employees and their families, while the company is more than willing to bear the experience rating. Also, employees can insure family members at their own expense, enjoying comprehensive protection at the same time. In 2021, in response to the pandemic and the government's promotion of the COVID 19 vaccine, the "Golden Vaccine Pandemic Prevention Insurance" is purchased for employees, protecting all of us from possible side effects after vaccination.

**Always stay healthy 3\_ Weekly stress-relieving massages ensure the best physical and mental condition!**

Since 2008, to keep the employees in good physical and mental

condition, Apacer had been providing weekly stress-relieving massage services for more than 14 years to this day. In 2021, a total of 848 persons enjoyed the massage. Massage is an effective stress-relieving method which can ensure the physical and mental health of the employees. We hope that every employee can enjoy a healthy and high-quality life.

**A<sup>+</sup> EAPs \_ A<sup>+</sup> ESG & RBA**

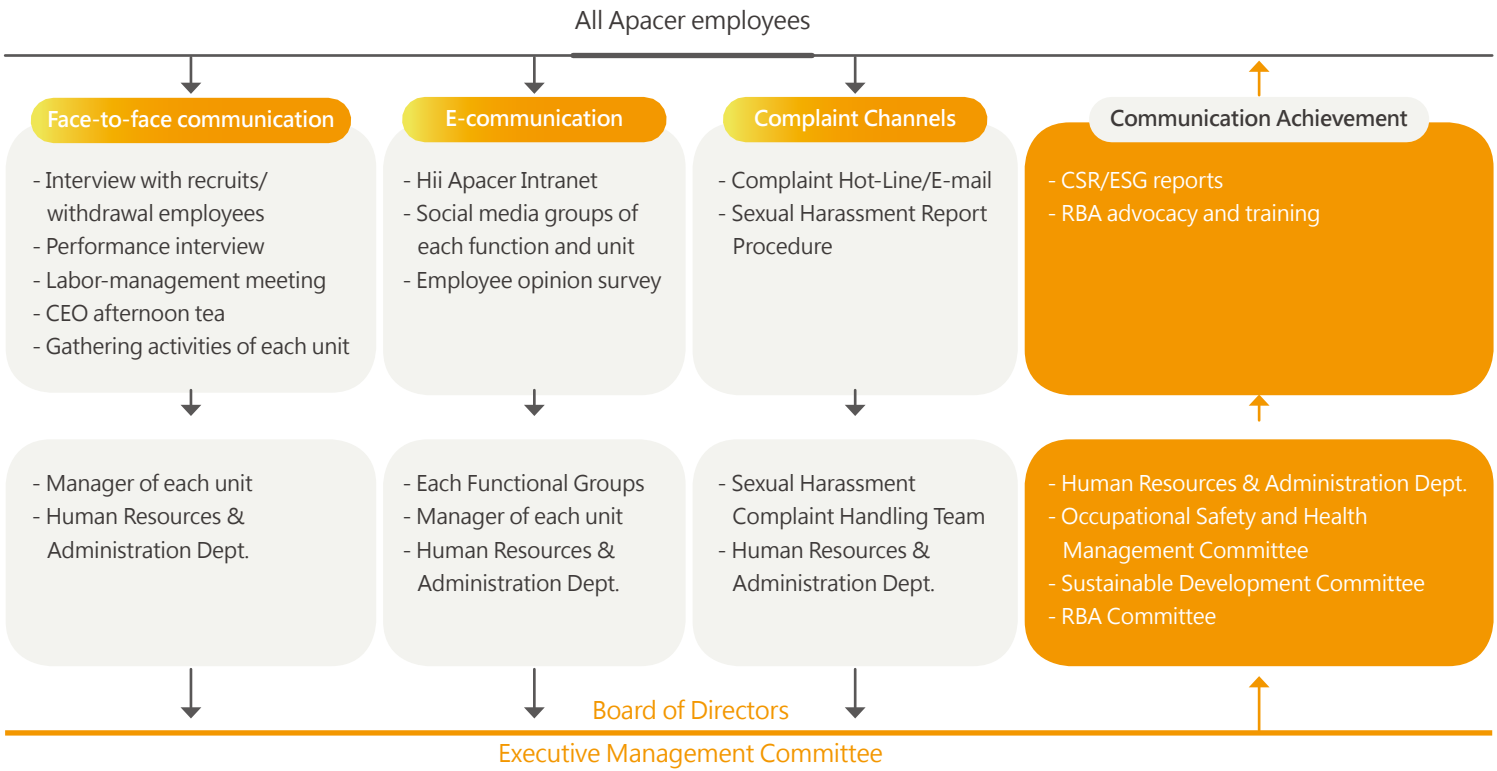
**Various welfares for migrant workers**

Since Apacer participated in the Responsible Business Alliance (RBA), it has been performing a deeper investigation on the expenses borne by migrant workers for working in Taiwan. To take care of the migrant workers as much as possible, the company not only continues to provide monthly subsidies for agency expenses during the worker's stay in Taiwan but also provides discounted three meals and meal allowance, as well as additional assistance including free dormitory and transportation allowance. In addition, we also help each migrant worker to pay overseas agency fees, various health examinations and license fees during their employment, plane tickets for returning, etc. Since 2020, in response to the COVID-19 pandemic, apart from providing pandemic prevention promotional training for migrant workers, pandemic prevention information is also advocated in dormitories to assist migrant workers to acknowledge and comply with pandemic prevention measures, maintaining their health and safety.

## Diverse and proper communication channels for employees

Apacer had designed a fun learning passport and corporate culture growth camps for recruits to support them in adapting to Apacer's corporate culture. For all current employees, their expression of opinions and feedback are valued by Apacer, and a diversified and proper employee communication approach was established as the figure below, and "Measures of Employee Complaint Handling", "Measures of Complaint and Punishment for Sexual Harassment at Workplace" and "Measures of the Prevention, Complaint, and Investigation of Sexual Harassment", were formulated, which not only ensure employees' rights to fully express their voices and opinions but also enable timely care and assistance when necessary.

For "Measures of Employee Complaint Handling" Please check Apacer's official website:  
<https://www.Apacer.com/zh/Investor/Company/Material/Internal Policies>



### Face-to-face communication

#### - Interview with recruits

To help the recruits to adapt to the workplace, monthly interviews with recruits are scheduled, enabling improvements in responding to suggestions/ questions from the recruits and assessments for the improvement strategies. In 2021, a total of 10 suggestions/questions have been replied to or handled.

#### - Performance interview

Every 6 months, employees' performance evaluation is conducted, and supervisors of each unit are encouraged to take this opportunity to interview employees about their performance, assisting them to understand their advantages and disadvantages in work.

## Face-to-face communication

### - Labor-management meeting

Labor-management meetings are convened quarterly, allowing the labor side and the management side to discuss and communicate about the systems of the company, and exchange opinions on the company's policies, the operational environment, safety and health, etc.

### - CEO afternoon tea

The CEO regularly meets with members of the talent supply chain each year to understand their anticipations and suggestions for the company's current operation and future development. The results of the afternoon tea meeting will become a key reference index for the company's development and implementation of the operating plan.

## E-communication

### - Hii Apacer (Apacer) Intranet

3 major parts are designed on the website's home page: material company policies promotion, announcements, and information of all kinds. Employees can click "like" for the posts, raise questions, or post their opinions at any time.



## The operation status of the labor-management meeting in 2021

Number of labor and management representatives	5 labor representatives and 5 management representatives
Election method of the labor representatives	Elected by all full-time employees
Term of labor and management representatives	4 years
Meeting frequency	Quarterly (4 times a year)
Issues for discussion	<ol style="list-style-type: none"> <li>1. Operational status and profitability of the company</li> <li>2. Responsive measured for the amendment of the Labor Standards Act</li> <li>3. Annual new product projects</li> <li>4. ESG and employee welfare activity discussion</li> </ol>

### - Social media groups of each function and unit

All functions and units are encouraged to establish their own social communities via social media of all kinds, and achieve their common goals through real-time communication and information.



## E-communication

### - Employee opinion survey

Employee opinion surveys are conducted every two years through the 6 major driving elements including supervisors, coworkers, remuneration, work development, corporate culture, overall satisfaction, etc., to understand employees' commitments in 3 aspects: value, diligence, and retention.

## Complaint channels

### - Complaint Hot-Line/E-mail

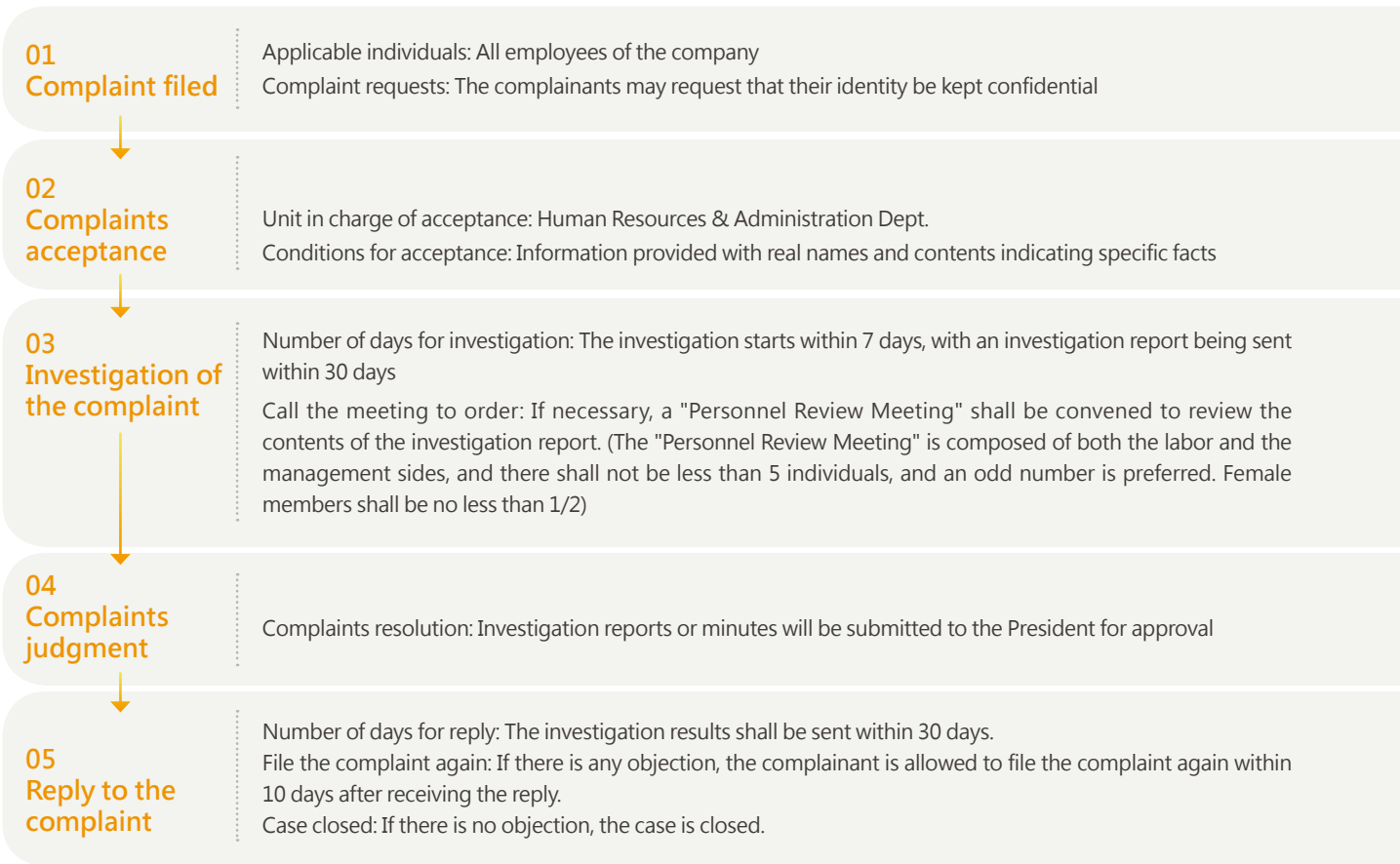
Apacer has formulated the "Measures of Employee Complaint Handling" which is available for all employees, allowing them to file complaints against unfair labor-related events or report unlawful acts affecting the company. Meanwhile, the contact unit responsible for talent structure complaints also makes promotions on the intranet routinely.

