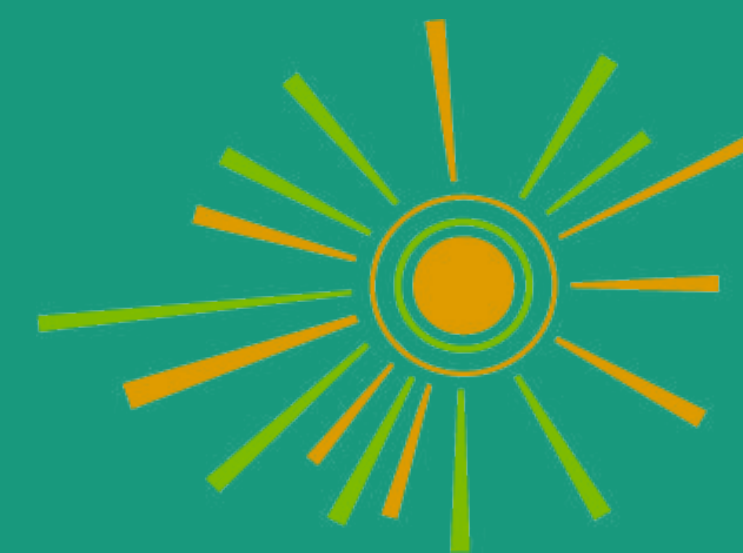


2024 Apacer

SUSTAINABILITY REPORT

+ Create and Share Warm Memories +



Apacer

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About the Report

Editing Principles and References

This report has been prepared in full compliance with the "Operation of Corporate Environmental, Social, and Governance (ESG) Information Reporting" and "Application for Correction of Operation of Corporate Environmental, Social, and Governance (ESG) Information Reporting" as stipulated by the Taiwan Stock Exchange (TWSE). It also adopts internationally recognized reporting frameworks to fully disclose Apacer's issues of concern to stakeholders in the areas of economy, environment, and society. Apacer considers domestic and foreign sustainability and industry trends and identifies issues of concern to stakeholders through materiality analysis to form the focuses of information disclosure in the report. At the same time, the report editor follows the eight reporting principles required by GRI Standards and uses the materiality, inclusivity, responsiveness and impact under the 2018 AA1000 Accountability Principles Standard (APS) as the basis for the preparation of the report.

Issuing Authority	Standards Framework / Regulation
The United Nations, UN	UN Sustainable Development Goals, SDGs
Global Sustainability Standards Board, GSSB	GRI Standards 2021
IFRS Foundation	SASB- Semiconductors
Taiwan Stock Exchange Corporation	Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies

Report Scope

The information disclosure period of this report is from January 1 to December 31, 2024. This report is the 13th Sustainability Report published by Apacer. Although Apacer is not a company that the FSC requires to report, it still follows the regulations outlined by the Taiwan Stock Exchange for the "Operation of Corporate Environmental, Social, and Governance (ESG) Information Reporting" and "Application for Correction of Operation of Corporate Environmental, Social, and Governance (ESG) Information Reporting". The scope of the Sustainability Report and Financial Report is outlined in the table below.

Company Name	Financial Report Boundary	Disclosure boundaries for each aspect in the Sustainability Report		
		Environmental Friendliness	Social Inclusion	Corporate Governance
Apacer Technology Inc. (Taiwan)	✓	✓	✓	✓
UD info Corp.	✓		✓	✓
Apacer Electronics (Shanghai) Co., Ltd.	✓		✓	✓
Apacer Memory America, Inc. (U.S.A.)	✓		✓	✓
Apacer Technology B.V. (Europe)	✓		✓	✓
Apacer Technology Corp. (Japan)	✓		✓	✓
Apacer Technologies Pvt Ltd. (India)	✓		✓	✓
KINGDOM CORPORATION LIMITED	✓			✓
Apacer Technology (BVI) Inc.	✓			✓
Shenzhen Qijing Technology Co., Ltd.	✓			✓

Data Quality

Internal Management

To ensure the transparency and credibility of information disclosure, and to enhance the comparability of performance and the substance of this report, this report was prepared by the Sustainability Committee and approved by the CEO and Chairman through the internal electronic signature and approval process. Starting from 2024, the report was submitted to the Board of Directors for approval and then publicly announced. The previous report was published in August 2024.The Sustainability Report is issued annually and disclosed at [Company's website](#), serving as an ongoing channel of communication regarding Apacer's sustainability practices.

September - December 2024	January - April 2025	April - May 2025	July 2025
Identification of Material Topics & Initiation Meeting for Preparing Sustainability Report	This report was compiled and prepared by the Sustainability Development Committee.	Verified by an independent third- party international organization	The report was finalized and designed after being submitted to the Sustainability Development Committee and the Board of Directors for review.

Contact Information

We see ourselves as "Becoming Better Partners" with all stakeholders. Your opinions will be the biggest driving force for our improvement. If you have any sustainable operation issues, please feel free to contact us:

Secretariat of the Sustainable Development Committee

Mei Lin, Project Manager

Tel.: (02)2267-8000 Ext. 5519 Email: 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-tw/normaldownload/download-report_

Third-party Verification

The independent and credible third-party organization, the British Standards Institution (BSI), was commissioned to verify this report in accordance with the AA1000AS v3 Assurance Standard (2008) and its 2018 Appendix 1 Verification Type, meeting the medium assurance standard and the assurance of GRI standards. Please refer to the independent assurance statement in the appendix of this report for the BSI's independent third-party assurance statement. The third-party verification for other management topics is listed as follows.

Sustainability Aspect	Verified Item	Verification Body	Verification Standard/ Level
Sustainability Disclosure	Sustainability Report	British Standards Institution (BSI)	AA1000AS v3 TYPE I, Moderate Assurance
Financial Management	Annual Report	KPMG Taiwan	CPA Certified Financial Statements in accordance with Audit Regulations and Generally Accepted Auditing Standards
Business and Customer Relations	ISO 9001 : 2015	Bureau Veritas	
Environmental Management	ISO 14064-1 : 2018 ISO 14001 : 2015	Bureau Veritas	
Occupational Health Management	ISO 45001 : 2018	Bureau Veritas	
Information Security Management	ISO/IEC 27001 : 2022	TÜV NORD	

Message from the CEO

CEO, Chang Chia-Kun

Due the global economic instability in 2024, deteriorating relations among nations and increasing geopolitical risks created an exceptionally challenging environment for businesses. In the memory industry, upstream overcapacity and weakened demand further impacted pricing and profitability. Despite these external pressures, Apacer's annual revenue reached NTD7.83 billion, showing growth over 2023. However, the decline in gross margin resulted in earnings per share (EPS) of NTD2.18. The Board of Directors has resolved to distribute a cash dividend of NTD2.2 per share.

In addition to financial performance, Apacer continued to advance its sustainability commitments. Notable progress was achieved across the three key aspects of ESG: Environmental, Social, and Governance, as outlined below.

Aspect	Corporate Governance	Environmental Friendliness	Social Inclusion
Key achievements	✔ Ranked in the top 5% in the Corporate Governance Evaluation for two consecutive years	✔ Obtained ISO 14064-1:2018 verification statement	✔ Received the Friendly Migrant Worker Companies Award from New Taipei City
	✔ Accumulated a total of 235 patents as of 2024	✔ Launched a completely lead-free DRAM product	✔ Honored with the Commonwealth Talent Sustainability Award
	✔ Completed both customer and supplier satisfaction surveys	✔ Completed a customer carbon footprint calculation project	✔ Received the TCSA Sustainability Report Gold Award
	✔ Products recognized with the Taiwan Excellence Award and EE Award for product innovation	✔ Promoted bento box recycling to reduce product waste	✔ Implemented projects focused on cultural heritage and environmental friendliness

The global trend toward sustainability has grown increasingly rigorous, as evidenced by policies such as the national net-zero carbon targets, carbon taxation, and the required use of recycled materials. In response to this trend, companies must implement changes both internally and externally, while also rethinking product design and technological development. Therefore, we not only encourage employees to engage in everyday sustainable practices, such as recycling paper lunch boxes, conserving water, and turning off lights when not in use, but also promote work-life balance through a variety of employee assistance programs. We have also introduced products and technologies that support our customers in their sustainability efforts. In addition, we continue to respond to client expectations by participating in the Carbon Disclosure Project (CDP) and obtaining certification from the Responsible Business Alliance (RBA). Through transparent disclosures and assessments, we demonstrate our performance across all ESG dimensions, while also encouraging our suppliers to join us in building a sustainable ecosystem founded on mutual growth and shared success.

Looking ahead, Apacer will continue to allocate resources toward the advancement of corporate governance, environmental sustainability, and social inclusion. We remain committed to addressing key issues, strengthening risk management, and implementing effective response strategies. It is our hope to generate positive impact and ensure that all stakeholders share in the value created through our business operations.

SSD, Sustainability Strategy Development

Sustainability Strategy Blueprint

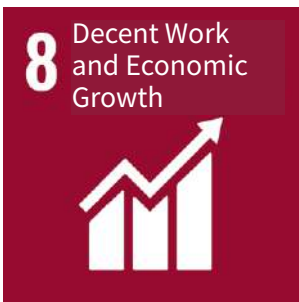
Apacer's core brand values are trust and innovation and this allows us to deliver on promises, continuously improve, and advance together as partners, forming our core ethos of "Becoming Better Partners". This guides our long-term operational strategies and aligns our concrete actions with the United Nations Sustainable Development Goals (SDGs).

Becoming Better Partners

Deliver on promises

With transparency and integrity as the cornerstone, we pursue stable corporate operations while responding to local needs and preserving Taiwanese culture.

United Nations Sustainable Development Goals



Sub-target 8.2



Sub-target 16.5/16.6



Sub-target 17.6

Material Topics

Corporate Governance, Economic Performance, Research, Development and Innovation, Information Security, Operational Risk Management

Apacer's Commitment

With sustainable development as our goal, we expect to continue making profits and giving back to local communities within five years. We are committed to building a strong and supportive community. Meanwhile, we continue to strengthen corporate governance, enhance information transparency, and protect the rights and interests of shareholders and stakeholders.

Strive for better

Comply with regulations and continuously reduce the environmental impact of our operations, moving towards a green enterprise.

United Nations Sustainable Development Goals



Sub-target 12.2



Sub-target 13.3

Material Topics

Raw Material Management Climate Change Risk Management

Apacer's Commitment

Committed to complying with the RBA regulations and implementing the hazardous substance-free (HSF) standards for suppliers, we also hold an annual supplier conference to promote these practices, achieving green and intelligent management.

To build a green and smart factory, the Company implements corporate environmental education to embed environmental protection concepts throughout the value chain. In terms of products and services, Apacer promotes green product design, continually enhances manufacturing processes, reduces power consumption, strengthens energy-saving features in product design, and minimizes environmental pollution during production.

Advance together as partners

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

United Nations Sustainable Development Goals



Sub-target 4.4



Sub-target 8.8

Material Topics

Talent Development, Occupational Health and Safety

Apacer's Commitment

Inheriting the Company's vision, mission, and core values, Apacer has developed a competency-based talent development framework, established a dual-track career development system, and promoted a talent supply chain mechanism along with the establishment of Apacer Academy to enhance talent value and create win-win outcomes. The Company also continues to provide a safe and healthy workplace environment by implementing the A+ Employee Assistance Programs (EAPs), fostering a friendly and supportive workplace that safeguards employees' physical and mental well-being.

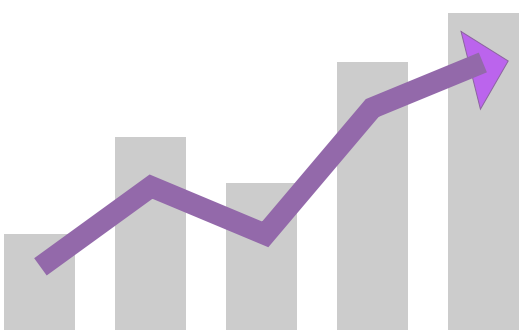
Key Sustainability Performances in 2024

A Partner that Leads to Innovation



in Corporate Governance Evaluation
(5 billion to 10 billion market value groups)

Revenue in 2024 was
NTD **7.837 billion**,
EPS NTD **2.18**



A Good Partner For A Green Environment

After verification, the 2023 GHG emissions (Scope 1 and Scope 2) decreased by approximately

0.96 metric tons of CO₂e per year
compared to 2022.



In 2024, the volume of general industrial waste reused increased by



compared to the previous year.

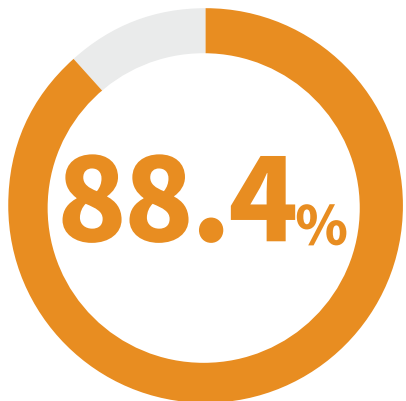
A Good Partner That Shares Progress And Growth

Customer Satisfaction Survey



Number of questionnaires collected:
123

Satisfaction score
★ ★ ★
★ ★ ★



Supplier Conference Results

Attendance
★ ★ ★
★ ★ ★

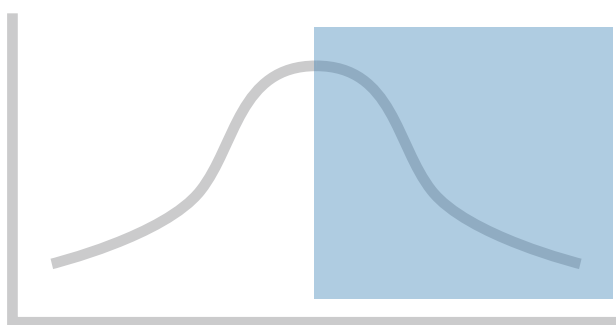


Satisfaction score
★ ★ ★
★ ★ ★

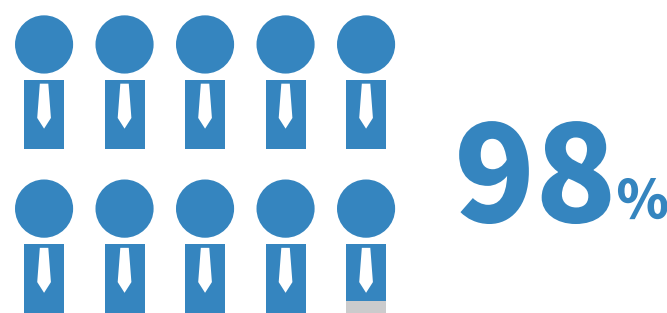


A Friendly And Healthy Workplace Partner

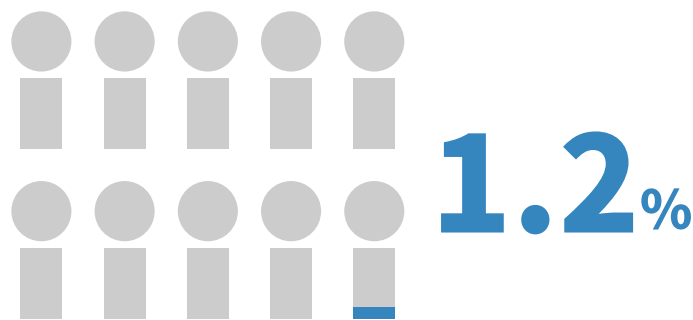
External compensation comparison ranked above industry median



Dual-track talent retention rate

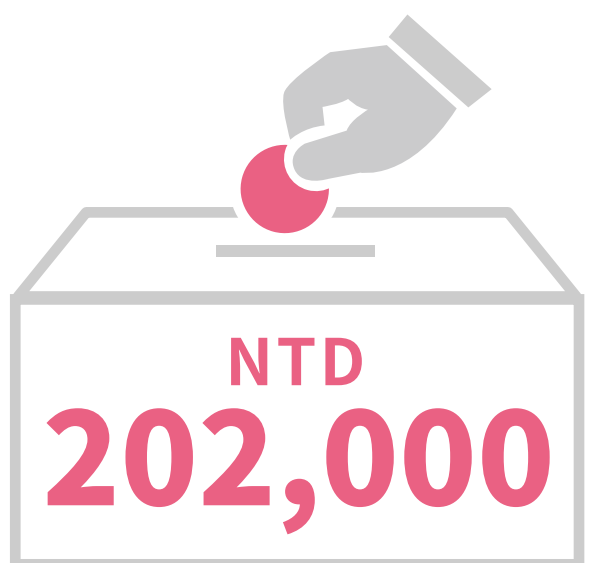


Employee turnover

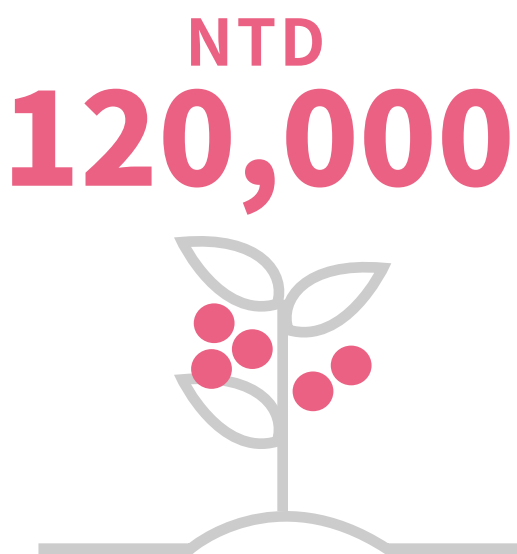


A Good Partner Of A Livable Home

Voluntary employee donations to the South-Link Medical Foundation totaled



Sponsorship of organic coffee tree cultivation in Gukeng



For details on target achievements, please refer to the relevant chapters.

Internal Sustainability Management Mechanism

Sustainable Development Committee - Organizational Structure

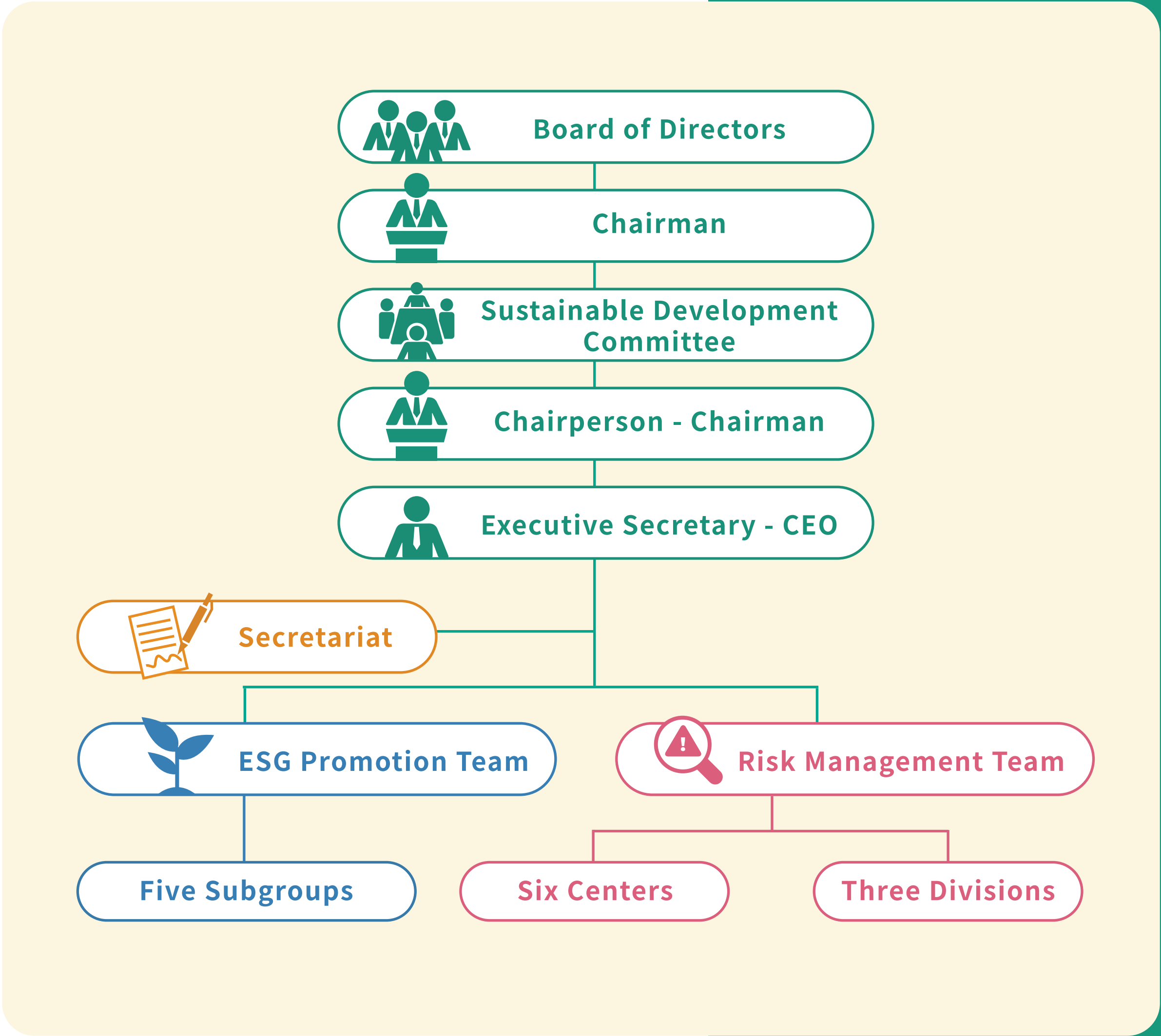
Apacer has integrated the concept of sustainability into its business operations. To promote sustainability affairs, we have established the Sustainable Development Committee, chaired by the Chairman and the CEO as the Executive Secretary. Apacer formulates ESG policies and oversees the execution of sustainability affairs in alignment with the company's long-term vision and objectives.

The Sustainable Development Committee consists of two teams:

ESG Implementation Team includes five subgroups, including "Corporate Governance", "Employee Care", "Customer and Supplier Care", "Environmental Care", and "Community Care". Each subgroup is led by department heads, who are responsible for formulating projects and organizing action teams based on short-, mid-, and long-term goals. This integration of daily departmental operations with sustainable development aims to foster synergy within the organization.

The Risk Management Team, on the other hand, is led by the heads of the six major centers and three departments. They are responsible for regularly reviewing various risks faced by the organization, implementing controls, and proposing improvement plans.

The Secretariat holds quarterly review meetings for each group separately, with both the Chairman and the Executive Secretary in attendance. This ensures the effectiveness of the actual operations of various tasks and initiatives. At the end of each year, all information, including key work progress, project benefits, and annual performance, is compiled and reported to the Board of Directors. This ensures consistency in the board members' understanding of policies and outcomes.



Apacer's Sustainable Development History

2015

Established the CSR Committee and established a division of labor to implement corporate social responsibility, as well as obtaining ISO 14001:2004, IECQ QC080000:2012, and ISO 50001:2011 certification.

2016

Promoted Apacer's One-day Volunteer program, obtaining the updated version of ISO 14001:2015 certification.

2017

Joined the Responsible Business Alliance (RBA) and obtained Silver certification, and the 2016 Sustainability Report won the TCSA Taiwan Corporate Sustainability Report Award - Silver Award, for the first time.

2018

Continued to respond to the United Nations Sustainable Development Goals (SDGs) with strategic actions.

2019

Set the sustainable development strategy based on the core brand value of "Becoming Better Partners".

2020

Passed ISO 45001:2018 certification and re-acquired RBA Silver certification.

2021

In response to the international trend, the CSR Committee was reorganized into the Sustainable Development Committee to include more units to allow for cross-departmental collaboration, thus improving operational performance and impact.

2022

Obtained RBA silver certification and many domestic and foreign awards, and launched the corporate mascot APA.

2023

Planned to obtain ISO 14064-1:2018 verification and publish the 2022 sustainability report in accordance with the GRI 2021 standards.

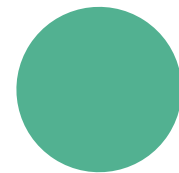
2024

Apacer obtained the ISO 14064-1:2018 verification statement for its greenhouse gas inventory. The Sustainability Report received the Gold Award in the TCSA Sustainability Report Award.

Stakeholder Engagement

Stakeholder communication channels and issues

Stakeholder	Significance to Apacer	Stakeholder Engagement			Focus on major topics	Apacer's response
		Purpose	Result	Channel and frequency		
Employee	Employees are one of our most important stakeholders, and their creativity and stable retention are fundamental to Apacer's continued industry leadership	Employee turnover rate is below 2.5%	✓ Employee turnover 1.2 % ✓ External remuneration comparison P50 ↑ ✓ Dual-track talent retention rate 98% ✓ Employee alignment score: 80 ✓ Number of occupational accidents: 0 ✓ Received the Migrant Worker-Friendly Company Award	- Regularly held review meetings of the Sustainable Development Committee, Strategy and Management Committee, Employee Welfare Committee, and Occupational Safety and Health Management Committee. - Promote relevant knowledge and activities through the Company's intranet from time to time. - Internal employee complaint channel	- Talent cultivation - Occupational Health and Safety	- Continue to promote A+ EAPs - Preparation for the Apacer Academy and development of the dual-track talent system
Customer	We innovate new products and services based on customer needs to provide the best product user experience. Clients' demands for environmental and social responsibility enable Apacer to constantly improve its self-regulations.	Strengthen market competitiveness Customer satisfaction remained above 85 points	✓ Completed the customer satisfaction survey with a satisfaction score of 88.4 points ✓ Completed satisfaction questionnaire from 123 key customers	- Customer Management System: CRM - After-sales service system: eRMA - Annual customer satisfaction survey - Customer service hotline and online consultation letter	- R&D, Innovation and Development - Information security - Climate Change Risk Management	- Correcting deficiencies through customer satisfaction surveys - Meeting customer needs through obtaining international certifications - Developing products and value-added technologies that address customer pain points
Shareholder/ corporate bodies	Capital investment reflects the trust and support of investors/corporate bodies in the Company, enabling Apacer to continue innovating and moving forward in the direction of corporate sustainability.	To strengthen investor/ corporate body relationships	✓ Held 2 investor conferences ✓ Held 1 shareholders' meeting ✓ 17 major event press releases ✓ Received 7 calls from shareholders	- Investor/investor conferences - Media press release - Official website of the Company - Investor relation contact - Market Observation Post System	- Corporate governance - Operational risk management - R&D, Innovation and Development - Economic performance	- Information transparency through public events such as shareholders' meetings and investor conferences - Strengthen information disclosure in both Chinese and English on official websites - Enhancing investors' understanding of the Company's operations by answering shareholder inquiries via phone calls

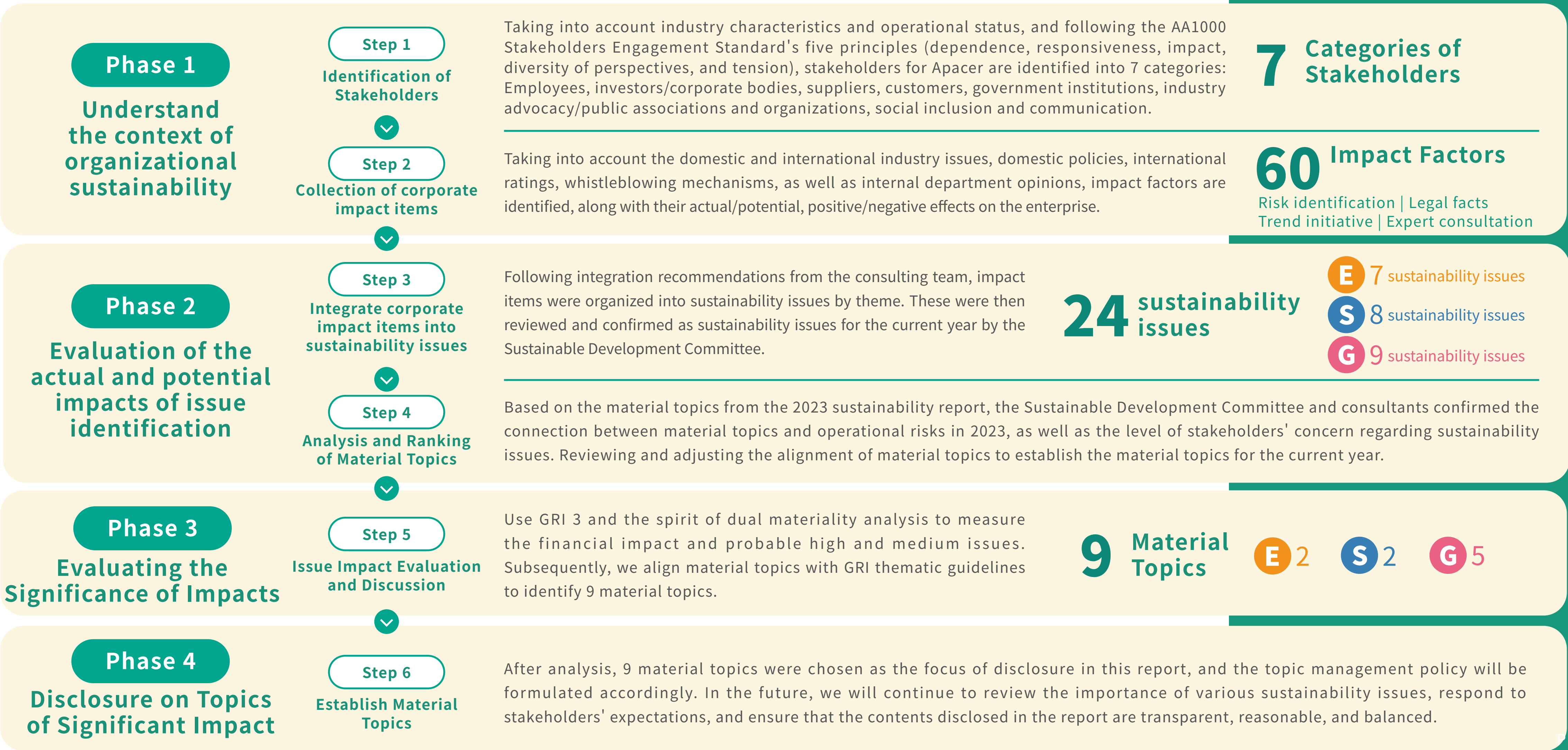


Stakeholder Engagement						
Stakeholder	Significance to Apacer	Purpose	Result	Channel and frequency	Focus on major topics	Apacer's response
Supplier	Suppliers are important partners of Apacer in implementing green production. Through collaboration, communication, and audit guidance, we learn together with suppliers on sustainability issues.	Suppliers scoring over 85% on the "Becoming Better Partners" questionnaire	✔ 123 copies of the "Becoming Better Partners" questionnaire for suppliers ✔ Supplier satisfaction survey reached 88.4 points	- Supplier AGP (Apacer Green Product Web System) Platform - Annual supplier conference	- Raw Material Management - Operational risk management	- Organize supplier evaluations (existing system combined with RBA audits), supplier conferences, and supplier guidance - Compliant with ISO 9001: 2015 and IECQ QC 080000:2017
Government agencies	We continue to pay attention to global sustainability trends and government regulations to proactively plan our corporate sustainability blueprints and strategies.	To ensure the compliance of regulations	No major violation issues	Communicate with cooperating government agencies in accordance with affiliated units	- Information security - Climate change risk management	- Corporate information is published on the Market Observation Post System and the official website based on its materiality. - Internal promotion of legal compliance
Industry Advocacy/ Public Associations and Organizations	Organizations comprising enterprises, organizations, merchants, professionals, and other entities within the electronics semiconductor industry influence the direction and effectiveness of business operations and R&D.	To ensure smooth organizational engagement	A total of 13 industry associations joined	Institution-designated channels	- Raw Material Management	- Continue to participate in organizational activities to ensure smooth information exchange
Social Inclusion and Communication	Residents and organizations in the communities surrounding Apacer's technology plant zones, as well as media outlets committed to information dissemination while simultaneously monitoring Apacer's technological development.	To ensure a positive brand image and fulfill social care responsibilities.	Completed 2 community care projects	From time to time	- Talent cultivatio	- Continue to promote community communication projects - Continue to maintain media relations

Materiality Analysis

Materiality Analysis Method and Process

The 2024 materiality analysis was conducted based on the Sustainability Development Committee. Through in-depth interviews with members of the committee, key issues were thoroughly examined and assessed. For the first time, this process integrated major risks and opportunities identified through enterprise risk management. The results serve as the foundation for preparing the sustainability report, providing stakeholders with a clear understanding of Apacer's sustainability efforts in corporate governance, environmental protection, and social contribution.

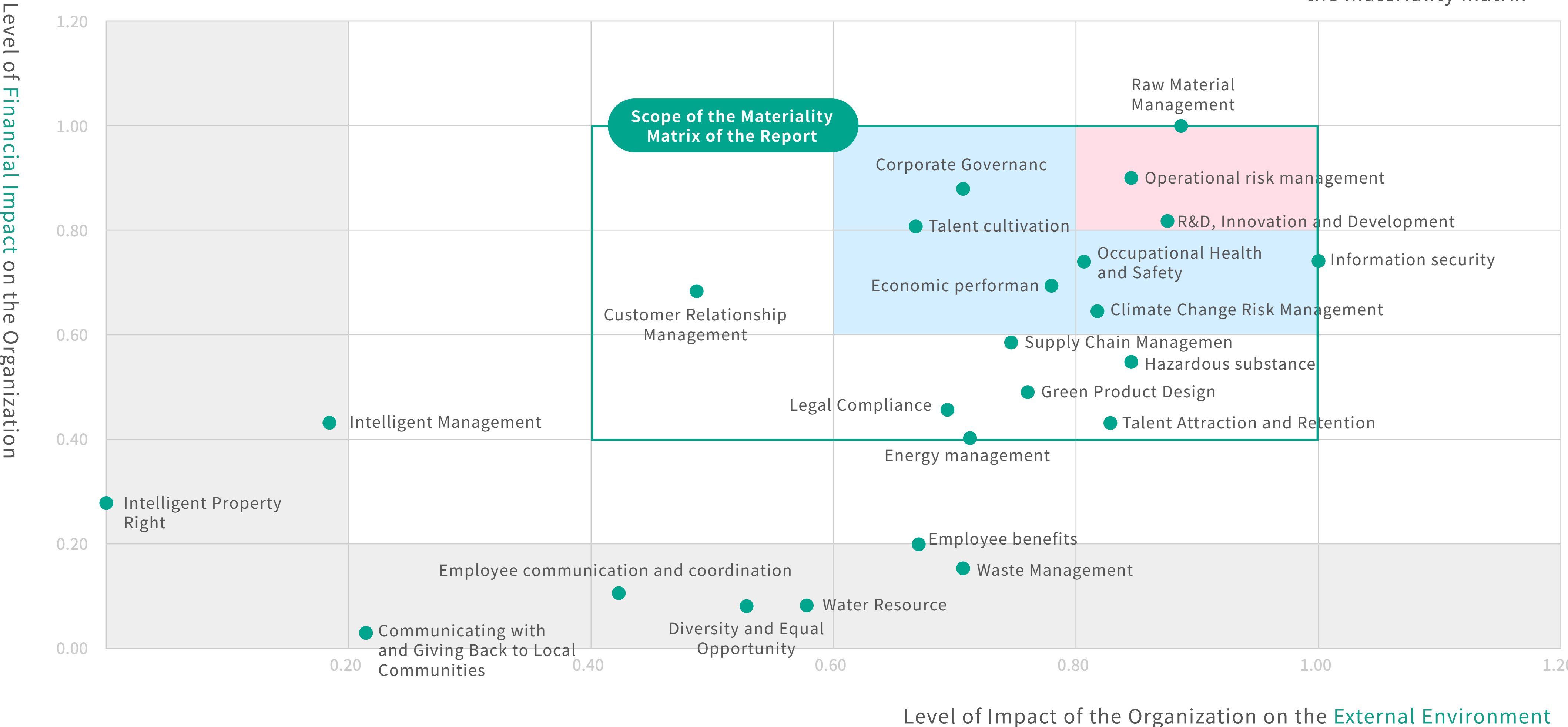


Materiality Analysis Matrix

This year's materiality analysis was conducted through questionnaires to understand the level of concern among stakeholders and corporate executives regarding sustainability issues, as well as the impact of these issues on the Company. Topics assessed as having high or moderate significance were prioritized for disclosure in this report, resulting in the identification of 9 material topics.

Management Policy

- 0.8-1.0 Highly significant theme
- 0.6-0.8 6 medium major themes
- 0.4-0.6 7 low level issues
- 0.0-0.2 8 tracking issues outside the materiality matrix



List of Material Topics

	Material Topics	GRI Topic Guidelines (Remarks)	Importance to Apacer	Response Section
Corporate Governance	R&D, Innovation and Development	Customized Material Topics	Continue to innovate technology and products to enhance Apacer's brand value.	1.4 Innovative R&D
	Operational risk management	Customized Material Topics	The risk management process, management policies, and relevant actions are all designed to mitigate risks. Issues include financial risks and emerging risks such as regulatory risks, political risks, climate change risks, information security risks, etc.	1.2 Corporate Governance
	Corporate Governance	Customized Material Topics	Apacer implemented various corporate management mechanisms to fulfill its managerial responsibilities, including enhancing the functionality of the Board of Directors, improving the quality of information disclosure, and prioritizing stakeholders' rights and interests.	1.2 Corporate Governance
	Information security	Customized Material Topics	In response to the rise of global information security risks, Apacer Technology has implemented an information security management mechanism.	1.1 About Apacer
	Economic performance	GRI 201 Economic performance	Apacer aims to create maximum value for shareholders and stakeholders by focusing on long-term overall operational performance, stable profitability, and growth.	1.3 Product Diversification and Operational Performance
Environmental Friendliness	Raw Material Management	Customized Material Topics	The weight or volume of raw materials (recycled raw materials) used by the organization.	2.4 Green Product
	Climate Change Risk Management	GRI 305 Emissions	Apacer implements management measures for GHG emissions during its operations and set targets related to carbon pricing, carbon sequestration, carbon capture, and other relevant carbon reduction targets.	2.2 Climate Change Risk Management
Social Inclusion	Talent cultivation	GRI 404 Training and Education	To continuously provide and cultivate high-quality talent, Apacer has designed a talent management and development framework, formulated a learning blueprint, and systematically enhanced the competencies of employees.	4.4 Talent Cultivation and Remuneration System
	Occupational Health and Safety	GRI 403 Occupational Safety and Health	Apacer's management practices regarding the working environment and health of employees and other workers.	4.2 Employee Safety and Health

Note: For detailed comparison with GRI standards, please refer to Appendix 1, the GRI Standards Disclosure Table

Changes in Material Topics

Material Topics	2023 Importance	2024 Importance	Change in ranking	Reasons for change	Response Section
Climate Change Risk management	Tracking issue	Moderate	Increase	Taiwan has officially announced "Taiwan's Pathway to Net-Zero Emissions by 2050, with policies being progressively reinforced. Consequently, the associated policy and regulatory risks related to climate change have increased for Apacer, resulting in a heightened materiality of this issue.	2.2 Climate Change Risk Management
Energy management	Moderate	Low	Decrease	This year's analysis methodology was adjusted to place greater emphasis on operational risk factors. As a result, the overall score of this sustainability issue, despite being well-managed, declined accordingly.	2.2 Climate Change Risk Management
Green Product Design	Moderate	Low			2.4 Green Product
Hazardous substance management	Moderate	Low			3.1 Sustainable Supply Chain Management

Material Topic Boundary

After conducting materiality analysis to identify various material topics, and collecting data in accordance with GRI topics, Apacer explains how it manages and addresses the economic, environmental, and social impacts related to these material topics. We define the internal and external boundaries of information to ensure the transparency and integrity of data disclosure.