The Human Resources & Administration Dept. are in charge of accepting complaints, when necessary, the identity of the complainant shall be kept confidential. For those accepted complaint cases, the Human Resources and Administration Dept. shall reply to the complainant in written form along with the investigation results within 30 days. If there is any objection, the complainant is allowed to file the complaint again within 10 days after receiving the reply.

As of the end of 2021, no complaint has ever occurred.



## Complaints procedures



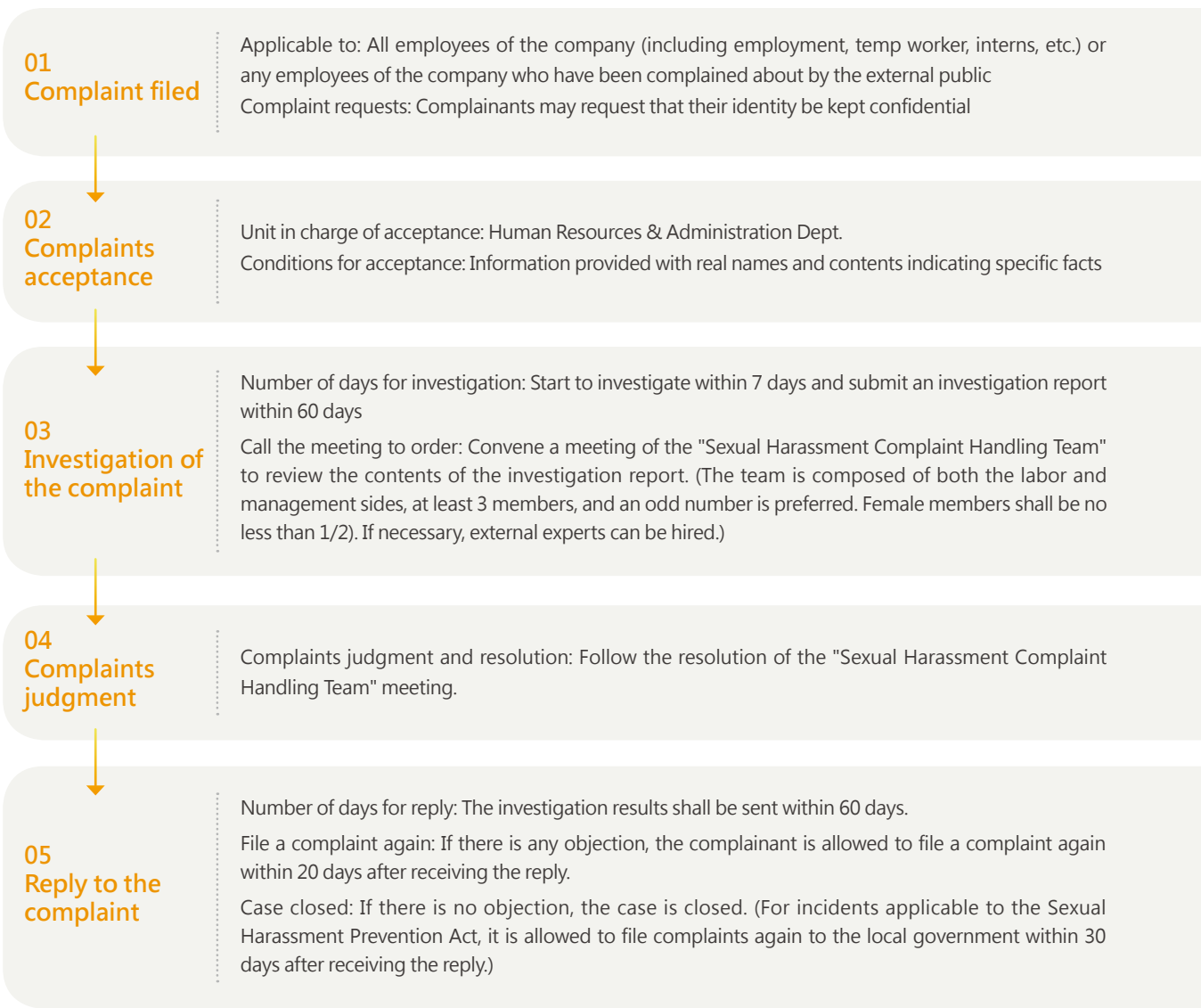
## Complaint channels

### - Sexual Harassment Complaint Procedure

Apacer has already formulated "Measures of Complaint and Punishment of Sexual Harassment at Workplace" and "Handling Measures of Prevention, Complaint, and Investigation of Sexual Harassment," which are not only applicable to all employees of the company (employees, temp workers, technical students, and interns) but also applicable to all employees of the company who have been complained of sexual harassment by anyone (including non-employees of the company), which is to prohibit sexual harassment of any form and protect the rights and interest of the employees and the general public. The Human Resources and Administration Dept. is responsible for accepting complaints, and complainants may request to keep their identity confidential.

For the handling procedures of the complaints, the unit in charge of accepting cases shall convene the "Sexual Harassment Complaints Handling Team", which shall be composed of designated labor and management representatives to tackle and investigate the sexual harassment cases. One standing member shall act as the minutes' taker (acted by the human resources supervisor), and a supervisor at or above the division level of other non-related units may be invited to the meeting to act as the chairman of the meeting on a case-by-case basis. The members of the meeting shall not be less than 3 persons (an odd number is preferred), and the proportion of female representatives shall be no less than 1/2, while that of male representatives is preferred to be more than 1/3. If necessary, experts and scholars may be invited to serve as team members referring to the "Sexual Harassment Investigation Professional Pool" listed by the Ministry of Health and Welfare. (website: <https://expert.mohw.gov.tw/>) For cases accepted, the Human Resources and Administration Dept. shall conduct an investigation within 7 days from the day after the complaint is filed or the transferred case is delivered, and the investigation shall be completed within 2 months. If necessary, the deadline may be postponed by 1 month and with the parties concerned being notified, and the investigation period can only be extended once. As of the end of 2021, no complaint of sexual harassment has ever occurred.

## Complaints procedures



# Talent Cultivation and Remuneration System

## Apacer's talent cultivation strategy

Apacer set "Introduce excellent talents to accumulate future technologies, establishing a reliable employer brand" as our talent cultivation strategy, offering a double-track talent development framework based on competency with a double-track talent development system to drive talent supply chain mechanism and set up Apacer Academy. Also, learning map courses were planned according to the training structure and training system. Apacer will continue to maintain the remuneration level of the industry and the operation of the A<sup>+</sup> EAPs Employee Assistance Program to create a friendly and healthy workplace, thereby achieving Apacer's talent cultivation strategy.

In 2021, Apacer invested a total of NT\$620 million in the talent development strategy, and the output of human resources effectiveness has surpassed the annual goal, with the remuneration level reaching above the targeted P50 in the industry, the growth rate of double-track talent being above the targeted 2%, the double-track talent retention rate being above the targeted 80% and the employee withdrawal rate being below the targeted 3%. On the other hand, Apacer's contribution to social and economic benefits reached above NT\$620 million.

### Input

- Cost of talent recruitment:  
NT\$2,325,050
- Cost of talent cultivation:  
NT\$1,001,350
- Remuneration and welfare of employees :  
NT\$616,486,030

### Apacer's talent cultivation strategy

- Introduce excellent talents to accumulate future technologies, establishing a reliable employer's brand
- Build double-track talent development system
  - Offer the double-track talent development framework based on competency
  - Promote talent supply chain mechanism
  - Establish Apacer Academy (Plan the learning map courses according to the training framework and system)
  - Maintain remuneration level of the industry
  - Maintain the operation of Apacer A<sup>+</sup> EAPs Employees Assistance Program
  - Create a friendly and healthy workplace

### Output

- Human resource effectiveness
- External remuneration survey percentile: P50 ↑
  - Growth rate of double-track talents: 20%
  - Retention rate of double-track talents: 93%
  - Annual withdrawal rate of all employees: 1.9%
- Socio-economic benefits
- The relative contribution of employees' remuneration and welfare to socio-economic:  
NT\$616,486,030

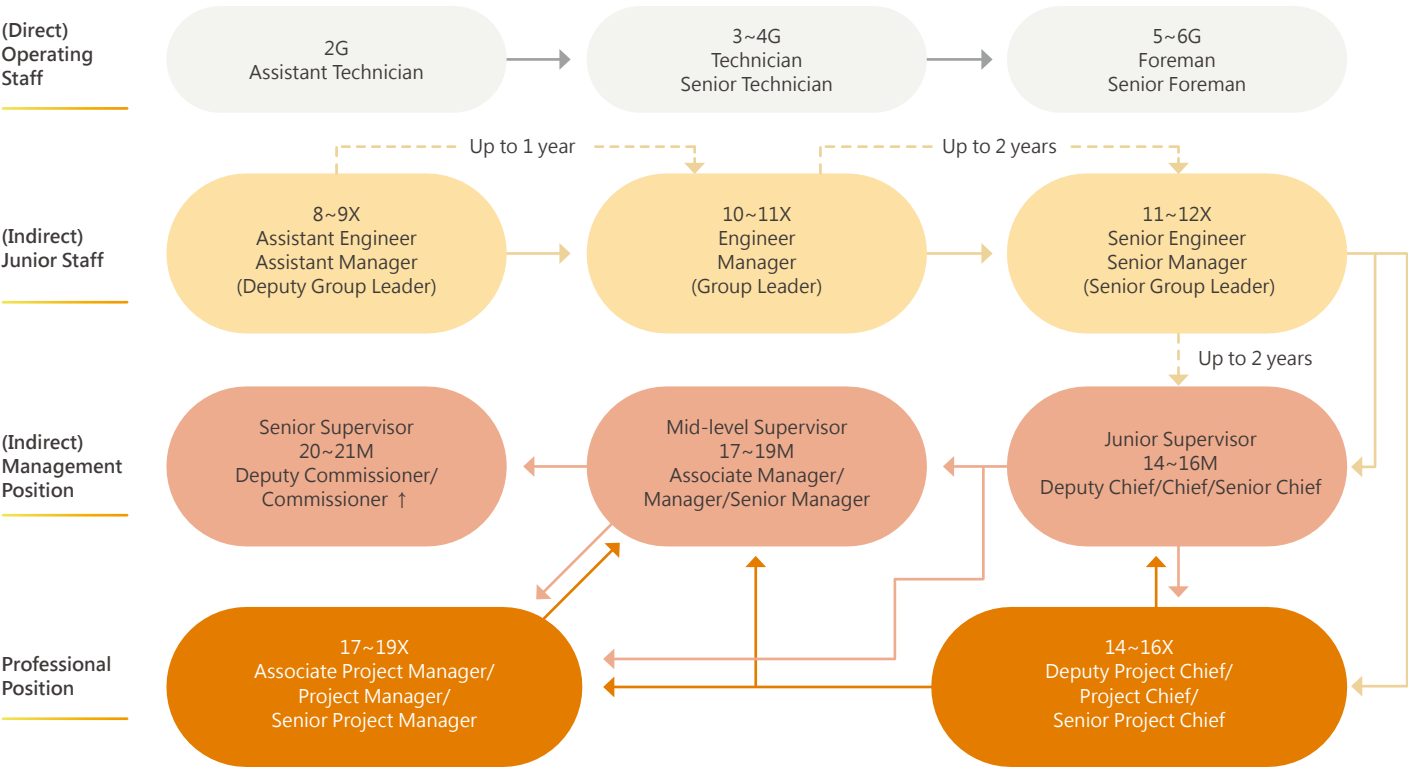
Double-track talent cultivation system

Since 2020, Apacer has established a double-track talent development system to appraise employees' levels in combination with work experience and academic background, job description, competency, appraisal, and the result of performance evaluation, thereby resolving the issues of level congestion or obstructed promotion that about 60% of employees were suffering from.

In 2021, according to Apacer's new Measures of Double-Track Talent Development and Management, a total of 55 employees were promoted (management positions account for 10, while professional positions account for 45), which account for about 12% of the total number of employees. With the new system, the number of promoted employees was about 1.6 times higher than the previous years.

DL : 3-step and 5-level promotion structure

IDL : 6-step and 14-level of promotion structure

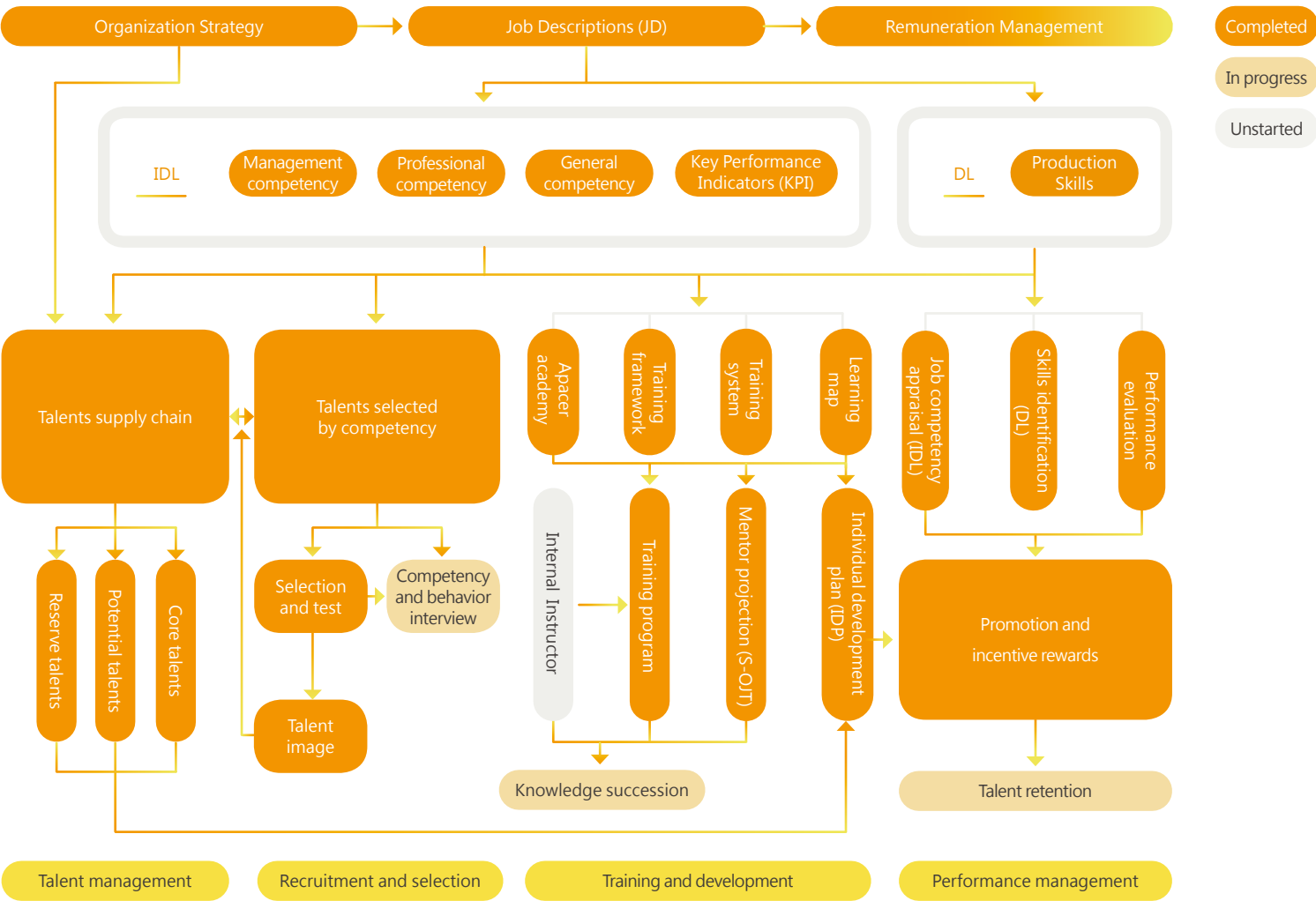


Job Category Remark: G: Representative on-site Operational Position  
X: Representing the collective name of functional duties (A~Y)  
M: Representing management position



### Competency-Based double-track talent development framework

To establish a double-track talent system applicable to the development of management and professional positions, and plan a talent development framework based on competency, Apacer started by organizing the job description, dividing competency into management competency, professional competency, and general competency, thereby planning a series of talent management development frameworks for remuneration management, talent management, recruitment and selection, training development and performance management.



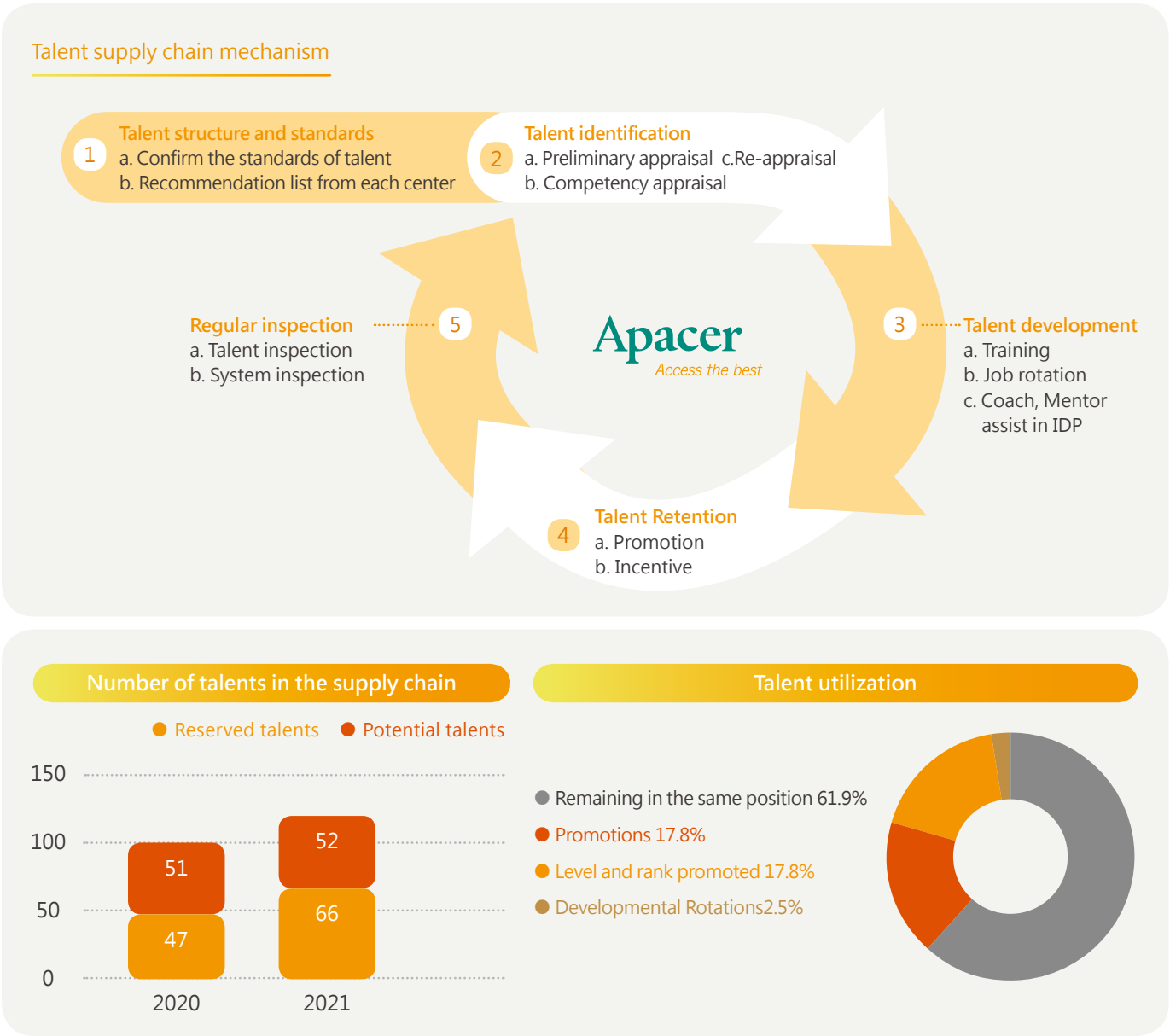


### Talent supply chain mechanism

To continuously provide and nurture outstanding talents responding to all types of market competition and operation challenges, Apacer has established the "talent supply chain mechanism" by discovering reserved talents, nurturing them into potential talents, and thereby making them long-term core talents of the company. The Human Resources & Administration Dept. is in charge of planning and launching the entire talent supply chain operations. It is the division level supervisors are responsible for recommending talents at all levels, the centers' supervisors are responsible for performing the preliminary reviews, and lastly, the Executives Management Committee composed of the executive level is responsible for the final review.