		Impacts and business relationships (Note)					Relevant stakeholders affected by the issue	Unit responsible for issue impact management	Response Section
Material Topics		R&D and improvement	Raw material procurement	Manufacturing production	Product sales	After-sales service			
Corporate Governance	R&D, Innovation and Development	▲	▲	▲	▲	▲	Employee, customer	RD & Technical Center	1.4 Innovative R&D
	Operational risk management	●	●	●	●	●	Employees, customers, suppliers, investors/corporate bodies	Sustainable Development Committee	1.1 About Apacer
	Corporate Governance	●	●	●	●	●	Employees, customers, investors/corporate bodies	Sustainable Development Committee	1.2 Corporate Governance
	Information security	■		■			Employees, customers, suppliers	Information Service Department	1.1 About Apacer
	Economic performance	●	●	▲	▲	■	Employees, investors/corporate bodies	Management and Administration Committee	1.3 Product Diversification and Operational Performance

	Material Topics	Impacts and business relationships (Note)					Relevant stakeholders affected by the issue	Unit responsible for issue impact management	Response Section
		R&D and improvement	Raw material procurement	Manufacturing production	Product sales	After-sales service			
Environmental Friendliness	Raw Material Management			●	●	●	Customers, suppliers	Procurement Division/ Manufacturing and Quality Center	2.4 Green Product
	Climate Change Risk Management		●	●	●	●	Employees, customers, suppliers	Sustainable Development Committee	2.2 Climate Change Risk Management
Social Inclusion	Talent cultivation	▲		▲	▲		Employee	Administration Management Division	4.4 Talent Cultivation and Remuneration System
	Occupational Health and Safety	▲		▲	▲		Employee	Administration Management Division	4.2 Employee Safety and Health

Note: The impacts of the organization's business activities on material topics are indicated with the following symbols:

▲ indicates "cause" impact: The organization causes an impact through its own activities

● indicates "contribute to" impact: The organization's activities lead to, facilitate, or induce another entity to cause an impact

■ indicates "directly linked to": The organization does not cause or contribute to negative impacts, but its operations, products, or services may result in negative impacts due to its business relationships

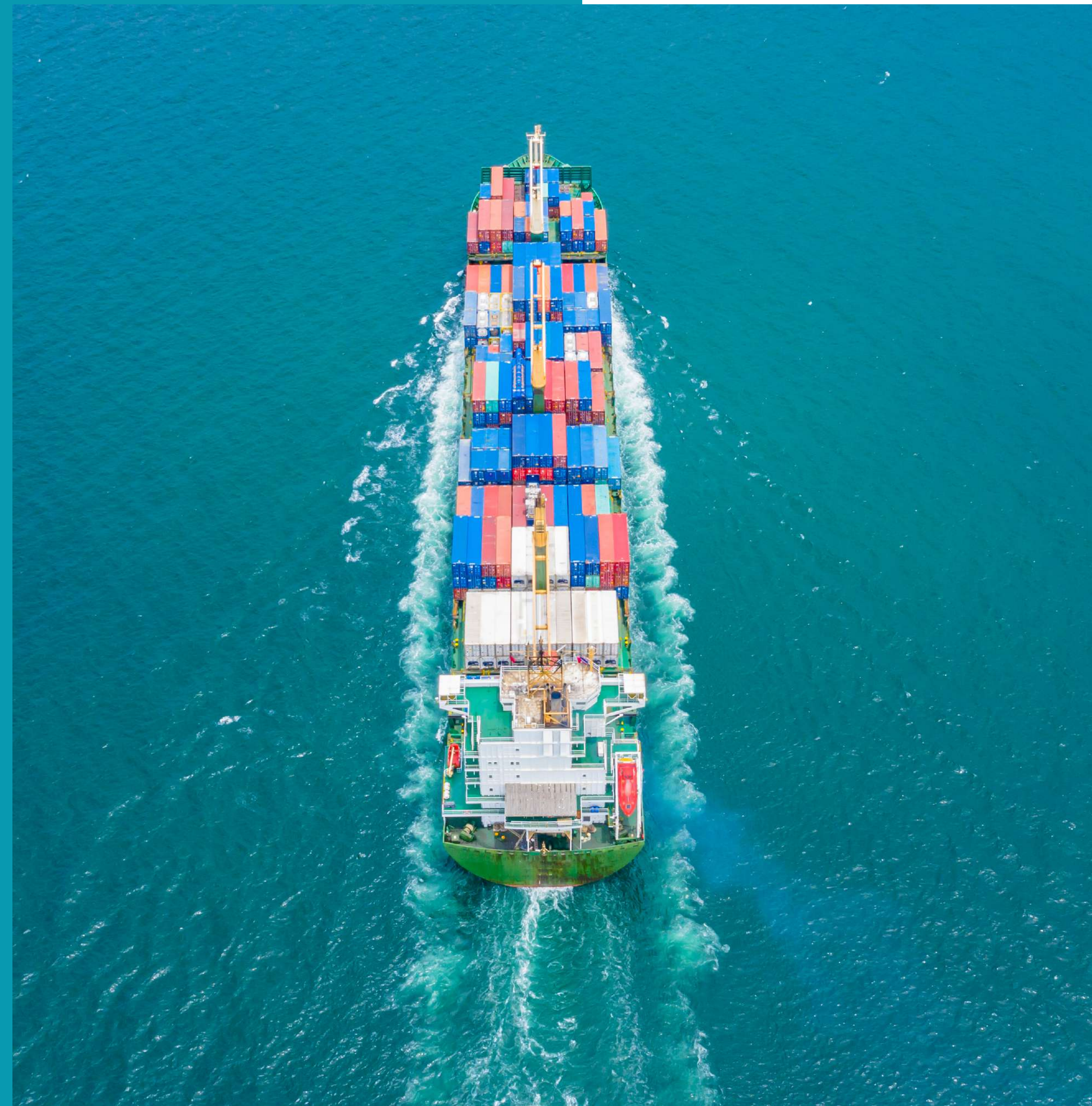
1 A Partner that Leads to Innovation

Vision

Apacer's vision is to "become a leader in technological information service integration, with the core service being in digital storage." We aim to create a fast, stable, and trustworthy smart storage application environment, becoming a trusted added-value service integrator, and providing an exceptional product/service user experience.

Policies and Commitments

Apacer's brand promise "Access the best, share memories", underscores our commitment to continuous innovation and R&D across diverse product domains. We position ourselves as a technology-integrated information service integrator, outlining a blueprint for future development. We promise to operate with integrity as the foundation while continuously pursuing growth and breakthroughs. We consider sustainable development a core goal of business operations, continuously creating value for stakeholders.



Material Topics in This Chapter

Material Topics	Material Topic Management Policy	Comparison with International Frameworks and Indicators			
Corporate Governance	Apacer fulfills its responsibilities as a business operator by ensuring the effective operation of its corporate governance mechanisms. This includes strengthening the functions of the Board of Directors, enhancing the quality of information disclosure, and safeguarding the rights and interests of stakeholders.	Customized Material Topics			
Impact Description	To fulfill its responsibilities as a business operator, Apacer ensures the sound operation of its governance framework by reinforcing the Board’ s functionality, improving information transparency, and prioritizing stakeholder interests. The Company strictly adheres to regulations and maintains open and transparent disclosure to uphold corporate integrity, thus being responsible to all stakeholders while pursuing steady and sustainable growth.	Actual	Potential	Positive	Negative
			V	43.1%	56.9%
Management Actions/ Preventive and Remedial Measures	Actual Plans	2024 Targets		2024 Performance	
	Executing Corporate Governance Evaluation as Planned	Corporate Governance Evaluation within the 6% to 20% range		Corporate Governance Evaluation within the 6% to 20% range	
	External Evaluation of Board Performance	External Evaluation of Board Performance		6%~20%	
				Achieved	
				Achieved	



	Stakeholder Category	Communication Method	Frequency	Reporting System or Response Method
Stakeholder Engagement	Employee	✔ Ethics and Legal Compliance ✔ Occupational Health and Safety ✔ Performance Evaluation	✔ Yearly ✔ Yearly ✔ Twice a year	✔ Conduct legal compliance advocacy ✔ Conduct annual education and training ✔ Conduct performance evaluation and communication
	Investors	✔ Hold investor conferences ✔ Shareholders' meeting ✔ Company website ✔ Press release ✔ Issuance of Sustainability Report	✔ Every six months ✔ Yearly ✔ From time to time ✔ From time to time ✔ Yearly	✔ Describe operational performance and market outlook ✔ Company business report and discussion ✔ Set up dedicated contacts and emails. Contact person: Mei Lin, Project Manage mei_lin@apacer.com

Sustainability targets	Method of evaluation
Short-term targets (2025)	Maintain a corporate governance rating within the 6% to 20% range.
Mid-term targets (2025–2026)	Following the blueprint of corporate governance 3.0, we aim to enhance corporate risk management and improve transparency of company information. This will help maintain our corporate governance evaluation performance within the 6% to 20% range.
Long-term targets (2027)	Continue to strengthen corporate governance performance, regularly review the corporate governance system, enhancing information transparency, and protecting the rights and interests of shareholders and stakeholders.
United Nations Sustainable Development Goals (SDGs)	
16.5 Significantly reduce all forms of corruption and bribery.	
16.6 Develop effective, accountable, and transparent systems at all levels.	



Material Topics	Material Topic Management Policy		Comparison with International Frameworks and Indicators			
Operational risk management	Cautiously review potential internal and external risks from the perspective of corporate sustainability, implement the operation of the risk management mechanism, and improve the efficiency of risk management and the division of labor to reasonably ensure the achievement of the Company's strategic goals.		Customized Material Topics			
Impact Description	Cautiously review potential internal and external risks, and implement a robust risk management mechanism. Effectively implement risk management by enhancing the risk management division of labor, and seeking solutions to reduce the impact of operational risks.		Actual	Potential	Positive	Negative
			V		100%	0%
Management Actions/ Preventive and Remedial Measures	Actual Plans	2024 Targets	2024 Performance		Result Tracking	
	Reduce the risk of obsolescence for key raw materials	The target is to clear 50% of all obsolete goods every six months	The average clearance rate is 100% for every six months		Achieved	
	Capacity utilization enhanced	✓ Redeploy resources to maintain basic operations through strategic outsourcing ✓ Readjust the product structure at production sites	Capacity utilization across factories and outsourced production has exceeded 100%, effectively reducing this risk.		Achieved	
	Effective Compliance with the U.S. Entity List	In full compliance with relevant regulations, there have been no violations in upstream or downstream transactions.	No penalties or violations have been incurred.		Achieved	



	Stakeholder Category	Communication Method	Frequency	Reporting System or Response Method
Stakeholder Engagement	Investors	✔ Disclosure on official website/in annual report ✔ Risk management report ✔ Issuance of Sustainability Report	Yearly	✔ Description of risk management evaluation ✔ Set up dedicated contacts and emails. Contact person: Mei Lin, Project Manage mei_lin@apacer.com

Sustainability targets	Method of evaluation
Short-term targets (2025)	Continuously reduce operational risk to below the moderate level
Mid-term targets (2025–2027)	Continuously reduce operational risk to below the moderate level
Long-term targets (2028)	Continuously reduce operational risk to 0
United Nations Sustainable Development Goals (SDGs)	
8.2 Enhance the productivity of economies through diversification, technological upgrading, and innovation, with a focus on high-added-value and labor-intensive sectors.	



Material Topics	Material Topic Management Policy		Comparison with International Frameworks and Indicators			
Information security	Continue to strengthen information security defenses and standardize processes. To ensure continuous business operation, uninterrupted information services, and data protection, we continually improve and enhance our information security systems and management strategies. We integrate international information security standards such as ISO/IEC 27001:2022 and NIST SP800-171 to establish an information security management framework.		Customized Material Topics			
Impact Description	In response to the rising of global information security risks, Apacer has proactively implemented advanced information security management mechanisms. This not only enhances operational readiness but also strengthens the interests of stakeholders such as customers, suppliers, and shareholders.		Actual	Potential	Positive	Negative
				V	31.2%	68.8%
	Actual Plans	2024 Targets	2024 Performance		Result Tracking	
Management Actions/ Preventive and Remedial Measures	Establishment of ISO/IEC 27001:2022 Information Security Management System	✓ Formed a dedicated information security team ✓ Established information security policies and procedures ✓ Conducted regular information security training sessions ✓ Performed internal audits ✓ Completed external certification	✓ Q1: Established the information security promotion team ✓ Q2: Completed ISO/IEC 27001:2022 system development and training ✓ Q3: Implemented the ISO/IEC 27001:2022 Regulations for Information Security Management ✓ Obtained ISO/IEC 27001:2022 certification		Achieved	
	Enhanced overall information security protection capabilities	✓ Conducted periodical vulnerability scans ✓ Deployed advanced network access control systems ✓ Established real-time monitoring and alert mechanisms	✓ Achieved a 100% completion rate for high and medium-risk vulnerability remediation ✓ Maintained zero incidents of unauthorized access ✓ Successfully passed both internal and external audits		Achieved	



	Stakeholder Category	Communication Method	Frequency	Reporting System or Response Method
Stakeholder Engagement	Employee	✔ Annual achievement report ✔ Project communication review ✔ Email ✔ Education and training	✔ Yearly ✔ Quarterly ✔ From time to time	Internal hotline 5300
	Customer	Customer Relationship Management	✔ Yearly ✔ From time to time	✔ Overall Customer Satisfaction Survey ✔ Our customer service hotline 0800-668-699 and online contact methods are available
	Supplier	✔ Supplier evaluation ✔ Supplier conference ✔ Quality improvement meeting	✔ Periodically ✔ Once a year ✔ Material quality incidents from time to time	✔ Supplier satisfaction survey ✔ Supplier evaluation

Sustainability targets	Sustainability targets	Method of evaluation
Short-term targets (2025)	Strengthen the resilience of business operations by upgrading the backup mechanism and conduct disaster drills.	ISO/IEC 27001:2022 international information security certification In accordance with changes in the external environment and international information security standards
Mid-term targets (2025–2026)	Comprehensively defend enterprise information assets, adhering to international information security protection frameworks.	
Long-term targets (2027)	Continuously improve and expand enterprise information security defense in a circular manner.	
United Nations Sustainable Development Goals (SDGs)		
7.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation, and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, particularly at the UN level, and through a global technology facilitation mechanism when agreed.		



Material Topics		Material Topic Management Policy		Comparison with International Frameworks and Indicators	
Economic performance	Develop better business strategies and business plans with an effective risk management mechanism, commit to achieving operational goals, and create sustainable business growth to enhance economic value for the enterprise.			201-1 201-3	
Impact Description	Given the dynamic nature of the memory industry, staying ahead of international trends to promptly adjust operational strategies is a critical factor influencing economic performance. Additionally, fulfilling corporate social responsibilities and implementing positive corporate governance practices can also impact economic performance.		Actual	Potential	Positive
			V		17.9%
Management Actions/ Preventive and Remedial Measures	Actual Plans	2024 Targets	2024 Performance		Result Tracking
	Revenue contribution from new customers	Accounts for 2% of total revenue.	Develop differentiated distribution and marketing strategies based on various market segments.		Achieved
	Contributions of strategic collaboration	Accounts for 6% of total revenue.	By providing stable supply and a quarterly pricing strategy, we assist customers in quickly integrating product lines, and achieve mutual benefits through joint marketing collaboration.		Achieved



	Stakeholder Category	Communication Method	Frequency	Reporting System or Response Method
Stakeholder Engagement	Investors/corporate bodies	✔ Investor conference ✔ Shareholders' meeting ✔ Conduct identification and management of operational risks. ✔ Issuance of Sustainability Report	✔ Every six months ✔ Yearly ✔ From time to time	✔ Describe operational performance and market outlook ✔ Company business report and discussion ✔ Set up dedicated contacts and emails. Contact person: Mei Lin, Project Manage mei_lin@apacer.com
	Customer	Customer Relationship Management	✔ Yearly ✔ From time to time	✔ Overall Customer Satisfaction Survey ✔ Our customer service hotline 0800-668-699 and online contact methods are available

Sustainability targets		Method of evaluation		
Short-term targets (2025)	Develop four operational momentum to improve operational efficiency.	Financial performance indicators in the annual financial report		
Mid-term targets (2025–2026)	A leading brand that provides integrated services and innovative value.	Item	Profit in the past two years	
		Unit: NTD	2023	2024
Long-term targets (2027)	Become a leading brand integrating the value ecosystem.	Operating revenue	7.6 billion	7.8 billion
		Gross profit margin	23%	16.6%
		Earnings per share (NTD)	4.51	2.18
United Nations Sustainable Development Goals (SDGs)				
8.2 Enhance the productivity of economies through diversification, technological upgrading, and innovation, with a focus on high-added-value and labor-intensive sectors.				



Material Topics		Material Topic Management Policy		Comparison with International Frameworks and Indicators	
R&D, Innovation and Development	Innovative R&D: Focus on investment in innovative R&D, delve into solutions for industry, social development, and sustainability needs Leading technology: Continue to invest in the research and development in both core businesses and new ventures to maintain a leading position in the industry Patent development: Expand the depth and momentum of innovation and develop core patented technologies with an emphasis on quality	Material Topic Management Policy		Comparison with International Frameworks and Indicators	
		Customized Material Topics		Comparison with International Frameworks and Indicators	
Impact Description	We have established a Patent Development Committee and a Patent Review Team to monitor external patent development, facilitate internal patent sharing, review successful cases and plan business opportunities. Through R&D innovation, the aim is to create high-quality products and value-added technologies, thus enhancing the brand value of Apacer. Additionally, the Company continues to obtain IOS 9001:2015 and ISO 14001:2015 verifications. The competitiveness of an enterprise is essential for maintaining market share.	Actual		Potential	Positive
		V			100%
Management Actions/ Preventive and Remedial Measures	Actual Plans		2024 Targets		Result Tracking
	Innovative project development		12 cases		Achieved
	Patent technology development		8 cases		Achieved



	Stakeholder Category	Communication Method	Frequency	Reporting System or Response Method
Stakeholder Engagement	Customer	✔ Production specification ✔ Seminar ✔ Company website	✔ According to product development and launch schedules ✔ Yearly ✔ According to product and brand messaging releases	✔ Conduct on-site visit ✔ Email ✔ Satisfaction survey
	Supplier	✔ Product Approval Sheet ✔ Update of quality documents ✔ Supplier conference	✔ Executed according to product development plan ✔ Executed according to the laws and regulations ✔ Yearly	✔ On-site audit ✔ On-line, email communications

Sustainability targets	Sustainability targets	Method of evaluation
Short-term targets (2025)	R&D of innovative products, deep cultivation of technology development, continuous innovation and R&D, and provision of customized services.	✔ Number of patent applications ✔ Number of innovative solutions and products
Mid-term targets (2025–2026)	Patented innovative technology transformed into substantial operating benefits.	
Long-term targets (2027)	Drive the growth of R&D momentum and maintain sustainable operations.	
United Nations Sustainable Development Goals (SDGs)		
8.2 Enhance the productivity of economies through diversification, technological upgrading, and innovation, with a focus on high-added-value and labor-intensive sectors.		



1.1

About Apacer

Company Overview – Business Locations

Founded in 1997, Apacer has been operating for more than 26 years. In 2010, Apacer was listed on the Taiwan Stock Exchange (stock code: 8271). The scope of operations includes our core businesses: industrial control memory modules and value-added digital storage technology, consumer memory products, gaming memory and peripheral products, as well as smart applications. These mainly provide integration of ICT and OT, promoting IIoT proactive disaster prevention systems and AI+AOI automated optical inspection total solutions.