After the list of talents at all levels has been confirmed, the Human Resources & Administration Dept. will provide Coaches or Mentors according to the needs of the talents. After the Coaches assisted the talents in formulating the personal development plans, the Human Resources & Administration Dept. will combine them with the results of the talent competency inventory and arrange the required courses for the talents at all levels. Meanwhile, the Executives Management Committee will also appraise the talent rotation mechanism according to the operation strategies, while Apacer offers corresponding incentive rewards according to the talent development progress.

In 2021, a total of 117 Apacer employees have entered the talent supply chain, achieving a 20% increase compared to the same period of the past, which include 66 reserved talents and 52 potential talents. After training, about 36% were promoted, 2.5% were developmentally rotated the retention rate reached 93%.



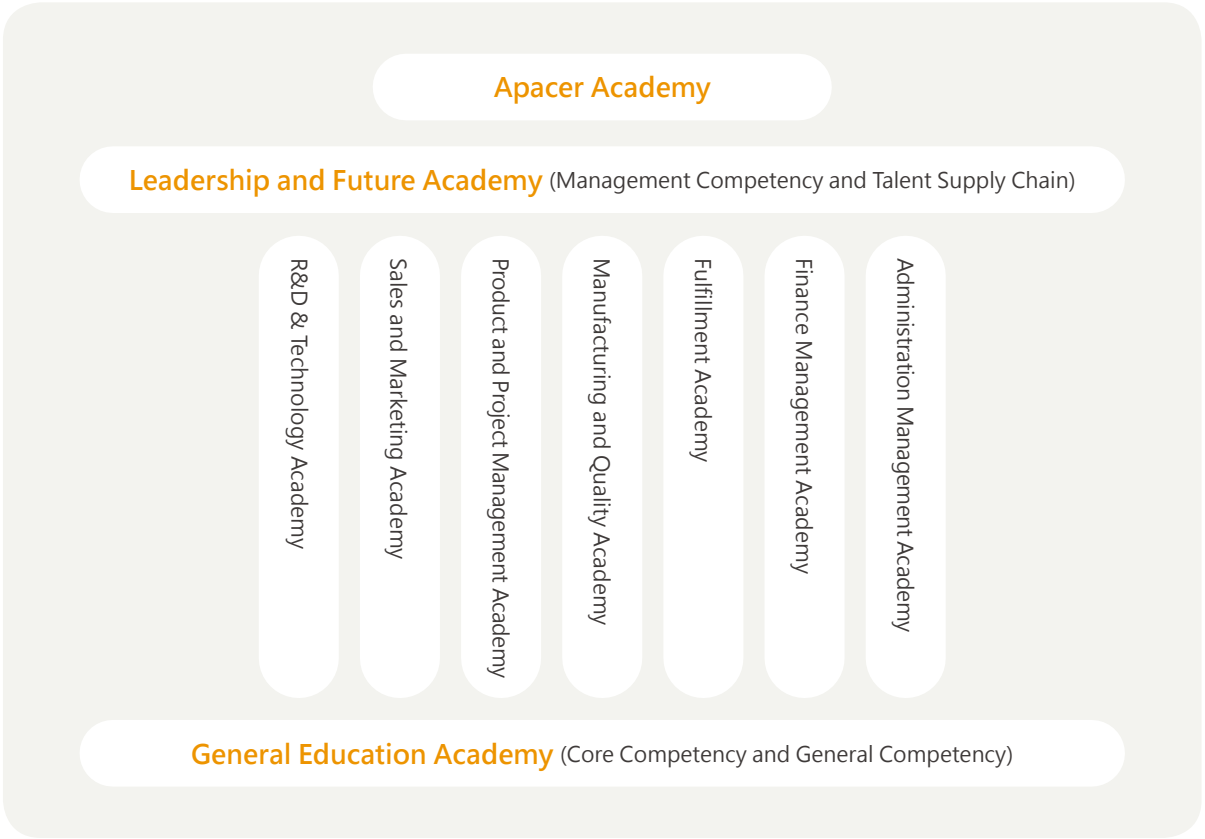
### Talent image

To cultivate and strengthen the member structure of the talent supply chain, in 2021, Apacer utilized the big data generated by the selection tool - adaptive testing to mark the talents required by the company and outline the talent image. In the future, the analysis results will be compared with the talent supply chain members year by year to properly satisfy the company's development needs.



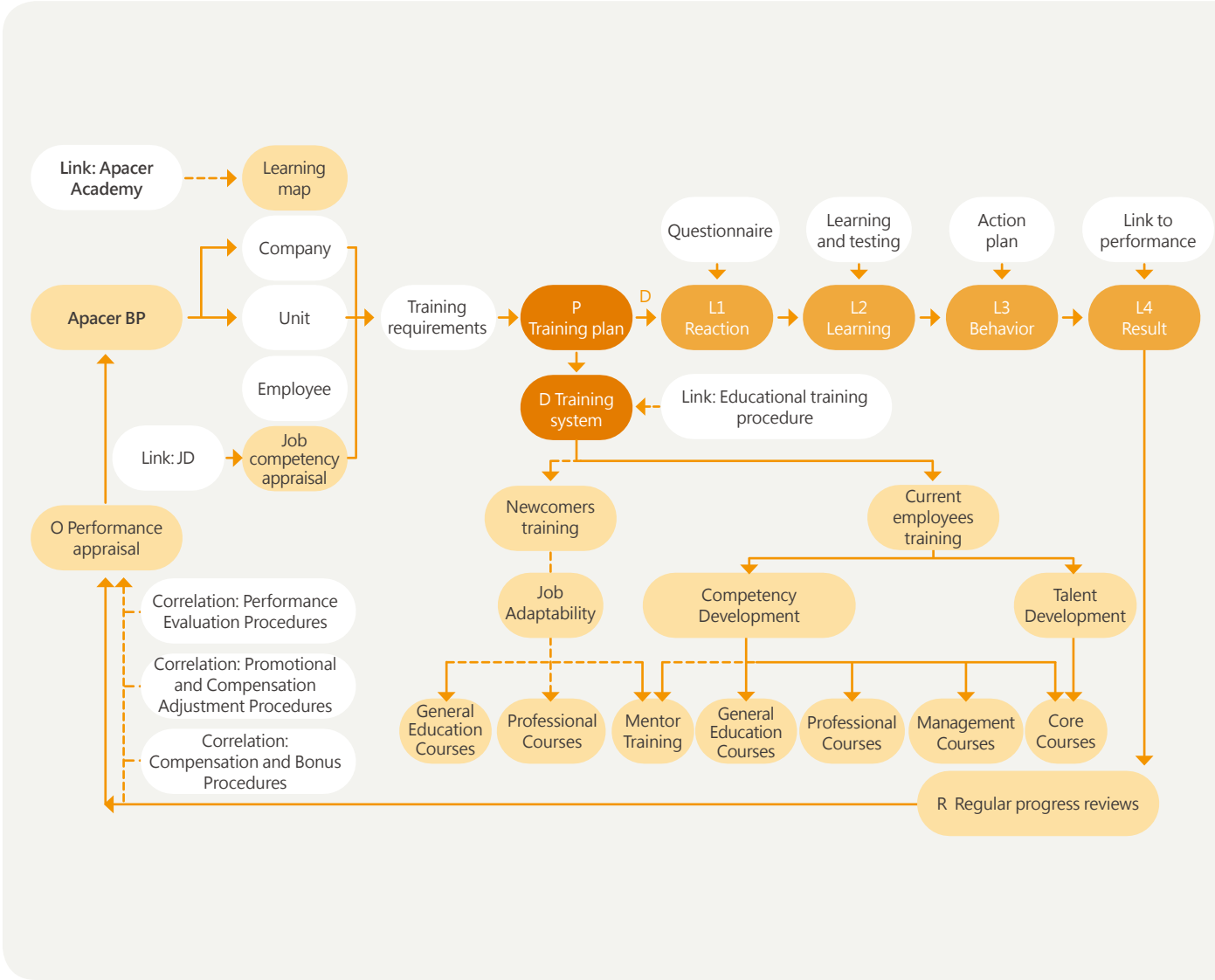
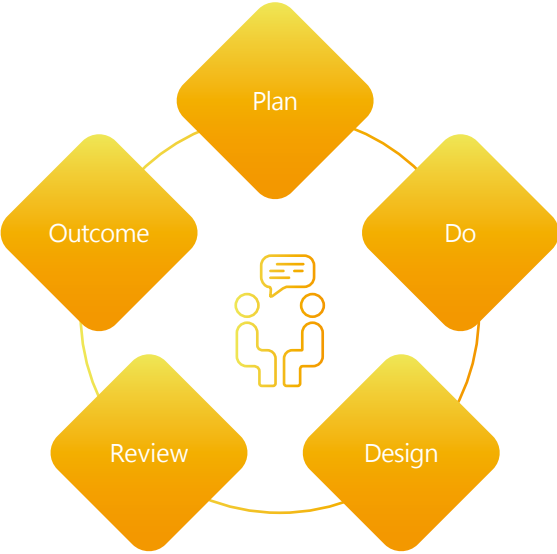
### Apacer Academy

In 2021, the construction of Apacer Academy have been completed. With the President serving as the principal, it was then divided into 9 colleges according to the functional and professional categories based on competencies, which will be planning the learning and development trails, as well as the training programs for all employees. Apacer anticipates that this transparent learning and development framework will lay out the path from a recruit to the executive level with training courses of each college, enhancing the competency availability rate and competitiveness of employees, thereby achieving the talent strategic goal of "Introduce excellent talents to accumulate future technologies, establishing a reliable employer's brand." For the implementation status of Apacer 2021 training courses, [please refer to Pages 104-106](#).



Training framework

Apacer adopts the 5 dimensions of TTQS talent development quality management: P(Plan), D (Design), D(Do), R(Review), and O (Outcome) as the training management circle. Through identifying training demands from competency disparity, annual training plans, course execution process, monthly regular review meetings and presentation of training results, and finally linking with performance, incentives, and bonuses, Apacer aspires to establish a complete and systematic human resources development framework.



## Education and training courses

Apacer knows well that employee is the source of enterprise growth and competitiveness. We provide diversified education and training courses to improve employees' professional abilities, enabling them to tackle the challenges of the ever-changing external environment of the industry. To plan courses that are more tailored to the needs, the Human Resources & Administration Dept. will conduct interviews with unit supervisors and employees while also carrying out post-training satisfaction surveys. During the period of the annual training survey, unit supervisors can also submit additional training demands for the Apacer Academy's learning map to help employees achieve the company's operation development goals, tuning the courses closer to competency learning needs. The categories of education and training courses are divided into recruit training, current employee training, talent training (including management training), RBA & ethical operation training, CSR/ESG training, etc. Apart from hiring external lecturers, we also invite employees with abundant expertise to serve as lecturers and gradually pass on their invaluable experience.

Under the influence of COVID-19, most of the education and training courses were conducted online, via virtual courses, or in small groups in the first half of 2021, and physical courses on a regular scale were not held until Taiwan started to recover from the pandemic after June. As a result, the total number of trainees, training hours and expenses decreased slightly compared with previous years.

### Recruit Training

The key points of the training include: Corporate culture (vision, mission, value), operation direction, RBA & Ethical management advocacy, environmental safety and health policy and management system, rules and regulations, system operation and recruits' occupational safety and health, etc. It is anticipated that recruits can adapt to the company's core values and working environment as soon as possible

### Current employee training (Including regulation training)

The key points of the training shall be the general and professional training for employees, including briefing skills, problem analysis and solution, professional training for all types of duties, related laws and regulations training, and occupational safety, health and fire emergency training, etc. This shall enable the employees to possess the required abilities and compliance knowledge.

### Talent training (Including management training)

The key points of the training shall be the training of talented supply chain members and supervisors at all levels. Based on competency as well as the practical and future development demands, excellent professional execution or planning management ability is expected to be cultivated.

### RBA & ethical management training

The key points of the training shall be following the RBA and the related laws and regulations of ethical management. RBA includes five major scopes, namely labor, health and safety, environment, code of ethics, and management system. In addition to the RBA code of ethics, the ethical management scope also includes the ethical management policy, the Ethical Management Code, and promotion of the Ethical Management Procedures and Conduct Guidelines.

### CSR/ESG training

The key points of the training include: Global enterprise sustain-able development trend, global enterprise sustainable development issues, etc.

## Statistics of education and training in 2021

Course category	Number of employees	Total participants	Total man-hour	Budget ratio	Total expenses (NT\$)
Recruit training (including occupational safety and health)	474	227	620.5	4.3%	\$1,001,350
Current employee training (including regulations training)		2,023	4775.5	58.7%	
Talent training (including management training)		441	1364.5	27.2%	
Overseas professional training		56	315	9.8%	
RBA & ethical management training (including occupational safety and health)		453	453	0.0%	
CSR/ESG training		44	88	0.0%	
Total		3,244	7,616.5	100.0%	
Average training costs of employees			\$2,122		

Average training hours of employees in 2021		
Duty category	Average training hours of each employee per year (Female)	Average training hours of each employee per year (Male)
Manager	718.5	1136.5
Professional employees	1114.0	2208.0
Sales	1303.0	703.5
Technical employees	279.0	154.0

Note: The training for technical employees is mainly based on on-site operation skills to meet the needs of production, and have fewer training hours

### Effectiveness of education and training

To ensure the effectiveness and quality of training courses, Apacer plans, designs, implements, evaluates, and reviews all education and training courses with the TTQS training cycle, and evaluates training effectiveness with Kirkpatrick's Four-Level Training Evaluation Model.

In 2021, Apacer initiated the training courses based on 4 major training axis, namely "Brand and

core technology layout," "strengthening Apacer's DNA and competency availability rate," "strengthening customer relationship management skills," and "strengthening product/cost/quality/value chain awareness." Each training axis generated practical training effectiveness, with the overall implementation rate of the courses reaching 97%.

Four-Level	Evaluation method / basis	Achievements
L1 Reaction	Course satisfaction survey	95% (+2% compared to last year)
L2 Learning	Exercise, after-class reflections, after-class assignments, tests. etc.	100% implementation rate
L3 Behavior	Competency appraisal, pre-test and post-test, action plan, presentation, etc.	14 courses
L4 Results	Quality improvement, reduction of customer complaints, maintenance status of system effectiveness, improvement of employee engagement, etc.	6 courses

Effectiveness of education and training

Brand and core technology layout

- In 2021, the total number of patents obtained licenses or effectively maintained is 193 (increased by 7 compared with 2020)
- An R&D innovation competition was organized with appointed and self-formulated topics, where a champion and a runner-up were selected respectively for the 2 types of topics in the annual competition

Strengthen Apacer's DNA and competency availability rate

- Conducted training for general employees and talents, and assisted the general employees to improve their competency availability:
  - Communication and coordination +27%
  - Establishment of successful teams +14%
  - Development of others+17%
- Conducted the talent training course series and presentation competition
  - In talent training, 95% of students' efficiency and ability have raised and the competency availability rate has improved by more than 100%
  - Presentation skills have increased by +14 points after talent training
  - 93% of the supervisors agreed that the presentation skills of the talents have seen significant progress and improvement
  - A group achieved excellent performance, and the video of their presentation was released to inspire mutual learning among the organizations

Strengthen customer relationship management/ response skills

Conducted PM presentation skills training and competitions  
For the presentation skill, all PMs reached 75 points(standard) or more, while three groups reaching above 80 points (Excellent), with an overall average of 80.2 points

Strengthen product/cost/quality/value chain awareness

- Conducted training for auditors, implemented audits, and maintained the effectiveness of the 2021 ISO45001 system
- Conducted the 12th Product Knowledge Training Session, with a 100% passing rate

● Performance management

Every year, Apacer conducts regular skill identification for direct personnel and competency appraisal for indirect personnel. The promotion system of the company also takes the results of competency appraisal/skill identification into account to effectively connect the performance with the employees' future development plans.

Skill identification/ Competency appraisal

-Skill identification for direct personnel

Every year, Apacer conducts skill identification for the direct personnel to ensure that all operators in the production process are capable of operating under the standard operating procedures to reduce quality instability caused by personal factors, where multi-skilled employees can be cultivated for effective manpower utilization adjustments.

In 2021, the implementation rate of skill identification for indirect personnel is 100% with the skill demand fulfillment rate reaching 90%

-Competency appraisal for indirect personnel

Every year, Apacer conducts a competency appraisal for the indirect personnel. The competency appraisal items start with the job description (JD) and are divided into three major categories: management competency, professional competency, and general competency. If disparities emerge from the appraisal results, related courses in the learning map will be connected to make up for the required lacking competency to improve the abilities of employees. In 2021, Apacer's implementation rate of competency appraisal for the indirect personnel was 100%, and the overall competency availability rate was 92% (management competency availability rate was 90%, general competency availability rate was 93%, and professional competency availability rate was 93%).

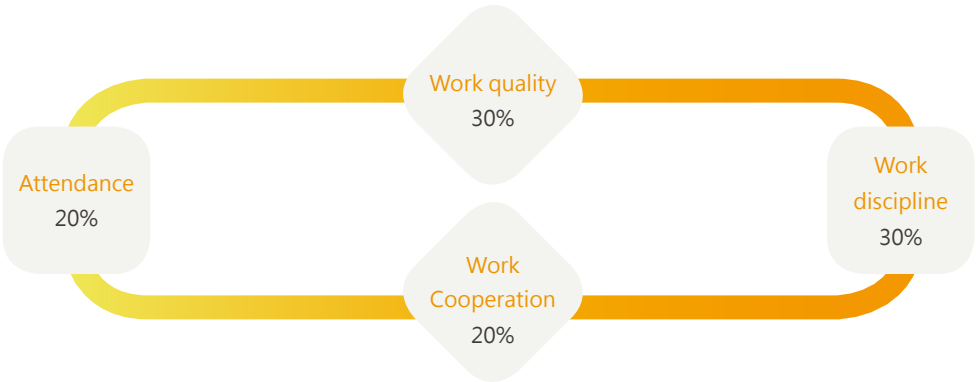
Performance appraisal

Apacer conducts regular performance appraisals for all employees. When it comes to the design of a performance management system, the items of performance appraisal are divided into direct and indirect personnel, while the performance appraisal proportion is divided into management positions and non-management positions.

Achievements of the performance appraisal are also connected with the reward and promotion system of the company, allowing the management system to give timely incentives for performance and combine it with the employees' future development plans.

-Performance appraisal for direct personnel

Regular performance appraisals for direct personnel are conducted every month, the items include work quality, work discipline, work cooperation, and attendance; The Human Resources & Administration Dept. shall timely issue performance bonuses according to the performance appraisal results every month to encourage employees for the improved work efficiency and productivity.



### - Performance appraisal for indirect personnel

Regular performance appraisals for indirect personnel are conducted every six months, and the items of performance appraisal are divided into goal and competency; the contents of goals appraisal shall be discussed by the unit supervisor and employees, and under the annual strategy of the company and the annual plan of the unit, they shall cooperatively determine the Key Performance Indicators (KPI) in January each year; contents of competency appraisal is uniformly stipulated by the Human Resources and Administration Dept. according to the core ability items of the competency development of each type. Every year, performance bonuses are issued by the company based on the result of performance appraisal, which shall not only serve as incentives for performance achievement but also a regular inspection of the employees' performance and personal development plans.