Corporate Governance Evaluation

Ranked in the Top 5% among companies with a market value between NTD5 billion and NTD10 billion



CommonWealth Magazine Talent Sustainability Award



Friendly Migrant Worker Companies Award



Taiwan Excellence Award



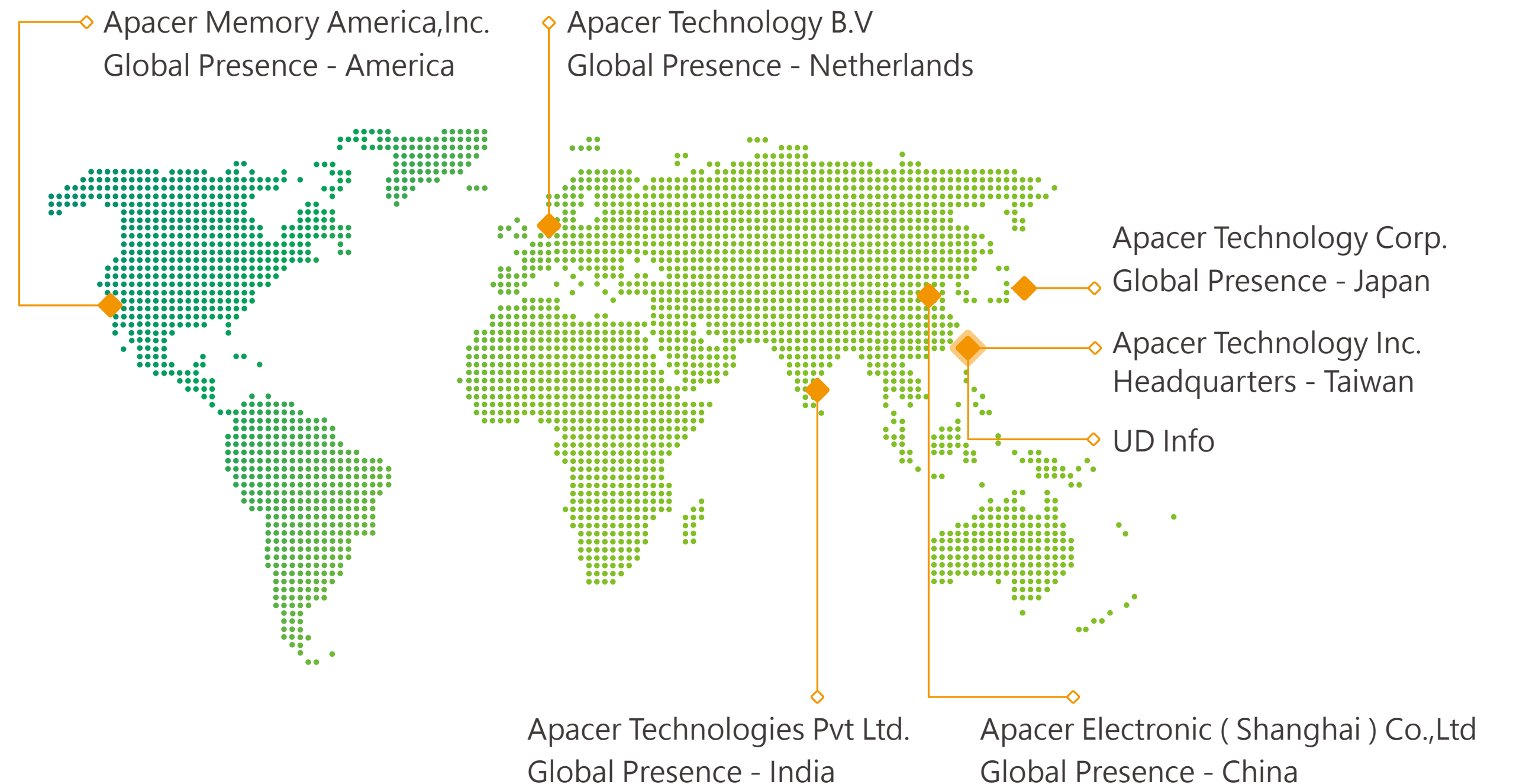
Business Weekly Top 100 Carbon Competitiveness Companies



EEAwards - Product Award



TCSA Sustainability Report Gold Award



For more information on past awards : [click here](#)

Apacer is capable of integrating R&D, design, manufacturing, and marketing. To provide professional international services, we established our global operational HQ in New Taipei City, Taiwan. We have subsidiaries in China, the United States, the Netherlands, Japan, and India. Furthermore, in 2022, we expanded our operational footprint by exchanging shares with UD Info, incorporating it as a subsidiary located in Sanchong Dist., New Taipei City. At present, the main business scope is global, and the types of customers include prominent distributors, equipment manufacturers, system integrators, and retail customers.

Company Name	Apacer Technology Inc.	Main products	✓ Industrial Solid State Drives ✓ Memory module ✓ Value-added technology ✓ Consumer digital products such as USB flash drives, external portable hard drives, and gaming products ✓ Smart IoT Integrated Solution ✓ AI+AOI Optical Inspection and Spectral Luminance Measurement System ✓ ODM design and manufacturing services for intelligent automation testing equipment
Company address	1F., No. 32, Zhongcheng Rd., Tucheng Dist., New Taipei City 236		
Date of establishment	April 16, 1997		
Listing information	TWSE stock code: 8271		
Capital amount	NTD 1.287 billion		
Industry category	Semiconductor industry	Total number of employees ¹	598

Note¹: Total number of employees at operating locations worldwide as of December 31, 2024

Brand Promise and Core Value

Apacer's development vision is to "become a leader in technological information service integration with digital storage as the core". Apacer has been established for many years, accumulating rich technology and experience, and has always adhered to the brand promise of "Access the best and Share Memories" to provide quality products and services to meet customer needs. We further insist on upholding our brand's core value of "Delivering on promises, striving to be better, advancing together" internalizing our ethos of "Becoming Better Partners" as the foundation of our corporate culture, which has since become the core driving force for promoting sustainable business operations.

Brand Promise

Apacer
Access the best

Brand Core Value

做好伴
說到做到 • 堅持更好 • 夥伴共進

Ethical Corporate Management

Ethical Corporate Management Policy: Implement Ethical Corporate Management, prohibit improper gains, ensure transparent information disclosure, respect intellectual property rights, promote fair trade competition, maintain confidentiality, and prohibit retaliation.

Apacer makes legal compliance a basic premise of its Ethical Corporate Management. All global operational bases adhere to local regulations to ensure compliance and avoidance of conflicts of interest. To uphold compliance with laws and practices of Ethical Corporate Management, Apacer has formulated an Ethical Corporate Management policy, along with related guidelines and procedures such as "Code of Conduct of Ethical Corporate Management" and "Procedures of Ethical Corporate Management", which have been approved by the Board of Directors. These measures strictly require employees to refrain from personal interests that may interfere with or have the potential to interfere with the Company's overall interests. Additionally, an annual report on the operation of Ethical Corporate Management is submitted to the Board of Directors. The Company designates the HR and Administration Department to concurrently manage Ethical Corporate Management, ensuring the effective and reasonable implementation of the internal control systems.

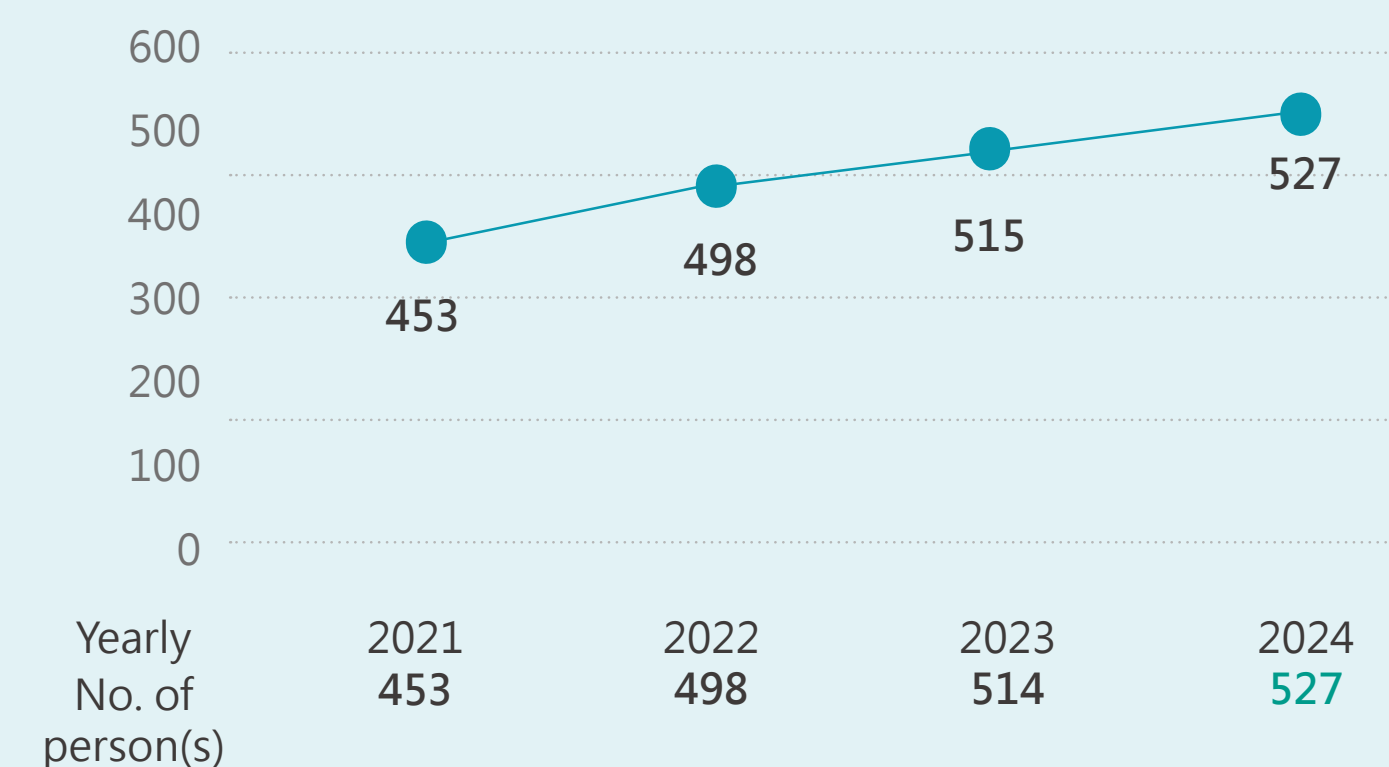
To proactively prevent unethical behavior in corporate management, Apacer has implemented a whistleblowing system to report violations of corporate finance laws and regulations, policies, and ethical standards, as well as any form of fraudulent behavior. For details, please refer to the Apacer website's Code of Conduct of Ethical Corporate Management of **Significant Internal Regulations**.

Education and Training of Ethical Corporate Management

The code of conduct related to Ethical Corporate Management is also published on the intranet for promotion and advocacy among the employees of the Group. In 2024, Apacer held its annual ethical business training program. The training covered topics such as the company's ethical business policy, anti-corruption standards, and the Code of Ethical Conduct. It also integrated related topics from the Responsible Business Alliance (RBA), including labor rights, occupational health and safety, environmental hygiene, ethical standards, and management systems, as well as measures to prevent insider trading. A total of 527 participants attended the training, achieving a 100% employee training rate.

Note: The above data includes figures from the subsidiary, UD Info Corp.

Number of employees trained in ethical corporate management



Internal audits

Purpose

The purpose of establishing the internal audit function is to assist the Board of Directors and management in inspecting and reviewing deficiencies in the internal control system, and in assessing the effectiveness and efficiency of operations. This ensures the continuous and effective implementation of the internal control system and serves as a basis for its review and improvement, thereby strengthening the company's operations.

Internal audit organization

- ✓ The internal audit reports directly to the Board of Directors and submits reports to both the Board and the Audit Committee.
- ✓ The appointment or dismissal of the Chief Internal Auditor must be approved by the Audit Committee and then resolved by the Board of Directors
- ✓ The appointment, evaluation, and compensation of internal auditors are handled by the Chief Internal Auditor in accordance with the company's "Corporate Governance Best Practice Principles" and are submitted to the Chairman for approval.
- ✓ Currently, the company has assigned one Chief Internal Auditor and one internal auditor to the internal audit unit.

Internal audit operation

The Company has established an internal control system in accordance with legal requirements. The internal audit unit has formulated the Implementation Rules of Internal Audit which are used to assess the effectiveness and compliance of current control systems and procedures. The audit scope covers all operations of the company and its subsidiaries. An annual audit plan is developed based on risk assessment results and is submitted to the Board of Directors for approval following the consent of the Audit Committee. Internal auditors execute audit tasks according to the annual audit plan. Monthly and quarterly audit and follow-up reports are submitted for approval and delivered to members of the Audit Committee for review by the end of the month following the completion of each audit item. In addition to reporting to the Audit Committee, the Chief Internal Auditor also attends Board meetings to present audit matters.

Internal control self-evaluation

Each year, all departments of the Company conduct periodic self-evaluation of the effectiveness of the internal control system. The internal audit unit then reviews these self-evaluation reports from each department and subsidiary. Together with any deficiencies or irregularities identified during audits and their subsequent improvements, these reviews serve as the primary basis for the Board of Directors and the President to evaluate the overall effectiveness of the internal control system and to issue the Internal Control System Statement.



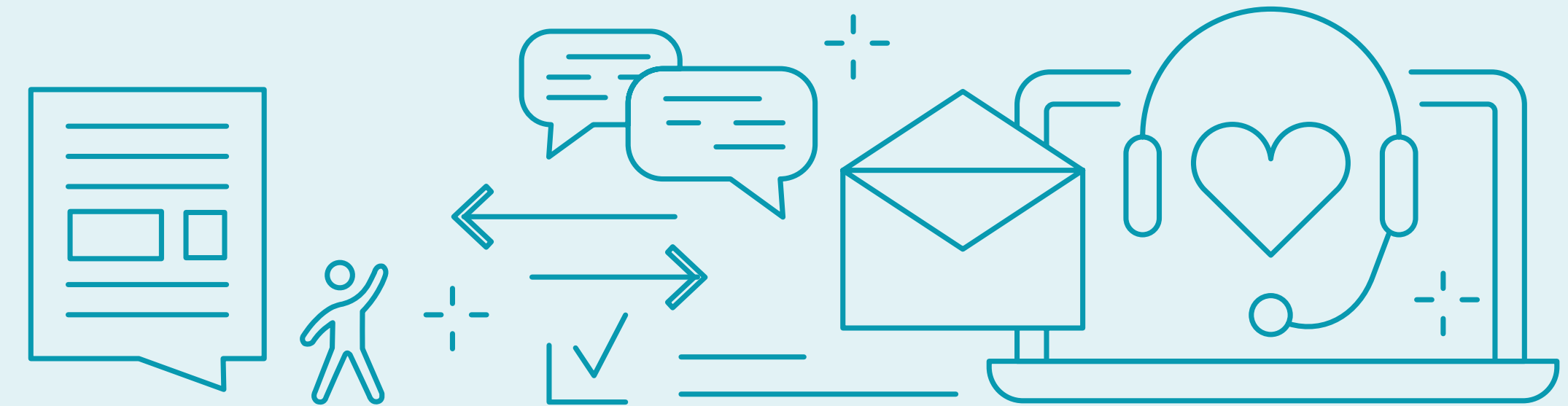
Whistleblowing System

Apacer places great importance on addressing corruption, fraud, and violations of ethical corporate management. The Company has established a "Rules Governing the Whistleblowing System" to provide a formal mechanism for reporting misconduct. Internal employees or external parties who detect irregularities may report any improper conduct through designated channels, and such cases will be investigated and handled by designated personnel.

The Company adopts strict confidentiality measures to protect the identity of whistleblowers and the content of reports, ensuring that whistleblowers and related investigators are protected from retaliation or unfair treatment. The contact information for reporting is provided below. No irregularities were reported in 2024.

Reporting System for Violations of Professional Ethics

- ✓ Whistleblower Hotline: (02) 2267-8000, ext. 5980 for Ms. Hsu
- ✓ Whistleblower Email: whistleblower@apacer.com
- ✓ Reporting Address: 6F., No. 32, Zhongcheng Road, Tucheng District, New Taipei City 236
Attn: Whistleblower Committee

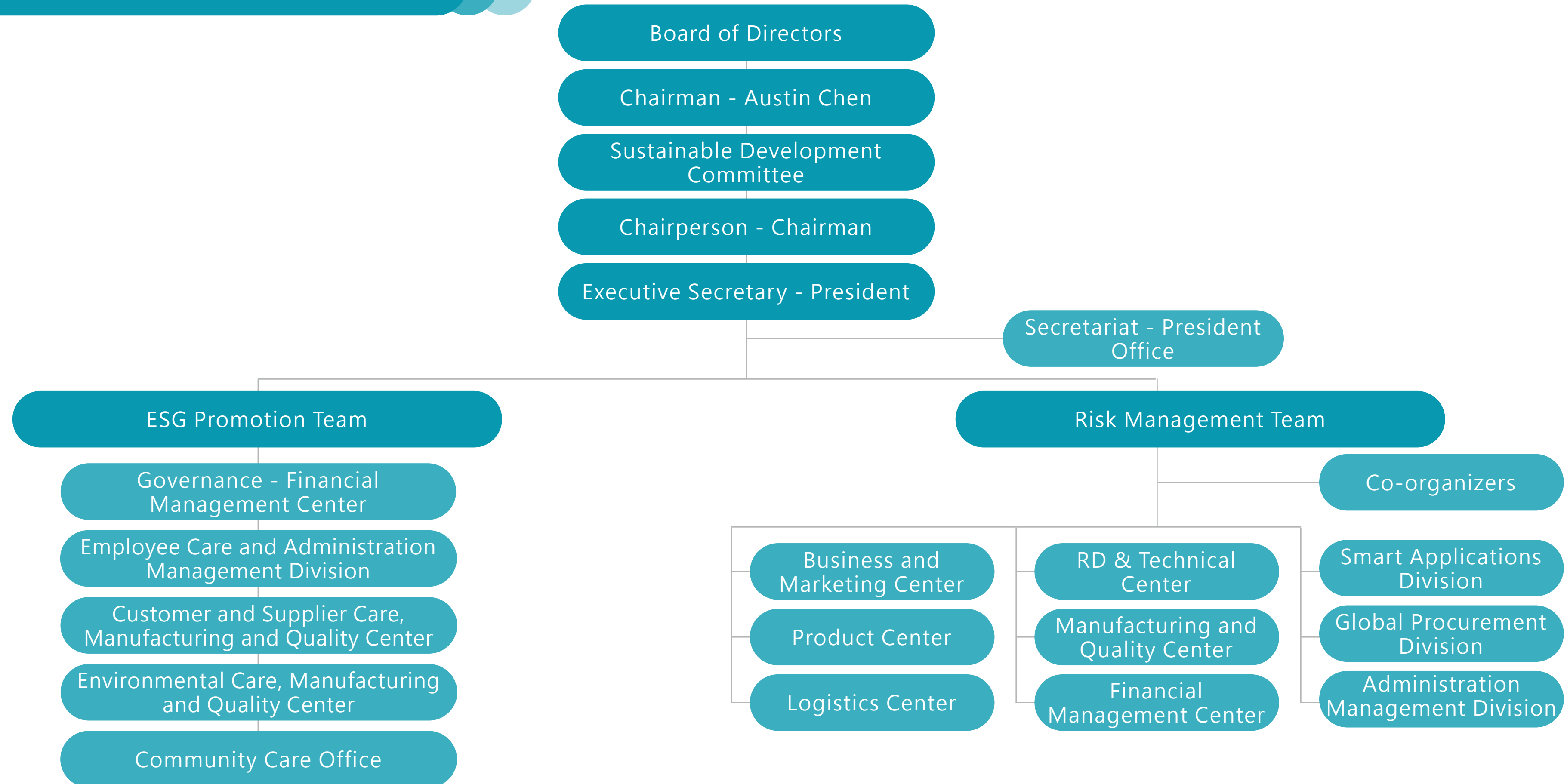


Note: Whistleblowing system: **For more information, please click Here**

Operational Risk Management (Material Topic)

To promote sound operations and sustainable corporate development, Apacer has established the "Risk Management Policy and Procedures". When conducting business activities, the Company carefully reviews potential risks from both internal and external perspectives through the lens of sustainable business operations. The Company implements risk management mechanisms to enhance the effectiveness of the division of labor as it relates to risk management, aiming to ensure the achievement of the Company's strategic objectives.

Risk Management Organizational Structure



● Board of Directors:

Serving as the highest decision-making unit for corporate risk management, the Company's Board of Directors is responsible for approving risk management policies and relevant bylaws, overseeing the implementation of all risk management systems, and ensuring the effective operation of the management mechanism.

● Sustainable Development Committee:

The Company has established a Sustainability Development Committee under the Chairman and Chief Strategy Officer. Under the Sustainability Development Committee, two subgroups have been formed: the ESG Promotion Team and the Risk Management Team. The Risk Management Team serves as the executive unit responsible for implementing the Risk Management Policy and is in charge of promoting the Company's risk management operations:

- ✓ Formulate risk management policies and related procedures
- ✓ Implement the risk management policy approved by the Board of Directors
- ✓ Review issues related to the Company's risk control
- ✓ Supervise the overall implementation and coordination of the operation
- ✓ Overall risk identification, prevention, and monitoring of major risk control issues
- ✓ Submit a report to the Board of Directors at least once a year

● Risk Management Team:

Belonging to the Sustainable Development Committee, the risk management team is composed of representatives appointed from various departments and divisions within the Company. They are responsible for executing risk management operations, including the fundamental risk identification across all company operations, proposals for improvements and response strategies and control plans, and implementation of routine risk management.