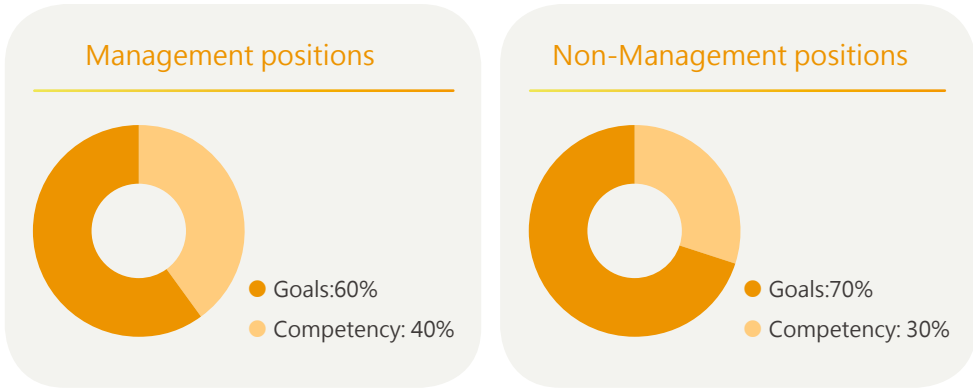
## ■ Remuneration management

### Conditions superior to the requirements of the Labor Standards Act

- Flexible working days (except for production line)
- Provide 3 meals per day (with additional meal allowance), weekly stress-relieving massage, number of annually paid-leaves superior to law requirements, annual health examination...
- Childbirth are supported and encouraged! Paid-leaves are provided according to the law, while the maternity allowance superior to law requirements

Apacer's Remuneration Committee has been established in 2011, and since 2018, all the members have been composed of independent directors to regularly review the policies, systems, standards and structures of directors and managers' performance and remuneration, as well as the performance and employee remuneration policies of the operation team. For the operation status of the Apacer Functional Committee, [please refer to: 1.2 Ethical Management and Corporate Governance](#)

Over the years, Apacer has adopted the remuneration survey reports provided by more than two external professional consulting companies as a reference for the remuneration level of the industry to ensure that all duties of Apacer can reach the P50 or more of the industry, so as to retain professional talents. In addition, the company allocates profits to give back to its employees every year according to its operating conditions to attract excellent talents to contribute their expertise and long-term devotion; furthermore, by issuing performance bonuses and patent bonuses employees are encouraged to pursue excellence and surpass themselves in their work continuously.



### Welfare

- 3 meals per day (with additional meal allowance)
- Provide weekly stress-relieving massage
- Provide annul paid-leaves superior to law requirements
- Annual health examination
- Family group insurance
- Maternity allowance
- Three festivals/birthday gift cards
- Trip/ Birth /Wedding, funeral, and celebration subsidies
- A\* EAPs Employee Assistance Program activities

### Bonus and remuneration

- Three festivals bonus
- Patent bonus
- Performance bonus
- Employee remuneration

### Allowance

- Supervisor differential pay
- Meal allowance
- Shift allowance
- Overseas allowance
- Relocation allowance for taking office/Returning to Taiwan
- Settlement allowance for taking office /returning to Taiwan

### Remuneration

- Market percentile P75 ↑
- Industry of the same trade percentile P50 ↑



### The proportion of total remuneration in 2021

Duty Category	Female	Male
Management	1.0	1.1
Sales	1.0	1.2
Professional	1.0	1.2
Technical	1.0	1.0

Note: Apacer assesses the employee level and remuneration based on academic background, work experience, duty category, professional license, and special expertise with a fair standard.

### The ratio of grassroots workers remuneration to local minimum remuneration in 2021

Gender	Apacer's remuneration	Local minimum remuneration	Female/Male remuneration ratio
Female	1.4	1.0	1:1
Male	1.4	1.0	

Note: The local minimum remuneration is calculated based on the monthly minimum wage of NT\$ 24,000 implemented from January 1, 2021.

### Remuneration overview of non-management positions over the years

Item	2019	2020	2021
Number of non-management employees	482	476	438
Average annual remuneration of non-management employees (NT\$)	\$909,000	\$869,000	\$1,084,000
Median annual remuneration of non-management employees (NT\$)	\$742,000	\$729,000	\$959,000

Note: Employees refer to the number of employees hired in Taiwan after deducting the number of managers, part-time workers, and employees who have been recruited and received payment for less than 6 months, and the average number is adopted for calculation; the total remuneration is the accrual basis which shall include base pay, all types of allowances, overtime pay, bonuses and employee remuneration, etc., but the expensed estimated amount of share-based payment is not included.

## Retirement System

Following the Labor Standards Act, Apacer has formulated its Employee Retirement Measures, transparently stipulated affairs including pension allocation, conditions for employee retirement, and payment of the pension. Meanwhile, the "Employ Retirement Reserve Fund Supervisory Committee" as required by the law, and the employee retirement reserve fund is deposited in a statutory financial institution in the name of the Committee and according to the amount evaluated by a third-party actuary, (the actuarial evaluation report is generated every January, reporting the information of the previous year). Since July 2005, in response to the new labor retirement system, for employees choosing the new system shall allocate 6% of their labor pension (employees may also voluntarily allocate within the range of another 6%) and deposit it in their personal pension account in the Labor Insurance Bureau. Employees choosing the old system shall allocate retirement reserve funds under the original method. To show appreciation to senior employees of Apacer, since 2008, the "Privileged Retirement Measures" has been formulated and approved by competent authority to further safeguard the retirement life of every employee.

### Remuneration and welfare expenditure in 2021

Category	Item	Amount (NT\$)	Number of beneficiaries
Remuneration	Employee salary	\$445,266,718	5,742
	Three festivals bonus	\$40,580,331	954
Bonus and Reward	Performance bonus	\$52,418,304	468
	Employee remuneration	\$33,380,600	424
Welfare_Company	Labor health insurance	\$33,754,064	5,742
	Group insurance	\$1,498,574	6,031
	Maternity allowance	\$342,000	18
	Retirement Plan	\$0	0
	Massage service	\$16,960	826
	Family activities	\$3,520,000	494
	Wedding, funeral and celebration subsidies	\$84,800	39
	Inter-Department single mixer subsidies	\$298,695	463
	Subsidies for books, newspapers, and magazines	\$30,860	499
	New year activity subsidies	\$2,659,054	499
Welfare_Welfare Committee	Club subsidies	\$75,000	106
	Travel subsidies	\$2,560,070	462
Total		\$616,486,030	22,767

## Chapter V

# A Better Partner for A Livable Homeland

### Vision

"Livable homeland, Apacer stands with you." Apacer is devoted in cultivating the local community, as our employees voluntarily responds to the implementation of sustainability plan, giving back to local needs by actual actions which are gradually spreaded to neighboring communities, inviting community groups to create a sustainable and symbiotic environment for the establishment of a livable homeland of happiness.

### Policies and Commitments

The Apacer operational headquarters combined with a manufacturing plant is located in the Tucheng District of New Taipei City. To give back with what the society needs, we continue to promote the local care program and has established long-term partnering relationships with local groups. It is hoped that employees can be encouraged to participate in person and expand their positive social influence through action such as treating of the community environment friendlier.

### Contribution to the United Nations Sustainable Development Goals (SDGs)





## 5.1 Local Influence

Since its initiation in 2015, Apacer has been promoting the "Green Cultivation Plan" for six years. For all this time, together with employees, the company has implemented actions including energy-saving and carbon reduction, vegetarian diets, etc., and subsequently, the "One-day volunteer" activity was fully launched, inviting employees to maintain the ecological environment of Tucheng together and expand the strength and scale of local cultivation. However, the company had to suspend the plans for related activities due to the COVID-19 pandemic in the past 2 years, and the promotion of local ecological education will be launched again after the pandemic situation improves and the government's restrictive policies are relieved. Under the pandemic prevention policy restrictions, vegetarian diet activities are continued to be held. In 2021, Apacer invited "Wayne's mouth enjoying and heart flying cooking lab" for the joyful vegetarian diet activities. Through learning to cook two vegetarian dishes and experiencing flavourful vegetarian diets, the goal of promoting healthy and green life among the employees has been achieved. Employees are also required to take action for environmental protection by the activities, as employees must prepare all tableware and food containers, enjoying the delicacy while reducing carbon emissions at the same time.

### ● A glance at the vegetarian day activities



## 5.2 Local Care

Apacer upholds the philosophy of "Deliver on our promises, strive for constant improvement, advance with our partners" and emphasizes the spirit of "Becoming better partners," promoting the "Apacer stands with you" project in cooperation with local NGOs, to take care of the underprivileged elderly and enhance the company's positive influence with local care.

The Apacer operational headquarters is located in the Tucheng District of New Taipei City. As Apacer hopes to focus on contributing to the local areas, we have been searching for suitable NGO organizations to cooperate with and give back to the neighborhood. Huashan Welfare Social Foundation was founded in 1999 and has established multiple operational sites in Taiwan, including a branch in Tucheng. After discussing with the head of the branch, Apacer started to cooperate with the Tucheng branch of Huashan Social Welfare Foundation in mid-2021, and "Apacer stands with you – uniform invoice lottery raising" was the first trial project that is anticipated to become long-term cooperation. A uniform invoice raising box is placed in the hall on the first floor of Apacer headquarters for employees to voluntarily donate invoices. If any donated invoice wins the lottery, the prize will be used for the caring services of the Huashan Foundation. As of January 2022, 594 invoices have been collected and donated to the Tucheng branch.



Austin Chen, Chairman of Apacer, donated his invoices to the box with pleasure after knowing about the project.

Apacer set the invoice raising box in the hall on the first floor



Through the cooperation with Huashan Welfare Social Foundation, Apacer has gained a deeper understanding of the needs of non-profit organizations and underprivileged elderly issues about the assisting side, the assisted side, and real-life difficulties: due to their age, it is difficult for underprivileged elderly to relieve themselves since they cannot move freely, and to maintain cleanliness and life quality, diapers for adults are necessary. However, diapers are expendables with a large demand. Therefore, in 2021, the company donated a batch of adult diapers of various types with a market price of more than NT\$ 8,000, which were provided to the elderly in need by the Tucheng branch of Huashan Welfare Social Foundation.

As Taiwan entered the nationwide level 3 epidemic alert in May 2021, many solitary elders in Tucheng were caught in the predicament of lack of masks under the resource shortage. Apart from purchasing a batch of masks for all employees, Apacer also donated 50 boxes of masks to the Tucheng branch, which were distributed to the elderly in need by the staff of the branch assisted, allowing Apacer to achieve local caring action.



Apacer donated masks to the Tucheng branch of Huashan Welfare Social Foundation

As the new year is around the corner, in the light that most of the seniors requiring assistance are of the "three lost" type (incapacitated, loss of dependency, or dementia), it is often impossible for them to have a reunion dinner. Therefore, Apacer promoted the "Apacer stands with you - new year's dinner raising activity" as employees voluntarily made donations to prepare the new year's dinner for the elderly, which were allocated to the new year's dinner project of Huashan Welfare Social Foundation, sending new year's dinner meal sets and new year gifts to the elderly in need during the lunar new year. The first fund-raising received wide support, as a total of 168 sets of new year's dinners were donated to the Tucheng branch, warming up new years eve for the underprivileged elderly. Due to the profound meaning of the activity, Apacer is eager to continue the plan and expand the scale of its positive influences, helping more local underprivileged groups.

Meanwhile, Apacer responded to the red envelope charity sale of Huashan Welfare Social Foundation and purchased 550 packs of red envelopes for the employees, which not only brought the symbol of lunar new year's good luck to Apacer employees but also allowed Apacer to take part in public welfare activities.

In the future, Apacer aspires to promote more local care activities and internalize the concepts of helping others into the company's operations, inviting all Apacer employees, as well as our upstream and downstream partners to join the cause. We hope to combine all the strengths we can gather to fulfill Apacer's corporate social responsibility and achieve the development vision of sustainability.

Apacer 華山基金會

2022 Apacer stands by you

## New year dishes collection with love

A total of 168dishes ·

Thanks to all fellows for participating in the event!

### Apacer - Results of the Green Cultivation Plan over the years

2015 Empowerment	Taiwan Energy-Saving Patrol conducts on-site diagnosis for the carbon reduction and vegetarian diets month	- A total of five lectures were held, and 218 employees joined. Nearly 60% of the employees agreed that "the activity enhances one's motivation to choose vegetarian diets"
	Green family day	- A total of 48 employees and their family members participated, and all interviewed participants agreed that "the activity inspired more energy-saving and environmental-friendly daily habits"
2016 Action	Apacer One-Day Volunteer	- A total of 34 employees and their family members participated, and all interviewed participants agreed that they are "willing to continue to join enterprise volunteer activities in the future"
2017 Strong engagementc	Apacer One-Day Volunteer	A total of 42 employees and their family members participated, and the satisfaction of those who participated was 100%
	Carbon reduction and vegetarian day	An energy soup and vegetarian diets experiential lecture was held, and a total of 60 employees participated
2018 Innovative plans	Apacer One-Day Volunteer	- A total of 42 employees and their family members participated, and the satisfaction with the ecological docent of the one-day volunteer activity reaches 97.6%. Apacer has been cooperating with the New Taipei City Tucheng Landscape Protection Association for 3 consecutive years and established a network connecting local groups.
		- Implemented innovative planning, organizing an exhibition on the first floor combining tung flower and firefly as the main theme, which gained outstanding positive feedback

2018 Innovative plans	Family DIY Vegetarian Spring Roll	- Hold the Family DIY Vegetarian Spring Roll activities to encourage employees to have a healthy diet and healthy life. A total of 45 employees participated.
2019 Continuous devotion	Apacer One-Day Volunteer	- A total of 37 employees and family members participated - The theme of this year was to remove alien species, with an ecological knowledge tour to see the fireflies - Abbot of Shanshi Temple strongly supported Apacer to hold similar activities continuously to safeguard ecological balance
2020 Expansion of participation	Family DIY Vegetarian Spring Roll	Cooperated with Jingwen University of Science and Technology – Jingwen's Local Xidian-Wulai Industrial Social Responsibility Project to promote the concept of natural vegetables, a total of 60 employees participated.
Green Cultivation Plan: A total of 586 persons participated. To give back with actual contributions to the local people, Apacer changed the project plan to "Apacer stands with you" in 2021, setting the people or organizations in the Tucheng district as the main target for caring and contribution.		
2021 Local care	Apacer stands with you	Uniform invoice lottery raising: A total of 594 invoices were donated as of the end of January 2022 Supplies donation: A batch of adult diapers and masks New year's dinner raising: A total of 78 persons participated and 168 sets of new year's dinner were delivered Red envelope charity sale: NT\$ 81,696
	Happy Vegetarian Diet	40 participants experienced the fun of vegetarian diets

## Public welfare donations

Apacer believes that the value of donations is not only limited to the amount itself, but also can connect the society and solve problems, as we make the most use of every donation and extend the positive influence to society. As of the end of 2021, a total of about NT\$1.68 million was donated to related entities, including local communities, charities, art and cultural heritage associations, etc.

Statement of accumulated donations over the years	Donation item	Donor	Project actions	Donation amount (NT\$)
	Art and culture inheritance	Tainan Municipal North District Daguang Elementary School	Apacer has been sponsoring for three consecutive years, with the funds intended for the expenditure required for the operation of the traditional arts clubs and public performances	500,000
	Track and field education	Track and field team of the New Taipei Municipal Yulin Junior High School	Apacer has been sponsoring for five consecutive years, with the funds intended for team transfer training and equipment rehabilitation	297,220
	Local community	New Taipei City Tucheng Landscape	Apacer has entrusted the association to synchronously plan the One-day Volunteer event for four consecutive years	32,000
	Others	Protection Association Charitable foundations, welfare foundations, etc.	For social welfare groups in need, Apacer supported the implementation of solutions by donating supplies and funds, enhancing the life quality of those in need	852,481
	Total amount of donation			1,681,701



## ■ Appendix 1 Comparison Table of the Global Reporting Initiative (GRI) Standards

The following tables are compiled referencing the GRI Standards: version 2016 and correspond to the contents of this report. Among these, Apacer adopts the new GRI 403: version 2018, to disclose information related to occupational safety and health. As described in the external verification statement, related information has been verified to meet the requirements of GRI standards for the external verification list.

### GRI 102: General Disclosures, 2016

Disclosure items	Description	Description	Reference section	Remark
Organizational Profile	102-1	Name of the organization	1.1 About Apacer	
			1.1 About Apacer	
	102-2	Activities, brands, products and services	1.3 Diversified Products and Operational Performance	
	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	1.3 Diversified Products and Operational Performance	
			1.1 About Apacer	
	102-7	Scale of organization	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 in the organization and its supply chain		There were no significant change in the organization and supply chain in 2021
	102-11	Precautionary principle or approach	1.2 Ethical Management and Corporate Governance 2.1 Commitment to the Environment and Compliance with Laws and Regulations	
	102-12	External initiatives	3.1 Sustainable Supplier Management	
	102-13	Membership of associations	1.4 Innovative R&D	

### GRI 102: General Disclosures, 2016

Disclosure items	Description	Description	Reference section	Remark
Strategy	102-14	Statement from senior decision-maker	The Chairman's Address	
	102-15	Key impacts, risks, and opportunities	1.2 Ethical Management and Corporate Governance	
Ethics and Integrity	102-16	Values, principles, standards, and norms of behavior	1.2 Ethical Management and Corporate Governance 3.1 Sustainable Supplier Management	
	102-17	Mechanisms for advice and concerns about ethics	1.2 Ethical Management and Corporate Governance	
Governance	102-18	Governance structure	Sustainability Strategy Development 1.2 Ethical Management and Corporate Governance	
	102-19	Delegating authority	Sustainability Strategy Development	
	102-20	Executive-level responsibility for economic, environmental and social topics	Sustainability Strategy Development	
	102-22	Composition of the highest governance unit and its committees	1.2 Ethical Management and Corporate Governance	
	102-24	Nominating and selecting the highest governing body	1.2 Ethical Management and Corporate Governance	
	102-32	Highest governance body's role in sustainability reporting	Materiality Analysis	

## GRI 102: General Disclosure 2016

Disclosure items	Description	Description	Reference section	Remark
Stakeholder engagement	102-40	List of stakeholder groups	Stakeholder engagement	
	102-41	Collective bargaining agreements	4.3 Employee Welfares and Communications	No union was established in Apacer, and labor management meetings are held on quarterly basis
	102-42	Identifying and selecting stakeholders	Materiality Analysis	
	102-43	Approach to stakeholder engagement	Stakeholder Engagement	
	102-44	Key topics and concerns raised	Stakeholder Engagement	
Reporting practice	102-45	Entities included in the consolidated financial statements	About This Report	
	102-46	Defining report content and topic boundaries	Materiality Analysis	
	102-47	List of material topics	Materiality Analysis	
	102-48	Restatements of information		There is no restatement of information in Apacer's previously published report
	102-49	Changes in reporting	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 items	Description	Description	Reference section	Remark
Reporting practice	102-55	GRI Content Index	Appendix 1 Comparison Table of the Global Reporting Initiative (GRI) Standards	
	102-56	External assurance	About This Report	

## GRI 103: Management Approach 2016

Disclosure items	Description	Reference section	Remark
Management approach	103-1	Explanation of the material topic and its boundary	Materiality Analysis

## GRI 200: Disclosure of specific topics – Economic, 2016

Disclosure items	Description	Reference section	Remark
Materiality Issues: R&D Innovation and Economic Performance			
Economic performance	201-1	Direct economic value generated and distributed	The Chairman's Address 1.3 Diversified Products and Operational Performance 4.3 Employee Welfares and Communications 5.2 Local Care
	201-2	Financial implications and other risks and opportunities due to climate change	2.1 Commitment to the Environment and Compliance with Laws and Regulations
	201-3	Defined benefit plan obligations and other retirement plans	4.4 Talent Cultivation and Remuneration System
Management approach	103-2	The management approach and its element	Chapter I A Good Partner for Navigating Innovation
	103-3	Evaluation of the management approach	Chapter I A Good Partner for Navigating Innovation
Market presence	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	4.4 Talent Cultivation and Remuneration System
	202-2	Proportion of senior management hired from the local community	4.1 Employee Overview



## GRI 200: Disclosure of specific topics – Economic, 2016

Disclosure items	Description	Reference section	Remark
Materiality Issues: R&D Innovation and Economic Performance			
Indirect economic impacts	203-1 Infrastructure investment and services supported	5.1 Local Impact 5.2 Local Care	
Procurement practices	204-1 Proportion of spending on local suppliers	3.1 Sustainable Supplier Management	
Materiality Issues: Corporate Governance			
Anti corruption	205-2 Communication and training on anti-corruption policies and procedures	1.2 Ethical Management and Corporate Governance	
	205-3 Confirmed incidents of corruption and actions taken	1.2 Ethical Management and Corporate Governance	
Management approach	103-2 The management approach and its components	Chapter I A Good Partner for Navigating Innovation	
	103-3 Evaluation of the management approach	Chapter I A Good Partner for Navigating Innovation	
Anti-competitive Behavior	206-1 Legal actions for anti-competitive behavior		No related incidents occurred in 2021

## GRI 300: Disclosure of specific topics – Environmental, 2016

Disclosure items	Description	Reference section	Remark
Materiality Issues: Raw Material Management, Green Product Design			
Materials	301-1 Materials used by weight or volume	2.4 Green product	
	301-2 Recycled input materials used	2.4 Green product	
	301-3 Reclaimed products and their packaging materials	2.4 Green product	
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	