● Scope of Risk Management

The Company implements risk management based on the following risk categories:

ESG Type	Risk Category	Definition
G	Operational risk	Also known as business risk, it refers to the impact of uncertainty factors in various stages of supply, production, and sales process during a company's production and operation.
G	Market risk	Market risks can be divided into interest rate risk, exchange rate risk, stock price risk, raw material price risk, etc.
E 、 S	Environmental health and safety risks	Occupational disaster/environment, self-pollution/public health incident (e.g. pandemic) risk
G	Financial risk	The inability of a company to repay interest or principal on debt financing as scheduled, leading to the possibility of bankruptcy, is known as default risk.
S	Human resource risk	Risks related to labor encompass various aspects such as recruitment, job analysis, career planning, performance evaluation, salary management, benefits/incentives, employee training, and personnel management.
G	Information security risk	The Company's information assets are vulnerable to various threats from both internal and external sources, which could lead to operational disruptions and losses.
E 、 S	Emerging risk	Emerging risks refer to new types of business or other risks that may have an adverse impact on future business operations due to lack of risk identification and evaluation, such as climate change risks, etc.

Members of the risk management team identify, measure and respond to the risks observed by the unit internally and externally. They also conduct follow-up operations to improve identified risk items to effectively control risks to within manageable boundaries.

Contents of risk management operations

Content	Confirm goals	Confirm each unit's annual target.
	Risk identification	Review risks that may prevent goal achievement and categorize and explain the sources of risk, while also assessing their impact.
	Risk measurement	Establish risk assessment criteria: Determine the probability and impact level Establish risk baselines: Create a risk distribution chart based on the probability (x-axis) and the degree of impact (y-axis).
	Risk response	For highly severe and certain risk issues: Evaluate whether existing control mechanisms can manage the risk. Develop response strategies (transfer/accept/eliminate, etc.) for risks that can be avoided.
	Improvement tracking	Track whether the above measures are effective in reducing risks.

Implementation status of risk management

The Company actively promotes the implementation of the risk management mechanisms. The "Risk Management Policy and Procedures" was established on August 4, 2021 and was subsequently approved by the Board of Directors. In October 2021, the "Corporate Social Responsibility Committee" was reorganized into the "Sustainable Development Committee". In addition to the ESG Implementation Team, the "Sustainable Development Committee" added a "Risk Management Team" responsible for conducting operational risk management tasks such as risk evaluation and response.

The operation of the Company's Risk Management Team in 2024 was as follows:

Quarterly meetings of the Risk Management Team

The Company identifies, measures, responds to, and tracks the improvements for the Company's overall risks on a quarterly basis. This process involves senior managers and members of the Risk Management Team identifying, assessing, responding to, and tracking improvements in the internal operational activities of the Company, identifying potential risks events that may lead to the failure to achieve company objectives, losses, or negative impacts. Based on the Company's strategic objectives, perspectives of internal and external stakeholders, tolerance for risks impacts, and available resources, risk response strategies or risks mitigation plans are selected. These are then implemented, with continuous monitoring by members of the Risk Management Team and relevant personnel from operating units. Timely reporting to the Risk Management Team is done, and relevant records are maintained.

The Company's risk identification includes, but is not limited to, operational risk, market risk, safety and health risk, financial risk, human resource risk, information security risk, environmental risk, and emerging risks (e.g., climate change risk) related to our operations.

Periodic reporting to the Board of Directors

The Risk Management Team compiles quarterly reports on risk management implementation and evaluation. These reports include risk assessment results for various aspects and provide details on control and supervision procedures for higher-risk areas. The Sustainable Development Committee consolidates these reports and regularly submits them to the Board of Directors to report on the results of risks management execution.

The latest report was submitted by the Sustainable Development Committee to the Board of Directors on December 19, 2024.

Future Planning and Progress of Risk Management Projects

In response to sustainability trends, Apacer plans to evaluate an organizational restructuring of the Sustainability Development Committee. The proposed adjustment would assign risk assessment responsibilities to senior executives and broaden participation across departments. This aims to ensure that operational risks and climate-related risks are jointly reviewed, enabling the development of comprehensive strategies to mitigate and reduce potential impacts.

2024 Corporate Risk Matrix

Based on the materiality principle and risk classification, the Company's internal risks are identified and assessed by senior managers and members of the Risk Management Team, then consolidated into the following risk matrix.

Occurrence rate	Very High					
	High					
	Medium			2. Overcapacity	1. Obsolete materials Key raw materials	
	low	16. Legal compliance risk (money laundering prevention)	7. Supplier capacity reduction 8. Information security – cyber security 11. Obsolete materials			
	Very low		12. Exchange rate/interest rate 13. Default risk (interest repayment) 14. Customer over/under material supply 15. Legal compliance risk (disclosure and reporting)	9. Material shortages – supply chain management 10. Contract risk (unfavorable terms)	4. Intellectual property infringement 5. Information security – source code leakage 6. Decline in market share	3. U.S. Entity List
		Very low	low	Medium	High	Very High
		Level of impact				

● Response measures to Material Issues in 2024

In 2024, the Company identified the risk items in the table above and responded to the top three items with the highest occurrence rates and greatest impact as follows:

ESG Type	Risk Type	Key Issue	Problem description/ background description	Likelihood of occurrence	Countermeasures	Response strategies
G	Operational risk	Supply chain risk – obsolete materials	High uncertainty in orders led to high material inventories and low demand, causing a slowdown in turnover	This impacts the Company's capital utilization, leads to inventory value losses, and effects the Company's financial performance	Mitigate risk	Materials remaining unsold for extended periods are either resold through procurement or used as substitute materials, increasing versatility to reduce inventory Update order information promptly and adjust procurement orders or quantities as needed, or delay incoming shipments to reduce inventory
G	Operational risk	Overcapacity	The demand for orders is lower than the prepared production capacity, making it impossible to maintain the basic operation of production sites	Increased product costs undermine product competitiveness	Mitigate risk	Redeploy resources to maintain basic operations through strategic outsourcing Readjust the product structure at production sites
G	Operational risk	U.S. Entity List	Check whether the Company's trading counterparties are included on the U.S. Entity List.	Potential risks include financial losses and restrictions on business development and expansion.	Mitigate risk	A transaction management mechanism for counterparties listed on the Entity List should be established to reduce risk.

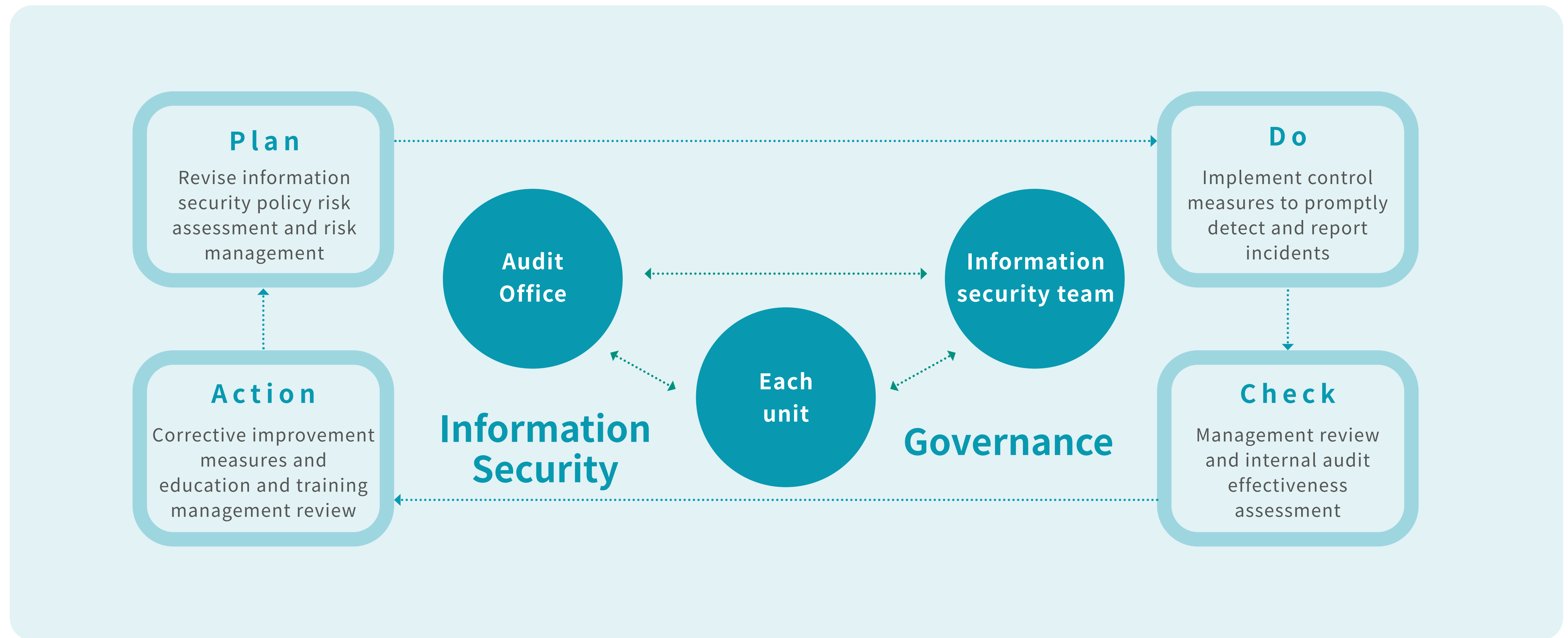
Information security (material topics)

● Information security policy

The Company implements various control measures for information security concerning information assets, including: information security management systems, employee information security management, asset classification management, system development and maintenance, system security management, communication network management, access control security, vulnerability detection management, incident response management, and operational continuity management. We continuously adapt to new risks and information security framework requirements by updating and adding relevant policies, ensuring consistency with disclosed information on our official website. These major categories undergo continuous PDCA cycles, including:

- ✓ **Planning:** Information asset classification, risk assessment, and risk handling plan
- ✓ **Operational:** Implementing in-depth defense measures including physical security measures, system/device security measures, account privilege management, and information security monitoring and maintenance
- ✓ **Review stage:** Internal audit, IT asset sampling review, technical defense effectiveness measurement
- ✓ **Improvement stage:** Corrective action and management review meeting
- ✓ **Information security awareness:** Announcement and promotion, new employee information security education and training

We also review the content of the information security policy every year to continuously strengthen the information security awareness of employees. Through employee information security education and training and announcements and promotions, our knowledge and correct understanding are enhanced to achieve the goal of information security protection. For details, please see "Information Security Management" on Apacer website.



Information security goal

Ensure that information operations are correct, complete, and usable for current and future operations.

Information security management unit

Establish an information security team to confirm the effectiveness of information security management operations.

Information security control measures	Privilege Management	Personnel account management and review.
	Access Control	Personnel access control management, data breach management, remote personnel access behavior restriction, external storage device control.
	External Threats	Regular virus scanning and detection of malicious software, setting up network firewalls.
	Operational Continuity	Monitoring system operations for abnormal alerts, regular data backups and offsite recording and storage, remote server room backups, regular disaster recovery drills.
	Information Security Promotion	Education and training courses for new employees, and periodic announcements of information security-related information

Effectiveness of Information Security Management in 2024

- Annual inventory of information security incidents and risk assessment: There were no material information security incidents in 2024.
- Risk management planning in advance: Conduct internal inventory in response to material domestic and foreign information security incidents, and plan risk mitigation measures accordingly.
- Apacer's continuous improvement helps reduce external threat risks.

Implementation Outcome of Information Security Promotion

Effectiveness in 2022

1. Information security control

- Upgraded 3 protection technologies (introduced MDR, upgraded VM platforms, increased backbone bandwidth)
- Addition of 6 items to the control measures
- 2 information security courses (CEH, ISC)

2. Backup/disaster recovery efficiency tripled

- Major service 8 hours (formerly 24)
- Secondary service 16 hours (formerly 48)

Effectiveness in 2024

1. Information security certification

- ISO/IEC 27001:2022 [IT server room + T100 core system] certification

2. Information security control

- 4 protection technology upgrades
 - Control measures for illegal device connections to the Fab system
 - Replacement of network firewall equipment
 - Replacement of spam email gateways
 - Establishment of the external DMZ access service to strengthen the protection framework

Internal audit: The Company passed information security-related audits and no significant deficiencies were found. There were also no serious information security incidents leading to the violation of the information security policy, leakage of customer information, or penalties.
Annual report of Senior Management: Presenting the report on the execution status to the Board of Directors on December 19, 2024

Effectiveness in 2023

Information security control

- 4 protection technology upgrades
 - Achieved the introduction of external connection OTP two-factor authentication
 - Achieved MDR protection by expanding coverage to all RSOs
 - Achieved the control over illegal device connections to the OA system
 - Achieved backup software conversion and upgrade (60% increase in backup performance and resource utilization)
- 1 information security self-evaluation
 - Awarded a score of 110 points in the United States DoD military-grade product information security self-assessment NIST 800-171

Plans for 2025

1. Information security certification

- Maintain the validity of ISO/IEC 27001:2022 certification and continue implementing ISO-compliant practices.

2. Information security control

- 4 protection technology upgrades
 - Optimize the visualization dashboard of the security operations platform: expected to be completed in H1
 - Optimize the automated voice alert system: expected to be completed in H1
 - Mask sensitive data in the ERP core system testing environment: expected to be completed in H1
 - Optimize the network topology of the server room: expected to be completed in H2

3. Mask sensitive data in the ERP core system testing environment: expected to be completed in H1

- Simulated phishing email attack exercise: expected to be completed in H1
- Disaster recovery drill for critical business service interruptions: expected to be completed in H2

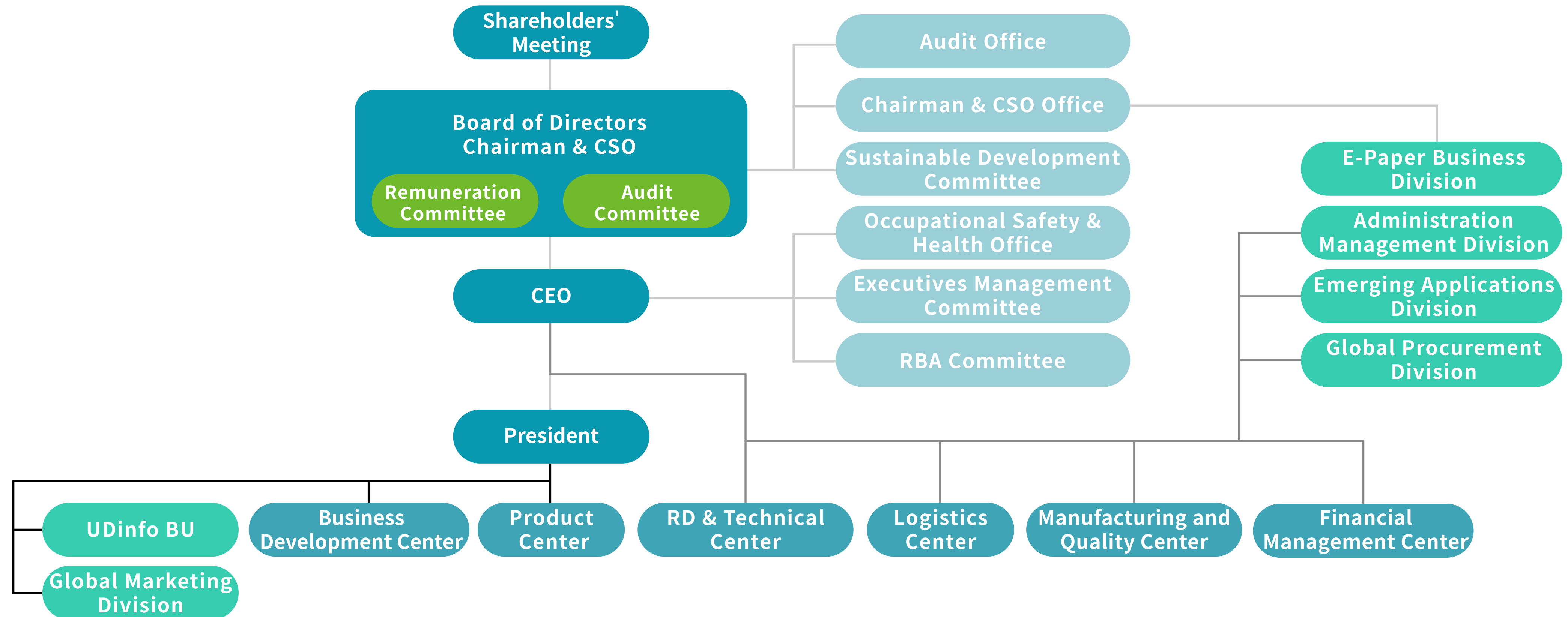
4. Improve hardware availability in the data center

- Expand/replace storage equipment resources: expected to be completed in H1
- Expand/replace computing server resources: expected to be completed in H2

1.2

Corporate Governance (Material Topic)

To meet the needs of the fast-paced economy, Apacer has harnessed various business innovation models and exerted operational synergy to pursue corporate performance growth. Currently, under the leadership of the President, Apacer has established six major functional centers and six new business/supporting departments.



(Note: This is the organization chart that took effect on 2025/3/1)

"Enhancing corporate governance" is a core value of Apacer's corporate governance. Apacer continues to actively participate in corporate governance evaluations through specific actions, aiming for continuous improvement.

2022	2023	2024
(The 9th term)	(The 10th term)	(The 11th term)
Ranked in the Top 5% among companies with a market value between NTD5 billion and NTD10 billion (Listed company ranking range: 6%–20%)	Ranked in the Top 5% among companies with a market value between NTD5 billion and NTD10 billion (Listed company ranking range: 6%–20%)	Ranked in the Top 5% among companies with a market value between NTD5 billion and NTD10 billion (Listed company ranking range: 6%–20%)

Apacer's corporate governance implementation in 2024

Apacer has appointed Lai Tzu-Wen, CFO and spokesperson, as the Head of Corporate Governance, responsible for overseeing corporate governance-related matters. The scope of responsibilities includes:

- I. Regular arrangement of further education for directors and provision of information required for directors to perform their duties and keeping them up to date on any legal developments relevant to the operation of the Company so as to help directors remain in compliance with laws and regulations at all times.
- II. Assisting with the meeting procedures of the Board of Directors and the shareholders and compliance matters of the resolutions.
- III. Assisting in the communication between the independent directors, chief internal auditor and CPAs at Audit Committee meetings.
- IV. Maintaining investor relations.
- V. Publishing important information related to the material resolutions of the Board of Directors and shareholders' meetings in accordance with the relevant laws.
- VI. On December 19, 2024, the "Ethical Corporate Management Execution Unit" was scheduled to report to the Board of Directors regarding the implementation and plans for promoting ethical corporate management within the Company for the current year, ensuring the adherence to the Ethical Corporate Management Best Practice Principles.
- VII. On December 19, 2024, the "Sustainable Development Committee" was scheduled to report to the Board of Directors regarding the implementation results of the sustainability practices and communication with stakeholders for the current year, ensuring the adherence to the Sustainable Development Best Practice Principles.
- VIII. Assist with the re-election of directors upon expiration of their term.
- IX. Reviewing the implementation of the corporate governance evaluation on a quarterly basis.
- X. Other matters stipulated in the Company's Articles of Incorporation or contracts.