## GRI 300: Disclosure of specific topics – Environmental, 2016

Disclosure items	Description	Reference section	Remark
Materiality Issues: Raw Material Management, Green Product Design			
Management approach	103-2 The management approach and its element	Chapter II A Good Partner for Green Environment	
	103- Evaluation of the management approach	Chapter II A Good Partner for Green Environment	
Water and effluents	3303-(2018) Water withdrawal	2.3 Waste and Water Resources Management	
	3303-(2018) Water withdrawal	2.3 Waste and Water Resources Management	
Emissions	305-1 Direct (Scope I) GHG emissions	2.2 Climate Change Risk Management	
	305-2 Indirect (Scope II) GHG emissions	2.2 Climate Change Risk Management	
	305-4 GHG emission intensity	2.2 Climate Change Risk Management	
Waste	306-2 (2020) Management of significant waste-related impacts	2.3 Waste and Water Resources Management	
	306-3 (2020) Waste generated	2.3 Waste and Water Resources Management	
	306-4 (2020) Waste diverted from disposal	2.3 Waste and Water Resources Management	
	306-5 (2020) Waste directed to disposal	2.3 Waste and Water Resources Management	
Materiality Issues: Environmental Compliance			
Environmental compliance	307-1 Non-compliance with environmental laws and regulations	2.1 Commitment to the Environment and Compliance with Laws and Regulations	
Management approach	103-2 The management approach and its components	Chapter II A Good Partner for Green Environment	
	103-3 Evaluation of the management approach	Chapter II A Good Partner for Green Environment	

## GRI 400: Disclosure of specific topics – Social, 2016

Disclosure items		Description	Reference section	Remark
Materiality Issues: Talent Attraction and Retention, Employee Welfare				
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 Welfares and Communications	
Management approach	103-2	The management approach and its element	Chapter IV A Better Partner for a Friendly and Healthy Workplace	
	103-3	Evaluation of the management approach	Chapter IV A Better Partner for a Friendly and Healthy Workplace	
Materiality Issues: Occupational Health and Safety				
Disclosure of the management approach-Occupational Health and Safety	103-2	The management approach and its element	Chapter IV A Better Partner for a Friendly and Healthy Workplace	
	103-3	Evaluation of the management approach	Chapter IV A Better Partner for a Friendly and Healthy Workplace	
	403-1 (2018)	Occupational safety and health management system	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	
	403-4 (2018)	Workers participation, consultation and communication on occupational safety and health	4.2 Employee Safety and Health	
	403-5 (2018)	Worker training on occupational safety and health	4.2 Employee Safety and Health	
	403-6 (2018)	Promotion of worker health	4.2 Employee Safety and Health 4.3 Employee Welfares and Communications	
	403-7 (2018)	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	3.1 Sustainable Supplier Management	

## GRI 400: Disclosure of specific topics – Social, 2016

Disclosure items		Description	Reference section	Remark
Materiality Issues: Occupational Health and Safety				
Disclosure of the management approach-Occupational Health and Safety	403-8 (2018)	Workers covered by an occupational safety and health 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	
Materiality Issues: Talent Cultivation				
Training and Education	404-1	Average hours spent training per year per employee	4.4 Talent Cultivation and Remuneration System	
	404-3	Percentage of employees receiving regular performance and career development reviews	4.4 Talent Cultivation and Remuneration System	
Management approach	103-2	The management approach and its element	Chapter IV A Better Partner for a Friendly and Healthy Workplace	
	103-3	Evaluation of the management approach	Chapter IV A Better Partner for a Friendly and Healthy Workplace	
Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	1.2 Ethical Management and Corporate Governance 4.1 Employee Overview	
	405-2	Ratio of basic salary and remuneration of women to men	4.4 Talent Cultivation and Remuneration System	
Non-discrimination	406-1	Incidents of discrimination and corrective actions taken		There were no incidents of discrimination in Apacer in 2021
Child labor	408-1	Operations and suppliers at significant risk for incidents of child labor		There was no child labor employment in Apacer in 2021
Local communities	413-2	Operations with local community engagement, impact assessments, and development programs		During the process of Apacer's operation in 2021, there were no negative impacts on local communities

## GRI 400: Disclosure of specific topics – Social, 2016

Disclosure items	Description	Reference section	Remark
Materiality Issues: Talent Cultivation			
Human Rights Assessment	412-2 Employee training on human rights policies or procedures	1.2 Ethical Management and Corporate Governance	
Supplier Social Assessment	414-1 New suppliers that were screened using social criteria	3.1 Sustainable Supplier Management	
	414-2 Negative social impact in the supply chain and actions taken	3.1 Sustainable Supplier Management	
Public Policy	415-1 Political contributions		There were no political contributions expenditure in 2021
Materiality Issues: Customer Relationship Management			
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		There were no incidents of non-compliance of relevant laws and regulations in 2021
Management Approach	103-2 The management approach and its element	Chapter III A Better Partner for Making Progress	
	103-3 Evaluation of the management approach	Chapter III A Better Partner for Making Progress	
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		There were no incidents of non-compliance of relevant laws and regulations in 2021

## GRI 400: Disclosure of specific topics – Social, 2016

Disclosure items	Description	Reference section	Remark
Materiality Issues: Customer Relationship Management			
Marketing and Labeling	417-3 Incidents of non-compliance concerning marketing communications		There were no incidents of non-compliance of relevant laws and regulations in 2021
Customer Privacy	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	3.2 Customer Relationship Management	
Socio-economic Compliance	419-1 Non-compliance with laws and regulations in the social and economic area		There were no incidents of non-compliance of relevant laws and regulations in 2021
Materiality Issues: Operational Risk Management			
Management approach	103-2 The management approach and its components	Chapter I A Better Partner for Navigating Innovation	
	103-3 Evaluation of the management approach	Chapter I A Better Partner for Navigating Innovation	
Materiality Issues: Hazardous Substance Management			
Management approach	103-2 The management approach and its element	Chapter III A Better Partner for Making Progress	
	103-3 Evaluation of the management approach	Chapter III A Better Partner for Making Progress	

Note: The 102-20 and 22 are disclosure items that are non-core options in the general disclosure topics, and Apacer takes the initiative to disclose related information.

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

Industry: Semiconductors industry

Index code	Disclosure index	Reference section
Disclosure Topics: Greenhouse Gas Emissions		
TC-SC-110a.1	<ul style="list-style-type: none"><li>- Gross global Scope 1 emissions (Unit: CO2e):</li><li>- Total emissions from perfluorinated compounds (Unit: %)</li></ul>	2.2 Climate Change Risk Management
TC-SC-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	
Disclosure Topics: Energy Management in Manufacturing		
TC-SC-320a.1	<ul style="list-style-type: none"><li>- Total energy consumed (Unit: Million joules)</li><li>- Percentage grid electricity (Unit: %)</li><li>- Percentage renewable energy (Unit: %)</li></ul>	2.2 Climate Change Risk Management
Disclosure Topics: Water Management		
TC-SC-410a.1	Total water withdrawn (Unit: Thousand cubic meters)	2.3 Waste and Water Resources Management
Disclosure Topics: Waste Management		
TC-SC-150a.1	<p>Amount of hazardous waste from manufacturing (Unit: Tons)</p> <p>Percentage recycled (Unit: %)</p>	2.3 Waste and Water Resources Management
Disclosure Topics: Employee Health & Safety		
Index Code	Disclosure Indicator	Chapter Reference
TC-SC-320a.1	Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards	4.2 Employee Safety and Health

Industry: Software & IT Services

Index code	Disclosure index	Reference section
Disclosure Topics: Recruiting & Managing a Global & Skilled Workforce		
TC-SC-330a.1	Percentage of employees that are foreign nationals (Unit: %)	4.1 Employee Overview
	Percentage of employees that are located offshore (Unit: %)	
Disclosure Topics: Materials Sourcing		
TC-SC-440a.1	Description of the management of risks associated with the use of critical materials	3.1 Sustainable Supplier Management
Disclosure Topics: Intellectual Property Protection & Competitive Behavior		
TC-SC-520a.1	Total monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations	There were no punishing cases occurred associated with anti-competitive behavior regulations
Operating index: Production by reportable segment		
TC-SC-000.A	Total production (Unit: Pieces)	1.3 Diversified Products and Operational Performance
Operating index: Production by reportable segment		
TC-SC-000.B	Percentage of owned facility production (Unit: %)	1.3 Diversified Products and Operational Performance

## Appendix 3 Disclosure Items of ESG Index for Corporate Governance Evaluation

Topics	Index items	Index description	Achievement data in 2021	Remarks
Environmental issues				
Greenhouse Gas Emissions	Direct (Scope 1) GHG emissions	Tons of CO2	681	In February 2022, the company completed the greenhouse gas inventory of scopes 1 and 2 of 2021. In the future, scope 3 will be incorporated into the inventory and disclosure scope.
	Indirect energy (Scope 2) GHG emissions	Tons of CO2	2,083	
	Other indirect (Scope 3) GHG emissions	Tons of CO2	-	
	GHG emission intensity	Tons of CO2/Operation amount	0.32	
	Strategies, methods and goals of GHG management	Qualitative statement	2.2 Climate Change Risk Management	
Energy Management	Utilization rate of renewable energy	Renewable energy / total energy	Renewable energy unused	2.2 Climate Change Risk Management
	Energy efficiency	Qualitative statement		
	Use of recycled materials policy	Qualitative statement		
Water resources	Water consumption	Tons	9,180	2.3 Waste and water resources management
	Water consumption density	Water consumption / Operation amount	0.001 Tons / thousand NT\$	
	Water resources management or reduction goals	Qualitative statement		
Waste	Hazardous waste quantity	Tons	6.1995	2.3 Waste and water resources management
	Non-hazardous waste quantity	Tons	28.2746	
	Total weight (hazardous + non- hazardous)	Tons	34.4714	
	Waste density	Waste volume / Operation amount	0.0000039 Tons / thousand NT\$	
	Waste management or reduction goals	Qualitative statement		
Social issues				
Human power development	Average salary of employee	NT\$/ person	1,178,000	
	Average welfares of employee	NT\$/ person	1,413,000	
	Average salary of non-management full-time employees	NT\$/ person	1,084,000	

## Appendix 3 Disclosure Items of ESG Index for Corporate Governance Evaluation

Topics	Index items	Index description	Achievement data in 2021	Remarks
Social issues				
Human power development	Median salary of non-management full-time employees	NT\$/ person	959,000	Mainly includes management personnel and executive-level personnel
	Proportion of female managers in management positions	Ratio	31.08%	
	Number of occupational disasters	Number of persons	0	
	Occupational hazard ratio	Ratio	0	
Governance issues				
Board of directors	Board seats	Qty	9	
	Number of independent directors	Qty	3	
	Proportion of female directors	Ratio	11%	
	Attendance rate of directors at the board of directors	Ratio	95%	
	Ratio of directors' and supervisors' training hours in line with training points	Ratio	100%	
Investor's communication	Number of annual investor conferences held by Apacer	Times	2	





## INDEPENDENT ASSURANCE OPINION STATEMENT

### Apacer 2020 Sustainability Report

The British Standards Institution is independent of 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 assurers 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



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.

...making excellence a habit.™



**Apacer**  
*Access the best*