Corporate Governance Structure

Board of Directors

Election and nomination

Apacer's Board of Directors adopts a candidate nomination system that takes into account the diversity and independence of its members. This is in accordance with the Company's "Corporate Governance Practices Guidelines", Chapter 3 (Strengthening Board Functions), Section 1 (Structure of the Board of Directors). In the future, candidates' corresponding ESG impact management ability will be included in the selection criteria. The Board of Directors consists of nine directors with extensive experience in various professional fields, including three independent directors (accounting for 33.33%). The number of independent directors seats exceeds regulatory requirements, and one of the independent directors is female. The term of the directors is three years, and reelection is held at the Annual General Shareholders' meeting. The current set of directors was elected on May 31, 2024, and their term will expire on May 30, 2027. For more details, please refer to: **Corporate Governance Best-Practice Principles**

Self-evaluation of the Board of Directors

The Company conducts an annual self-evaluation of the Board of Directors according to the provisions of the "Board of Directors Performance Evaluation Procedures", and there is no independent third-party evaluation. The self-evaluation covers the scope, methods, and key performance indicators of the Board. Aspects of the evaluations of the Board of Directors, board members (self-evaluation or peer evaluation), and functional committees. In order to enhance the Company's resilience for sustainable operations, ESG impact management capabilities will be added to the evaluation. Please refer to Article 8 of the Company's "Board of Directors Performance Evaluation Procedures". The performance evaluation results are divided into three levels: Exceeding standards, meeting standards, and needing improvement. For the detailed results, please refer to Report on the Implementation Results of the Board of Directors Performance Evaluation Procedures in 2024.

Item for evaluation	Evaluation results
Board of Directors performance evaluation (overall)	Exceeding Standards
(Self) Performance Evaluation of Directors	Exceeding Standards
Evaluation of the performance of functional committees	Exceeding Standards

Functions of the Board of Directors

In addition to supervising the Company's operations and providing operational recommendations, discussions on corporate sustainability-related matters are conducted, and the execution is entrusted to the Secretariat of the Sustainable Development Committee. The current term of the Board of Directors will expire in May 2027, and the election of new directors will take place in 2027. Relevant Board of Directors education and training, please see pages 31-32 of annual report (to be confirmed upon completion of the final report).

Title	Name	Organizer	Course	Education hours	Corresponding ESG aspects
Chairman & CSO	Austin Chen	Taiwan Stock Exchange Corporation	Creating a New Carbon Era with Sustainability Knowledge	6	E
Vice Chairman	Ming-Ta Chen	Taiwan Corporate Governance Association	How to Map Out a Sustainable Development Roadmap for Enterprises	3	E
		Taipei Foundation of Finance	Corporate Governance - Sustainable Finance	3	E 、 G
Director	Chang Chia-Kun	Taiwan Corporate Governance Association	Green Power, Certification and Sustainable Development – The Path Toward NetZero	3	E
		Taiwan Corporate Governance Association	Evolution of Data Centers – The Development Trend of Silicon Photonics and AI Servers	3	G
Director	Teddy Lu	Accounting Research and Development Foundation	Practical Analysis of the Impact of Net-Zero Carbon Emissions on Financial Statements	3	E
		Securities and Futures Market Development Foundation	2024 Insider Trading Prevention Conference	3	G
Representative of Corporate Director	Victor Chien	Taiwan Corporate Governance Association	The Relationship between the US and China and the International Situation in the Future – Political Risks of Investment in China	3	G
		Taiwan Corporate Governance Association	Information Security and Risk Manage-ment	1.5	S 、 G
		Taiwan Corporate Governance Association	Taxation Governance and Updates of Securities Regulations in the New Tax Environment	1.5	G
Director	George Huang	Taiwan Corporate Governance Association	The Offensive and Defensive Strategies of Non-consensual M&A and Related Corporate Governance Issues	3	G
		Taiwan Corporate Governance Association	Notice to Directors and Supervisors: Insight into How Criminals Use Non-Regular Transactions and Related Party Transactions	3	G
Independent Director	Max Wu	Taiwan Corporate Governance Association	How the Board of Directors supervises ESG Risks and Creates Sustainable Competitiveness for an Enterprise	3	E 、 S 、 G
		Taiwan Corporate Governance Association	ESG-related Legal Issues that the Board of Directors Should Take into Account	3	E 、 S 、 G
Independent Director	Philip Peng	Taiwan Stock Exchange Corporation	2024 Cathay Sustainable Finance and Climate Change Summit	6	E
		Taiwan Independent Director Association	How Foreign Investors View ESG and In-vestment Responsibilities	3	E 、 S 、 G
		Taiwan Independent Director Association	Legal Planning and Risk Management for Multinational Mergers and Acquisitions	3	G
		Taiwan Corporate Governance Association	AI and Open Source Era – Analysis of Corporate Legal Risks	3	G
		Taiwan Corporate Governance Association	Creating a Corporate Sustainable Com-petitiveness through DEI Culture	3	S 、 G
Independent Director	Cathy Han	Taiwan Independent Director Association	Legal Planning and Risk Management for Multinational Mergers and Acquisitions	3	G
		Taiwan Corporate Governance Association	AI and Open Source Era – Analysis of Corporate Legal Risks	3	G
		Taiwan Corporate Governance Association	Creating a Corporate Sustainable Com-petitiveness through DEI Culture	3	S 、 G

 Diverse background

The members of the Board of Directors have professional backgrounds in business management, accounting and finance, and engineering technology. Each of them brings expertise in financial analysis, business management, venture capital, engineering technology, and leadership and decision-making, showcasing a diverse and complementary effect. The professional backgrounds and industry experience of the directors enable the Company to accurately operate the business and implement future development strategies. In 2024, the directors undertook 69 hours of ESG-related courses to enhance the sustainability knowledge of the Board of Directors, facilitating the timely update of corporate governance policies and planning.

 Recusal principle

The current Board of Directors held a total of six meetings in 2024, and the recusal principle was enforced twice in total. The average attendance rate was 96.3%. Apacer values the transparency, professionalism, and efficiency of the Board of Directors' operations to strengthen the effectiveness of corporate governance. The Board of Directors supervises the Company's major decisions based on current international situations, market observations, and financial evaluations. We will continue to strengthen the ESG awareness and capabilities of the Board of Directors to protect the rights and interests of shareholders, improve operational performance, leverage the functions of independent directors, strengthen risk management, and ensure information transparency, effectively protecting the interests of all stakeholders.

Title	Name	Gender	Professional background	Industrial experience							Board of Directors meetings attended	Attendance rate
				Accounting and financial analysis	Business management	Venture investment	Engineering technology	Leadership and decision-making skills	Net zero pathway	Social and human rights impacts		
				G	ESG	G	EG	G	EG	SG		
Chairman & CSO	Austin Chen	Male	Management		✓		✓	✓		✓	6	100%
Vice Chairman	Ming-Ta Chen	Male	Management, engineering		✓		✓	✓	✓		4	100%
Director	Teddy Lu	Male	Management, engineering		✓	✓	✓	✓		✓	5	83.33%
Director	Chang Chia-Kun	Male	Management, engineering		✓		✓	✓	✓		6	100%
Director	George Huang	Male	Engineering, finance	✓	✓	✓	✓	✓		✓	6	100%
Director	Haydn Hsieh (Note)	Male	Management, engineering		✓			✓	✓		2	100%
Director	Representative of Acer Inc. - Victor Chien	Male	Management, engineering		✓		✓	✓		✓	3	75%
Director	Representative of Phison Electronics Corporation - Wen Chieh Weng (Note)	Male	Accounting	✓				✓		✓	2	100%
Independent Director	Max Wu	Male	Engineering		✓	✓	✓	✓	✓		6	100%
Independent Director	Philip Peng	Male	Management, finance	✓	✓	✓		✓		✓	6	100%
Independent Director	Cathy Han	Female	Management, finance	✓	✓	✓		✓		✓	6	100%

Note¹: Board member stepped down upon re-election at the Shareholders’ Meeting on May 31, 2024.
Note²: For the concurrent positions of Board members and the existence of controlling shareholders (shareholdings by directors), refer to P5 – P6 of the 2024 Annual Report (page numbers to be confirmed upon official release of the annual report).
Note³: For the cross-shareholding status of suppliers and other stakeholders, please refer to P60 of the Annual Report (page numbers to be confirmed upon official release of the annual report).
Note⁴: Download: [Click Here](#)

● Remuneration policy

The remuneration structure for the highest governance unit and senior management includes both fixed salaries and variable incentives and bonuses. Beginning in 2025, the incentive and bonus plans for the highest governance unit and senior management will be linked to shareholder interests and the Company's performance in Environmental, Social, and Governance (ESG) areas, including environmental sustainability, social inclusion, and corporate governance.

⚖️ Functional Committees

Remuneration Committee Date of establishment: August 2011 Functions: The Remuneration Committee is mainly responsible for performing the following duties faithfully with the due care of prudent administrators and submitting its recommendations to the Board of Directors for discussion. • Establish and regularly review the organizational regulations of the Remuneration Committee Charter and propose amendments as necessary. • Establish and annually review the annual and long-term performance goals for directors and managers, along with the policies, systems, standards, and structures of remuneration. • Regularly evaluate the achievement of performance goals for directors and managers each year, and establish the content and amount of their individual remuneration accordingly.	Committee meeting attendance ratio in 2024			
	Title	Name	Actual attendance in person	Attendance rate (%)
	Convener	Max Wu	4	100%
	Member	Philip Peng	4	100%
	Member	Cathy Han	4	100%
	Note ¹ : The current term of committee members is from May 31, 2024 to May 30, 2027. Note ² : Attendance rate=number of actual attendance / total meetings held.			
Audit Committee Date of establishment: May 2018 Functions: To review and supervise the following matters • Fair presentation of the Company's financial statements • Appointment (dismissal) and remuneration of attesting CPAs • Independence of attesting CPAs • Effective implementation of the Company's internal control • Compliance to relevant laws and regulations to control existing	Committee meeting attendance ratio in 2024			
	Title	Name	Actual attendance in person	Attendance rate (%)
	Convener	Max Wu	4	100%
	Member	Philip Peng	4	100%
	Member	Cathy Han	4	100%
	Note ¹ : The current term of committee members is from May 31, 2024 to May 30, 2027. Note ² : Attendance rate=number of actual attendance / total meetings held.			

1.3

Product Diversification and Operational Performance

Operational strategy planning

Apacer specializes in the R&D and manufacturing of memory modules and value-added technologies. Its product lines are divided into industrial and consumer products. Unlike other competitors that choose to focus exclusively on industrial or consumer markets, Apacer has learned from the past and chose this concurrent model. This decision stems from the memory industry's susceptibility to external factors, leading to significant price fluctuations. To ensure operational performance, we combine industrial products, which are more resistant to price drops, with consumer products that can quickly respond to price differentials. This strategy allows for price adjustment and profit stability. Direct communication with consumers through consumer products helps to accumulate brand value and create more collaboration opportunities. Recognizing the need to inject more momentum into sustainable business operations, we have been laying out three major operational drivers since 2021 (focusing on the key areas of future technology deployment and digital transformation). In 2022, we added a fourth major operational driver: strategic alliances with UD Info and Acer Corporation. In 2024, Advantech also became a new strategic partner. We are currently continuing to strengthen momentum through ongoing collaboration with these partners.

🌿 Short-term Operational Strategy

Focus on core industries and actively develop the smart IoT market. Apacer continues to focus on its core business: the development of digital storage. Through deepening core products and R&D technologies, we cultivate key markets while continuously developing smart IoT application fields. By staying abreast of market trends, we further bring added value benefits to customers and partners, and creating operational performance together.

🌿 Long-term Operational Strategy

With the vision of "becoming a leader in technological information service integration at the core of digital storage," Apacer not only continues to invest in sustainability affairs in response to ESG trends but has also laid out four major operational growth drivers.

Key areas of focus: Focus on special application markets with high value and high customization.

Planning for future technology: Integrating value-added services, 5G, cloud applications, and cloud-based remote intelligent management.

Digital transformation of operations: Improve decision-making efficiency to optimize operational capacity and create competitive advantages.

Strategic alliances: Look for quality partners to expand operational efficiency.

Product and service types

Apacer's products and services are divided into three categories, namely "B2B industrial control products", "B2C consumer products", and "smart IoT applications".

B2B Industrial control products

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

Provide integrated solutions for problem-solving

Serving thousands of customers worldwide, Apacer has rich experience in industrial products and R&D. With our integration and technical capabilities, we help customers solve problems and provide trustworthy products and services. We are committed to working with partners to provide customers with complete solutions, and to establish profound partnerships with customers. We have been ranked as the number one global individual SSD supplier for five consecutive years.

B2C Consumer products

Based on the consumers' life experience, we design a full range of digital storage and mobile peripherals, such as SSDs and memory modules. We also have a high-end gaming product line to meet the needs of data storage and protection.

Meeting Consumer Needs

With years of experience, Apacer develops digital storage products ranging from memory modules for computers, flash drives or memory cards, and SSDs to military-grade external storage devices. Additionally, Apacer offers the ZADAK line for high-end gaming enthusiasts. By providing highly recognizable gaming products and full machine components, ZADAK builds a premium brand image and meets the digital storage needs of all types of consumers with diverse product designs.

Smart IoT Applications

We also provide IoT environmental control system design, integration, and implementation, as well as optical instrument sales and OEM services, to accompany customer on the first mile of smart IoT innovation.

Smart IoT Partners

Integrate ICT and OT to provide comprehensive AIoT planning and intelligent automation deployment services through a total solution business model. In addition to actively promoting the IIoT proactive disaster prevention systems, we further develop AI+AOI automated optical inspection total solutions. This one-stop service assists customers in shortening the development timeline for smart IoT.

Quality Assurance

We believe that quality assurance is the most fundamental commitment to customers. Apacer demands the highest standards in product quality, for everything from product R&D, design, and lifespan to after-sales service. Every stage undergoes rigorous and meticulous design and testing, with multiple safety and quality assurance checkpoints arranged to ensure that the products deliver high efficiency and stable performance.

● Product safety testing

Basic function test	Long time testing	Uninterrupted power on/off test
Power failure testing	Environmental reliability testing	Electromagnetic Magnetic Compatibility Test
Safety compliance testing	Compatibility testing	Data storage testing
Reliability Demonstration Test		On-Going Reliability Test

All Apacer products comply with the EU RoHS and REACH hazardous substances restriction, as well as the WEEE (EU Waste Electrical and Electronic Equipment Directive) recycling regulations, to provide consumers with products that are neither hazardous or toxic. We are also committed to adhering to international conventions, domestic environmental protection, safety, health, and related regulations.

● Product Labeling

Apacer's products are compliant with regulations in various countries, marked with conformity labels, and accompanied by complete product information including manufacturer details, complete content information, usage instructions, international certification marks, etc., ensuring transparency and protecting consumer rights.

Apacer also conducts electromagnetic compatibility (EMC) tests to regional requirements. Only after passing these tests are the products allowed to be sold in various countries, ensuring the stability and safety of product usage. The test contents include Taiwan BSMI, U.S. FCC, EU CE, New Zealand and Australia RCM, and Japan VCCI., and the regulatory symbols are marked on the product body.



EU RoHS Hazardous Substances Restriction Label		EU WEEE Recycling Label	
RoHS			

EMC Labels					
 D33466 RoHS					
Taiwan BSMI	U.S. FCC	EU CE	New Zealand and Australia RCM	Japan VCCI	UK UKCA

Financial performance (material topics)

Apacer focuses on key areas of operation and promotes digital transformation to adapt to the rapidly changing industry landscape, making real-time strategic adjustments to maximize benefits. In 2024, due to the increase in memory prices, overall revenue grew by 2.7% compared to 2023. However, changes in the sales mix and production line gross margins led to a decrease of approximately 6.7% in the Group's overall gross profit margin compared to 2023.

NTD thousand

Item	2021	2022 ²	2023	2024
Operating revenue	8,682,393	8,797,035	7,631,446	7,837,159
Operating cost	(7,229,509)	(7,108,621)	(5,852,804)	(6,535,954)
Gross operating profit	1,452,884	1,688,414	1,778,642	1,301,205
Operating income	573,060	694,122	710,534	306,911
Net profit after tax	485,781	576,991	604,711	291,950
Earnings per share (NTD)	4.81	5.23	4.51	2.18
Note ¹ : Financial figures are derived from the annual consolidated financial statement, and have been audited and certified by CPAs. Operating revenue refers to sales revenues within the industry Note ² : Data from 2022 onwards includes subsidiary UD Info.				

NTD thousand

Item	2023	2024
Operating revenue (A)	7,687,787	7,901,516
Economic value distributed (B)	7,159,951	7,658,898
Operating costs	5,685,814	6,389,284
Employee wages and benefits	910,311	790,328
Payments to providers of capital	418,453	420,920
Payments to government by country	145,373	58,366
Community investments	0	0
Economic value retained: (A) - (B)	527,836	242,618
Note: The operating revenue presented in this table is based on the GRI Standards and includes both sales revenue and non-operating revenue, which may differ slightly from the definition used in the previous table.		

● Based in Taiwan with a Global Vision

Apacer's customer base includes global distributors, IT equipment manufacturers, system integrators, and retail customers, with a sales network covering all five continents. Through a robust distributor network and deep collaboration with partners around the world, we provide high-performance, high-stability, and high-value digital storage application products and integrated services, driven by a commitment to perfection, to share memories with the world.

Regional Sales Ratio of Main Products		
Sales region	2023	2024
Domestic sales	16.24%	18.93%
America	15.15%	11.36%
Europe	25.25%	16.62%
Asia	42.35%	52.25%
Others	1.02%	0.84%
Total	100.00%	100.00%

Note: The above data includes all subsidiaries

1.4

Innovative R&D (material topics)

With innovative leadership as a competitive advantage, Apacer recruits outstanding talent in the industry and actively plans on-the-job training to develop the team's capacity for innovative thinking, and allowing them the chance to demonstrate their potential and value. The R&D Technology Center leads innovative brand value projects as well as strategic partner cooperation projects, employing diverse thinking to create mutually beneficial outcomes for both partners, achieving the goal of progressing together with partners.

"Become a leader in technological information service integration with digital storage as the core", is the corporate vision of Apacer. With this vision in mind, Apacer focuses on the development of digital storage, continuously accumulating product and technological R&D capabilities, thereby establishing a competitive advantage in business operations.

R&D Accumulates Sustainability Momentum

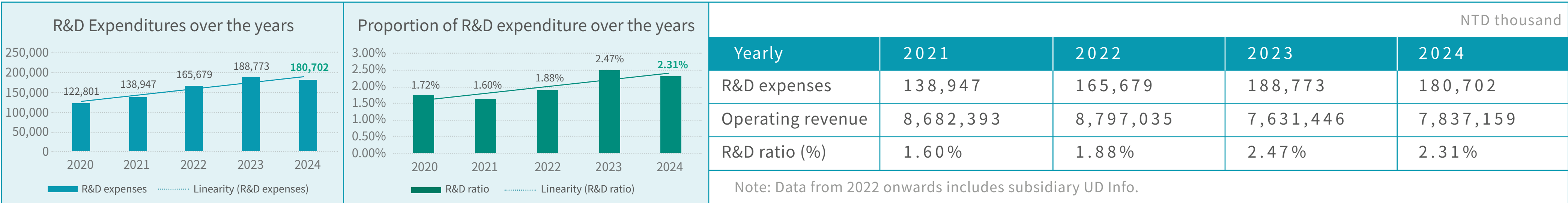
Apacer is committed to "Deliver on promises, Advance together" forming its core ethos of "Becoming Better Partners." Apacer continues to develop innovative and diverse storage solutions, as well as integrate software, hardware, and firmware designs and technological research across various fields. The goal is to become the industry's best collaborative ally within the ecosystem, creating mutual benefits through value-added services. Strive for better

The R&D Technical Center is a complete R&D unit equipped with firmware development, hardware development, software development, engineering development, testing development, industrial design, mechanism design, technical support, application engineering, product verification, and other advanced technologies. Leveraging years of accumulated digital storage patent technology and successful R&D experiences, it enhances the competitiveness of products and services. The R&D team not only ensures a diverse product line but also meets the customized development and requirements of customers across various solutions, including memory modules, industrial SSDs, consumer digital storage products, and IoT integrated applications.

Apacer has been strategically planning for sustainable development, allocating and scrutinizing annual budgets to R&D needs. The investment in R&D can be observed from the trend of R&D expenditure, as shown in the following chart analysis. In 2024, R&D expenses accounted for 2.31% of total revenue. Revenue increased by 2.7% compared to 2023, reflecting successful efforts in strengthening R&D capabilities. As of 2024, the R&D center had achieved a total of 235 patent filings and grants, which includes 199 granted patents and 36 pending applications. Among Apacer's R&D innovation projects, three products were recognized with the 2025 Taiwan Excellence Award, including: Apacer CoreRescue instant recovery technology, the Fragrance SSD, and DataDefender™ Plus hardware-software integrated technology. Apacer will continue to invest resources in R&D and innovative design based on this successful model, aiming to become a solid cornerstone for sustainable operation.

Innovation Value Competitiveness

Apacer's R&D Technology Center serves as a fully equipped R&D unit that aims to transform patented technology into value-added technical services, leading to competitive products. With the goal of increasing market share annually, Apacer focuses on leveraging innovative product differentiation as its strongest competitive advantage.

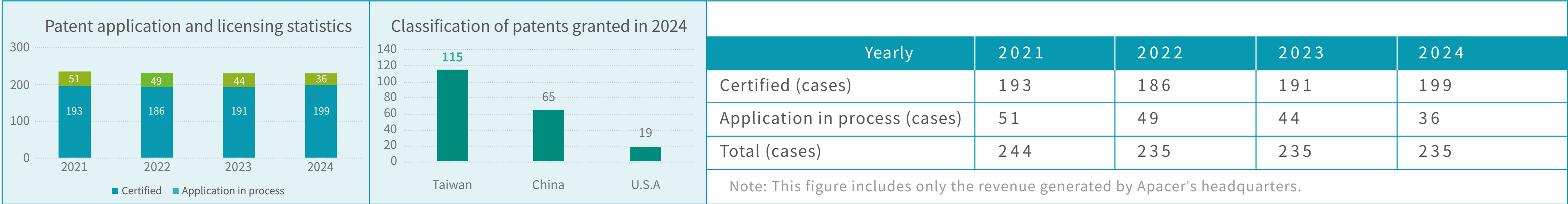


Patent deployment for future technology

Apacer established the Patent Development Committee in 2017 to strengthen its R&D capabilities. Chaired by the General Manager, this Committee includes a patent review team responsible for conducting internal reviews of invention patents. In addition to including the number of patents developed in the performance evaluation, the Patent Output Reward System has been promulgated to encourage colleagues to develop toward the patent commercialization. Apacer hires patent engineers internally to manage, apply for, and maintain patents. These engineers also provide advice on potential infringement issues for developing products and devise strategies for avoidance designs. Additionally, Apacer creates patent maps and provides information on competitors' patent applications to fully understand the development and patent application trend in competitors' technological fields.

In recent years, Apacer's patent strategy has shifted from pursuing quantity to emphasizing the commercialization of patented technologies. Patents that have already been commercialized include the CoreGlacier thermal solution introduced in 2019, the progressive CoreSnapshot series launched in 2020, the CoreRescue technology in 2022, the fragrance module for portable storage devices in 2024, and the upcoming CoreVolt 2 and CoreEnergy technologies scheduled for release in 2025. These technologies are protected by patents in Taiwan, with additional applications filed in China and the United States, aiming to transform patent concepts into actual business revenue. According to internal statistics, in 2024, revenue generated from patent commercialization amounted to approximately NTD253 million, accounting for around 2.7% of the Company's total annual revenue.

● Statistics of patent applications and approvals over the years



As of the end of December 2024, Apacer received a total of 235 patents, of which 36 are pending and 199 have been granted and actively maintained. In recent years, the number of granted patents for Apacer has shown an overall trend of stability. On the other hand, in 2024, Apacer's patent classification by country shows that the number of patents granted in Taiwan is relatively higher, followed by China and the United States. This is largely consistent with the situation in the previous year.

Patent Innovation Performance	Product and Technology R&D Innovation Performance
- Storage device with automatic backup and restoration mechanism (Taiwan, China) - Solid-state drive fastening structure (Taiwan, China) - Thermal modules and electronic devices (Taiwan, China) - Automatic bottle loading equipment and its unloading mechanism and bottle pushing mechanism (Taiwan, China) - Method for firmware used in solid-state drives (Taiwan, China) - Storage device (Taiwan, China) - New memory module power protection design (Taiwan) - Modular stacked heat dissipation structure (Taiwan, China) - Encapsulated stacked graphene heat sinks (Taiwan, China) - Memory Fragrance Module (Taiwan, China)	100K erasable 3D NAND SSD - DataDefender™ PCIe Gen4 x4 SSD - Smart upgrade in the nursing/environmental safety dual domains - ZADAK SPARK RGB DDR5 - JEDEC Raw Card Revision 1.0 - Video/gaming M.2 PCIe SSD - Apacer collaborates with Asus to build cloud IPC information security - Smart IoT Nursing Field Solutions - CoreAnalyzer2 robust edge computing - PANTHER RGB DDR5 - Rugged Industrial SSD - FIPS140-2 Data Encryption Certified SSD - Rugged military-grade SSD - iKeep Smart Vocabulary Device 4TB Gen 4 x 4 SSD - Automated Optical Inspection System Solution

Relevant Industry Association

To enhance sensitivity to market fluctuations and trends, Apacer has joined the industry-related associations as listed in the table below, aiming to maintain industry relevance and expand business opportunities.

Participating Associations	Participation Form
Taiwan Stock Affairs Association	Member, representatives are sent to attend association meetings and seminars periodically
Responsible Business Alliance	Member
GSI Taiwan	Member
SATA-IO (The Serial ATA International Organization)	Member
JEDEC (Global Standard for Microelectronics Industry)	Member
SDA (SD Association)	Member
CFA (CompactFlash Association)	Member
PCI-SIG (Peripheral Component Interconnect Special Interest Group)	Member
DRAM EXCHANGE	Member
INSPECTRUM	Member
Taipei Computer Association	Member
Taiwan External Trade Development Council - Taiwan Trade	Member
Intelligent Computer & AIoT Association	Member

2 A Good Partner For A Green Environment

Vision

To fulfill our social responsibilities and protect the global environment, Apacer has implemented an environmental management system, formulated supplier management regulations, promoted green product design, and conducted internal environmental protection education within the Company. These efforts integrate environmental protection principles into the overall value chain of the enterprise, from top-down policies to bottom-up actions, embodying a corporate philosophy of green sustainability.

Policies and Commitments

Apacer has formulated the following environmental, safety, and health, and energy policy: "Compliance with laws and regulations, pollution prevention, participation in consultation, risk control, green design, continuous improvement, and environmental friendliness". Adhering to this policy, Apacer ensures the timely delivery of competitive, defect-free, and environmentally safe products and services to satisfy customers. °



Material Topics in This Chapter

Material Topics	Material Topic Management Policy		Comparison with International Frameworks and Indicators			
Climate Change Risk Management	Compliant with the national "Greenhouse Gas Reduction and Management Act", Apacer conducts organization-level greenhouse gas inventories in accordance with ISO 14064-1:2018 and has obtained a verification statement.		305-1~305-5			
Impact Description	Excessive greenhouse gas emissions contribute to global warming, leading to climate change and environmental shifts. These changes may impact the supply chain and affect operational locations.		Actual	Potential	Positive	Negative
				V	23.3%	76.7%
Management Actions/ Preventive and Remedial Measures	Actual Plans	2024 Targets	2024 Performance			Result Tracking
	Establish a climate risk assessment and response mechanism	Conduct climate risk and opportunity identification based on Apacer's operational scope	The assessment is carried out every two years, most recently identifying three major climate risks and two climate opportunities			Achieved
		Complete the 2023 ISO 14064-1 GHG verification	Obtained the 2023 ISO 14064-1 verification statement			Achieved
	Low-carbon manufacturing Improving energy efficiency	Smart meter installation – SMT process energy monitoring	Smart meter installation completed in July; web-based monitoring system launched in September			Achieved
		Laser maker replaced 0.5KW equipment, with a target of over 10% energy savings	Replaced with 0.2KW equipment, achieving 60% energy savings			Achieved
		Energy consumption improvement in product repair operations Efficient use of SMT reflow ovens for repaired products to reduce independent processing steps and lower energy consumption	Energy loss reduced by approximately 200 kWh annually.			Achieved
		Adjust product line mix to reduce energy loss from ineffective heating and cooling during SMT reflow processes.	Total SMT changeover frequency reduced by 8.4%, major changeovers reduced by 8.7%, effectively minimizing energy loss from temperature fluctuations.			Achieved



	Stakeholder Category	Communication Method	Frequency	Reporting System or Response Method
Stakeholder Engagement	Employee	Environmental Team follow-up meetings	Periodically held every month	Apacer Internal Website – Hii
	Customer	✔ Sustainability Report ✔ Official website	✔ Yearly ✔ As needed	Secretariat of the Sustainable Development Committee
	Supplier	✔ Sustainability Report ✔ Official website ✔ Supplier conference	✔ Yearly ✔ As needed ✔ Yearly	Secretariat of the Sustainable Development Committee Supplier conference
	Shareholders	Submitting the shareholders' report	Once a year	Shareholders' meeting
	Sustainability targets		Method of evaluation	
Short-term targets(2025)	✔ Short-term carbon reduction target 1.2% (scope 1 and 2) ✔ Design and develop 2 low-power consumption products ✔ Develop 1 SMT low-temperature solder paste process product		✔ Short-term carbon reduction target net emissions: 1,866 metric tons CO2e/year ✔ Short-term development of two low-power series products ✔ Short-term development of one low-temperature solder paste process product	
Mid-term targets(2025~2026)	✔ Compliance with regulatory requirements ✔ Carbon reduction target 1% (scope 1 and 2) ✔ Collaborate with suppliers to reduce carbon emissions		✔ Mid-term carbon reduction target net emissions: 1,847 metric tons CO2e/year	
Long-term targets(2027)	✔ Compliance with regulatory requirements ✔ Net-zero emissions		✔ Long-term carbon reduction target net emissions: 0 metric tons CO2e/year	
United Nations Sustainable Development Goals (SDGs)				
13.3 Improve education, raise awareness, and enhance the capacity of individuals and institutions in climate change risk reduction, adaptation, impact mitigation, and early warning.				



Material Topics	Material Topic Management Policy				Comparison with International Frameworks and Indicators		
Raw Material Management	Apacer fully implements the RoHS directive in its processes and material management, complies with REACH regulations and relevant customer requirements, conducts audits on component suppliers, and requests environmental commitment statements to ensure that source materials comply with regulations. Apacer uses the AGP system (Apacer Green Product Web System) to establish control information and communicate management policies and procurement standards at supplier conferences, effectively managing the use of raw materials.				Customized Material Topics		
Impact Description	Increase the proportion of renewable raw materials in products and enhance the recyclability of packaging materials to realize the spirit of a circular economy. Ineffectively managing the procurement and use of controversial raw materials can lead to increased operating costs, ethical controversies, and environmental pollution.			Actual	Potential	Positive	Negative
					V	0.0 %	100 %
Management Actions/ Preventive and Remedial Measures	Actual Plans		2024 Targets		2024 Performance		Result Tracking
	The supplier conference promotes the complete uploading of the material composition list		The recycling rate of the Total Material Composition Table for new materials achieves 90%		The recycling rate of the Total Material Composition Table for new materials achieves 100%		Achieved
Stakeholder Engagement	Stakeholder Category		Communication Method		Frequency		Reporting System or Response Method
	Customer		✔ Email ✔ Telephone		From time to time		✔ Company sales personnel ✔ Communication via mail or phone explanation
	Supplier		✔ Email ✔ Telephone ✔ Official website ✔ Announce in AGP system ✔ Supplier conference		From time to time/ every year		✔ Company procurement personnel ✔ Supplier conference ✔ Communication via mail or phone explanation
	Sustainability targets						Method of evaluation
	Short-term targets (2025)	✔ The recycling rate of the Total Material Composition Table for new materials achieves 70%				✔ AGP system upgrade launched in 2024	
Mid-term targets (2025–2026)	✔ The recycling rate of the Total Material Composition Table for new materials achieves 80%				✔ Supplier conference satisfaction ✔ Recycling rate of the Total Material Composition Table for new materials		
Long-term targets (2027)	✔ The recycling rate of the Total Material Composition Table for new materials achieves 100%						
United Nations Sustainable Development Goals (SDGs)							
12.2 Achieving the sustainable management and efficient use of natural resources before 2030.							



2.1

Environmental Commitment and Legal Compliance

Apacer follows the environmental, safety, health, and energy policy of "compliance with regulations, pollution prevention, consultation participation, risk control, green design, continuous improvement, and environmental friendliness", and refrains from using substances that endanger the environment or cause damage to public health. We also make proper use of existing resources to employ practical measures such as energy conservation, carbon reduction, and resource reuse to minimize resource depletion. The Company aims to become a renowned green enterprise.

Apacer's Environmental Commitment

Legal aspect

Check the status of regulatory updates quarterly and comply with domestic environmental protection and energy management regulations. There were no environmental-related incidents in 2024.

Institutional aspect

- ✓ Manage the negative environmental impacts of processes and products in a systematic manner through the ISO 14001:2015 environmental management system.
- ✓ The procurement and manufacturing process complies with international environmental protection standards for electronic products, meeting the Hazardous Substances Free (HSF) specification, and implementing the IECQ QC 080000:2017 Hazardous Substance Process Management System.
- ✓ Advocate and implement RoHS 2.0 requirement.
- ✓ 100% prohibition on the use of metals from conflict-affected and high-risk areas.



R&D aspect

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

Specific Actions

- ✓ Set carbon emission reduction targets and review them annually.
- ✓ In 2024, outdated laser marking equipment was replaced, reducing power from 0.5KW to 0.2KW, achieving 60% energy savings. Smart meters were installed to monitor energy consumption in high-energy SMT processes; installation was completed in July and the energy monitoring webpage was launched in September. Adjust product line mix to reduce energy loss from ineffective heating and cooling during SMT reflow processes. Total SMT changeover frequency reduced by 8.4%, major changeovers reduced by 8.7%, effectively minimizing energy loss from temperature fluctuations. Energy consumption in product repair operations was improved by efficiently utilizing SMT reflow ovens for repaired items, reducing the need for separate processing and minimizing energy loss. Recovered cardboard weight increased by 0.65 tons, with the recycling rate rising by 4.6%.
- ✓ Annual environmental education and training are conducted for employees to enhance awareness of environmental protection and energy conservation.
- ✓ The ESG Environmental Task Force has set short-, mid-, and long-term environmental sustainability goals, with quarterly reviews and progress tracking to continuously improve green sustainability practices.



Introduce the environmental management system

To become a green enterprise, Apacer has followed the PDCA (Plan-Do-Check-Act) Cycle to ensure that all stages of operations and product comply with policy standards and achieve established goals. Through systematic management, we ensure product quality and environmental assurance, reducing the negative impact of products and their processes on the environment.

Key Points of Apacer's EMS PDCA Promotion

Plan Environmental impact inventory and action plan

Conduct a comprehensive inventory of the plant's environmental impact, analyze the environmental impact of workflows, and formulate an environmental protection action plan.

Do Actual operation

According to the action plan, each department implements environmental protection actions, which include reducing factory waste, minimizing product packaging materials, and implementing office environmental protection actions.

Check Performance review

Supervise and measure the effectiveness of each implementation item to ensure the achievement of environmental protection goals.

Action Continuous improvement and management

Based on the gap between the performance and goals, we make improvements to the deficiencies through various actions and set the goals for the next stage.

Apacer's Implementation of Management System



ISO 14001 : 2015 Environmental Management System

Major management items

Balance environmental protection with changes in social and economic environmental conditions through a product lifecycle approach.

Actions and performance

Establish a risk-oriented thinking model and a lifecycle perspective in environmental management. Ensure that environmental requirements are included into every stage of the product lifecycle, design and manufacturing.



IECQ QC 080000 : 2017 Hazardous Substances Process Management System

Major management items

Raw materials comply with EU RoHS and REACH regulations.

Actions and performance

Raw material suppliers must sign the Environmental Protection Commitment, provide raw material test reports, and complete the substance survey.



ISO 14064-1 : 2018 GHG Verification Statement

Major management items

GHG emissions generated by emission sources and operational activities within the boundary.

Actions and performance

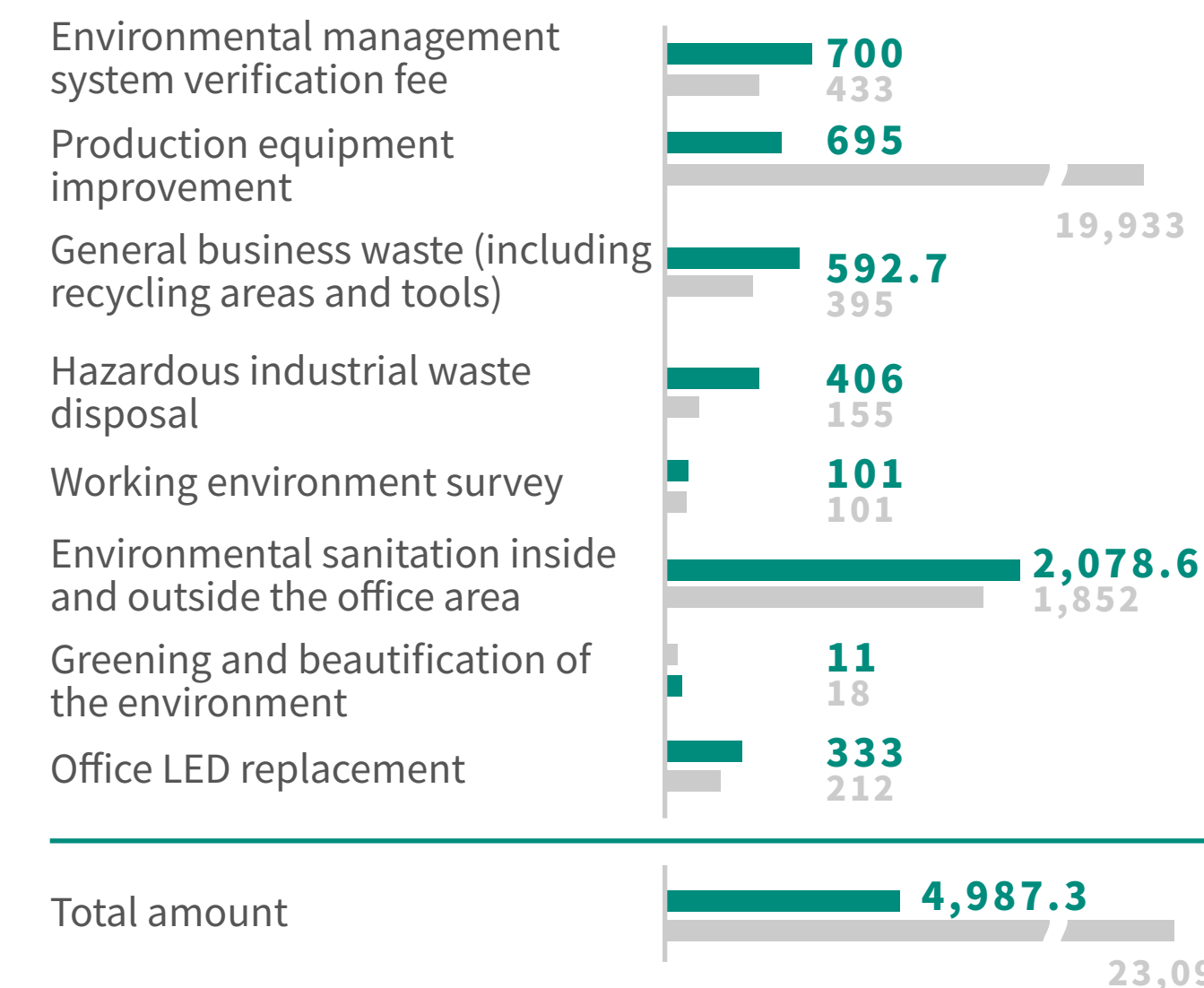
In response to the international trend of net-zero carbon emissions and domestic GHG verification requirements, obtaining statements of impartiality through third-party verification activities.

Environmental protection expenditure

■ 2024

■ 2023

NTD thousand



2.2

Climate Change Risk Management (material topics)

To address the risks and impacts of climate change, Apacer references the framework of the Task Force on Climate-related Financial Disclosures (TCFD) proposed by the Financial Stability Board (FSB) to identify and manage climate change risks and opportunities. As current climate change risks have a relatively low direct impact on Apacer, risk identification is conducted once every two years.

Governance Body

Sustainability Development Committee
The Committee is responsible for identifying climate change risks. Chaired by the Chairman, it carries out and plans climate change risk and opportunity identification on an annual basis.

Strategic Targets and Action Plans

Apacer continues to uphold its ESG commitments by aligning sustainability strategy targets with corporate operational planning. By identifying potential climate change risks and opportunities, the Company aims to strengthen its competitive edge through early action. In addition to actively reducing carbon emissions within the organization, Apacer designs its products with a focus on energy efficiency, waste reduction, and environmental friendliness, providing customers with low-carbon, green alternatives. At the same time, we continuously improve manufacturing processes to reduce carbon emissions while maintaining product quality. Through these action plans, we aim to transform climate change risks into opportunities to enhance operational resilience.

	Governance	Strategy	Risk Management	Indicators and Targets
Management Strategies and Action Plans	Sustainable Development Committee: The Committee is responsible for identifying climate change risks. Chaired by the Chairman, it carries out and plans climate change risk and opportunity identification on an annual basis.	Each department identifies climate change risks and engages in cross-departmental discussions on key climate risks and opportunities of concern.	- Following the TCFD framework, identify the climate risks and opportunities that have a significant impact on Apacer. - Based on the climate risk identification results, risk prevention and management indicators are established in advance to mitigate risks. - Incorporate climate risk identification and evaluation into operational risk management.	Conduct greenhouse gas inventories in accordance with ISO 14064-1:2018, using the results as short-, mid-, and long-term optimization indicators to support the national goal of achieving net-zero carbon emissions by 2050.
Implementation Status	Quarterly ESG meetings and annual reviews and reports to the Board of Directors.	The Sustainability Development Committee resolved this year that, given the current mild impact of climate risks and opportunities on the business, future climate risk and opportunity evaluation will be conducted every two years.		Conduct annual GHG emissions inventory; the verification statement for the 2023 inventory was obtained on August 13, 2024.

Climate Risk/Opportunity Identification Process

To understand the risks that climate change may bring to the Company, Apacer identifies and prioritizes climate-related risks/opportunities according to the TCFD framework to identify which risks/opportunities may have an impact on Apacer. Apacer will refer to international organizations' climate change research reports and integrate them with a climate risk and opportunity matrix. This will inform the integration of sustainability measures such as energy conservation, carbon reduction, and water conservation into the Company's operational policies. Significant impact of relevant risks can be identified through risk identification based on "impact level" and "likelihood of occurrence". Given the current mild impact of climate risks and opportunities on the business, the climate risk and opportunity evaluation is conducted every two years.



STEP 1

Planning and formulating

- ✓ Collection period: January 2023 to December 2024
- ✓ Collect relevant risk/opportunity topics
- ✓ Identify risk/opportunity stakeholders and responsible department

Responsible Department: Heads of the six centers and three departments under the Risk Management Team

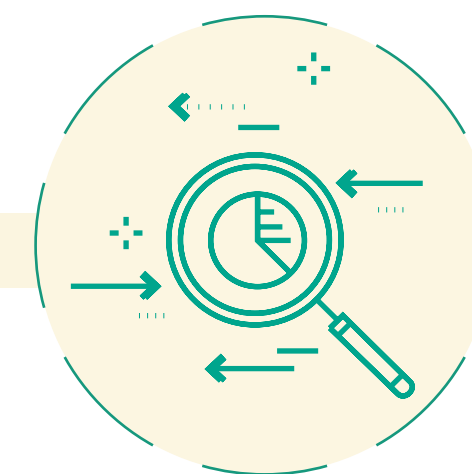


STEP 2

Internal interview

- ✓ Interviews with representatives of responsible department on matters related to the identification of climate risks/opportunities
- ✓ Conduct climate change risk evaluations for the upstream and downstream of the value chain, including direct and indirect operational scopes

- ✓ Identify 8 climate risks and 5 climate opportunities
- ✓ Generate the financial impacts of material risks/opportunities



STEP 3

Risk/opportunity identification

- ✓ Analysis frequency: Re-examined every two years

- ✓ Generate the climate change risk and opportunity matrix
- ✓ Risk/opportunity identification data provided by the responsible department
- ✓ Integrate data for statistical analysis



STEP 4

Control measures and target setting

- ✓ Present Risk/Opportunity Response Strategies
- ✓ Track the implementation of corresponding strategies for each risk/opportunity every year
- ✓ Track implementation results annually
- ✓ Develop corresponding strategies for each identified risk/opportunity

Material Risks and Opportunities

(5 is the highest likelihood of occurrence)

(5 is the highest level of impact)

(5 is the highest financial impact level)

Risks and opportunity topics		Likelihood of occurrence		Level of impact		Financial impact level		Total score	Materiality (V)
Opportunity	Obtain cooperation and incentives from public sectors		5		5		3	13	✓
	Promotion of the energy-saving and carbon-reducing production		3		3		2	8	
	Engagement in the market for green products		4		4		5	13	✓
	Promotion of the positive corporate image		2		2		2	6	
	Creating a green building environment		1		1		1	3	
Risk	Physical risk								
	Typhoon and flood		5		5		5	15	✓
	Droughts		2		1		1	4	
	Sea level rise		1		1		1	3	
	Rising temperature		2		1		3	6	
	Transformation risk								
	Environmental regulations are becoming increasingly stringent		5		5		3	13	✓
	Higher cost of carbon emissions management		4		3		5	12	✓
	Unstable energy supply		3		3		2	8	
	Impact on the Company's image		1		1		5	7	

Risk Category	Risk Level (Note)	Apacer's Management Method
Key focus on	10 points or more	Formulate countermeasures and review their implementation status every year
Continuous	5 points or more	Actively collecting relevant domestic and international information and related case studies, and reviewing this topic every year
Low risk	1 to 4 points	Continuous observation

Note:
Impact level : extremely high, 5 points; high, 4 points; moderate, 3 points; low, 2 points; extremely low, 1 point
Likelihood of occurrence : extremely high, 5 points; high, 4 points; moderate, 3 points; low, 2 points; extremely low, 1 point
Financial impact : extremely high, 5 points; high, 4 points; moderate, 3 points; low, 2 points; extremely low, 1 point

Response Plans for Material Risks and Opportunities

In 2023 and 2024, Apacer identified two major climate risks and three major climate opportunities as its key focus areas. Based on the nature of these risks and opportunities, strategies were proposed to address them. For risks, we proactively manage them as early as possible to minimize possible negative impacts in the future. For opportunities, we allocate resources and carry out planning in advance to grasp the business opportunities that may be brought about by climate change.

		Risks and opportunity topics	Value chain scope of impact			Description of the main potential financial impact	Response strategies
			Upstream	Operation	Downstream		
Opportunity		Obtain cooperation and incentives from public sectors		✓		As sustainability-related regulations and policies become increasingly stringent, various operational and production costs are expected to rise. Collaborating with the public sector to obtain incentives may help offset these additional costs.	This includes participating in government subsidy programs such as renewable energy promotion and carbon offset initiatives, or gaining benefits like tax reductions and preferential loan terms.
		Developing green product market demand		✓	✓	By investing in the development of green products, Apacer aims to tap into new markets and enhance overall operational performance.	Sustainable design is applied throughout the product lifecycle, from raw materials to packaging, supported by technical optimization to improve product performance and reduce energy consumption. These efforts aim to strengthen brand awareness, build supply chain competitiveness, and drive growth in customer acquisition, order volume, and revenue.
Risk	Physical risk	Typhoon and flood		✓	✓	Reduced production capacity, equipment damage, and increased costs may impact operational performance.	✓ Emergency disaster response drills: Includes expenses for personnel disaster preparedness and coordinated drills with the supply chain, as well as contingency plans for production processes or transportation. ✓ Hardware and infrastructure optimization: Includes the purchase of waterproof and flood prevention equipment, structural reinforcement of buildings, and off-site data backup.
	Transformation risk	Environmental regulations are becoming increasingly stringent	✓	✓	✓	To comply with regulations, potential increases in operational costs may arise, for example, from upgrading equipment or adopting environmentally friendly materials. Failure to comply may result in penalties.	✓ Track international regulatory trends and adjust product processes and R&D to ensure compliance with applicable standards and technologies. ✓ Regularly review operational equipment and evaluate the appropriate timing for upgrades or replacements.
		Higher cost of carbon emissions management		✓	✓		

GHG Management

To understand the environmental impact of our operations, Apacer has initiated independent GHG emissions inventories since 2023, with 2022 set as the base year. This aims to accurately monitor the Company's GHG emissions and reduce them in accordance with government carbon reduction policies and international environmental trends.

In July 2024, Apacer completed the 2023 greenhouse gas inventory for Scope 1 and Scope 2 emissions, with the operational boundary defined as the headquarters in Tucheng District, New Taipei City. The emission sources included on-site equipment and purchased electricity. The inventory also covered Scope 3, categories 6 and 7. In 2023, greenhouse gas emissions (Scope 1 and Scope 2) were reduced by 50.96 metric tons of CO₂e per year compared to 2022.

	Scope 1 and 2		Scope 3
Inventory Reference Guidelines	ISO 14064-1:2018 – Organizational Greenhouse Gas Inventory		✓ ISO 14064-1:2018 – Organizational Greenhouse Gas Inventory ✓ Greenhouse Gas Protocol – Corporate Value Chain (Scope 3) Accounting and Reporting Standard
Organizational Boundary	The organizational boundary is defined based on operational control, including the operational headquarters located in Tucheng District, New Taipei City.		
Inventory Type	In accordance with ISO 14064-1, the inventory covers seven types of greenhouse gases: Carbon dioxide (CO ₂), Methane (CH ₄), Nitrous oxide (N ₂ O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur hexafluoride (SF ₆), and Nitrogen trifluoride (NF ₃)		In accordance with the GHG Protocol – Corporate Value Chain (Scope 3) Accounting and Reporting Standard, three categories under Scope 3 are included: Category 6: Business travel Category 7: Employee commuting
GHG Sources	Scope 1 Emissions from fuel combustion and refrigerant leakage; the Company has no biogenic emissions.	Scope 2 Emissions from imported electricity.	Scope 3 Business travel, and employee commuting.
Calculation Method	✓ Emissions are primarily calculated using the emission factor method: Activity Data × Emission Factor × Global Warming Potential (GWP) = CO₂e ✓ The GWP values are based on the IPCC Sixth Assessment Report (AR6), 2021 ✓ The electricity emission factor used is 0.494 kg CO₂e/kWh, based on the 2023 published value		

Inventory Period: 2023/1/1~2023/12/31

GHG Emissions

Unit: Metric tons CO₂e

Scope	2021	2022 (base year)	2023	2024 (self-reported)
Scope 1 (A)	681.387	125.2123	125.2509	125.2644
Scope 2 (B)	1,867.3630	1,816.0016	1,765.0064	1,742.4850
Emissions subtotal (A+B)	2,548.7500	1,941.2139	1,890.2573	1,867.7494
Scope 3 (C)	-	366.6729	389.1529	385.5630
Total emissions (A+B+C)	2,548.7500	2,307.8868	2,279.4102	2,253.3124
Annual Revenue (Million)	8,682.39	8,797.04	7,631.446	7,837.159
Greenhouse Gas Emission Intensity ¹ (Metric tons CO ₂ e/ million)	0.294	0.221	0.248	0.286

Note¹: Greenhouse gas emission intensity (metric tons CO₂e / million) = Total Scope 1 and Scope 2 emissions (metric tons CO₂e) ÷ Annual revenue (million).

Note²: Due to the use of the "Procurement or Outsourced Supplement Method" in 2021 and the shift to the "leakage method" following third-party verification starting in 2022, there is a significant change in the data.

Note³: The 2024 greenhouse gas emission data is based on internal calculations (referred to as "self-reported") and is expected to receive third-party verification by August 2025.

Energy management

Through the ISO 14001: 2015 environmental management system certification, Apacer has established pollution prevention and improvement mechanisms to conserve energy usage and reduce the environmental impact of its operations. The Company mainly relies on electricity for internal energy usage, with purchased electricity for the headquarters (indirect energy) accounting for over 93% of total energy consumption. In 2024, the primary focus was on procuring new equipment with lower energy consumption, resulting in a reduction in electricity usage, with energy intensity also showing a slight decline. Compared to the previous year, total electricity consumption decreased by 1.28%. (3,527,316 kWh in 2024; 3,572,888 kWh in 2023)

Energy Usage Over the Years

Yearly		2021		2022		2023		2024	
Direct energy	Diesel Type ¹ Forklifts	20 liter	0.702 GJ	0 liter	0 GJ	20 liter	0.702 GJ	20 liter	0.702 GJ
Indirect energy	Plant and office power use ²	3,748,997 kWh	13,496.389 GJ	3,673,094 kWh	13,223.138 GJ	3,572,888 kWh	12,862.396 GJ	3,527,316 kWh	12,862.337 GJ
Total energy consumption (GJ)		13,497.091		13,223.138		12,863.098		12,699.039	
Annual Revenue (Million)		8,682.393		8,797.035		7,631.446		7,837.159	
Energy intensity (GJ/million)		1.55		1.50		1.69		1.62	

Note¹: 1 liter of diesel = 8,400 kcal, 1 calorie = 4.18 joules (refer to Table of the calorific values of energy products, Energy Administration, Ministry of Economic Affairs).

Note²: 1 kWh of electricity = 3.6 million joules = 3.6x10⁻³ GJ

Note³: Energy intensity (GJ/million) = total energy consumption (GJ) / annual revenue (million)

Energy Saving Actions and Benefits in 2021 - 2024

To protect the environment and reduce greenhouse gas emissions and resource consumption, Apacer has gradually replaced its equipment with water-cooled air conditioning systems and energy efficient production machinery including solder paste inspection machines, placement machines, and reflow ovens, to lower electricity usage. In 2023, all lighting across the entire facility was fully upgraded to LED, and air conditioning units are now shut down one hour earlier each day. In 2024, in addition to further replacing outdated production equipment, improvements were also made to the product repair process and adjustments were made to the product line mix. These efforts not only reduced electricity costs but also embodied Apacer's commitment to environmental sustainability and contributed to mitigating climate change. In 2024, greenhouse gas emissions were reduced by 22.5079 tCO₂e compared to 2023.

2021

Testing process refined to reduce electricity consumption

Reduced the number of DRAM testing stations from 4 to 2 saves process electricity consumption.

Reduction Scope  Scope 2

Complete replacement of the air conditioning system has saved reduced electricity consumption

Building on the achievements in 2019, we introduced water-cooled air conditioners on the 1st to 6th floors of the factory office in 2020, which were fully operational by 2021. It is expected that the electricity consumption for air conditioners can be reduced by over 30% in the future.

Reduction Scope  Scope 1  Scope 2

2022

Reduced process electricity consumption

Purchased production equipment with low consumption for the reflow ovens to save electricity consumption by 28.8%, generating 27,000 kWh/year.

Reduction Scope  Scope 2

Water-cooled air conditioning is now used to save air conditioning electricity consumption

After fully implementing the water-cooled air conditioning system, the Company's total electricity consumption in 2023 decreased by 538,000 kWh per year compared to 2020, representing a 13% reduction.

Reduction Scope  Scope 1  Scope 2

2023

SMT process equipment gradually upgraded

Saved approximately 6.1% of electricity consumption compared to original equipment, about 15,000 kWh per year

All lighting replaced with LED fixtures

Lighting energy savings of 67%

Reduction Scope  Scope 2

Performance tracking of air conditioning system after transitioning from air-cooled to water-cooled

In 2023, with water-cooled air conditioning, the total company electricity consumption further decreased by 95,800 kWh per year compared to 2022 by implementing a policy of shutting down the air conditioning one hour earlier each day, contributing to a further 2.6% decline.

Reduction Scope  Scope 1  Scope 2

2024

Smart meters for energy consumption monitoring

For the high-energy-consuming SMT process, smart meters were fully installed in July 2024, and the equipment energy monitoring webpage was completed in September of the same year.

Energy consumption improvement in product repair operations

Repaired items effectively utilize the SMT reflow oven, reducing independent processing steps and lowering energy loss by 0.2 thousand kWh per year.

Reduction Scope  Scope 2

Replacement of old equipment to improve energy efficiency

Old equipment used in the laser marking process was replaced with new equipment, reducing power consumption from 0.5 kW to 0.2 kW, achieving 60% energy savings.

Adjust product line mix to reduce energy loss from ineffective heating and cooling during SMT reflow processes

Total SMT changeover frequency reduced by 8.4%, major changeovers reduced by 8.7%, effectively minimizing energy loss from temperature fluctuations.

Reduction Scope  Scope 1  Scope 2

Office Environmental Protection Actions

Apacer prioritizes incorporating energy-saving and environmental protection concepts into daily operations, reducing environmental impact while fostering environmentally friendly behavior among employees.

2024 Apacer Office Environmental Protection Action Results

The effectiveness of employee sorting and recycling of lunch boxes and beverage cartons was below expectations. To improve recycling outcomes, the recycling area was relocated and additional sorting equipment was installed. This led to an increase in the rate of proper waste sorting and recycling by employees, thereby reducing environmental impact. In 2024, the volume of general industrial waste sent to landfills or for incineration decreased from 45.6 metric tons to 37.6 metric tons, while the volume of recycled waste increased from 18.06 metric tons to 22.44 metric tons. The total volume of general industrial waste processed decreased by 11%, and the recycling rate increased from 28% to 40%.

2.3

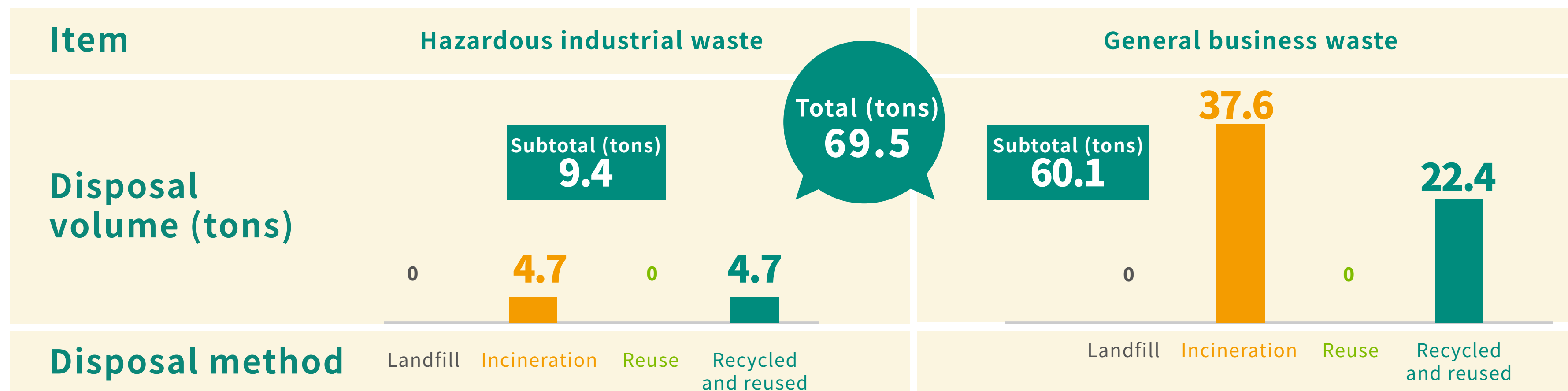
Waste and Water Management

Waste Management

To effectively clean up waste and prevent environmental pollution, Apacer attaches great importance to the reduction of waste in production. We ensure proper sorting, recycling, and outsourcing of waste disposal. Both general and hazardous waste are handled by qualified external vendors to ensure proper management. Apacer has established relevant management procedures to ensure proper and legal waste disposal. The responsible department conducts onsite audits at least once a year as needed. If the audit results do not meet the standards, the vendor is required to stop operations and make improvements within a specified deadline. If the improvements are not satisfactory, the contract will be suspended, and another qualified vendor will be selected to fulfill the corporate responsibility for waste management. In 2024, an on-site audit was conducted for high-risk waste collaboration vendors, and the results confirmed no irregularities. For the waste solutions generated during production, we have installed containment tanks in the eyewash equipment and explosion-proof rooms to prevent chemicals from leaking and flowing into the drainage pipes.

In 2024, the Company introduced a new recycling program for paper containers and actively promoted resource recycling. The volume of general industrial waste reused increased by 12 percent compared to the previous year. The total amount of waste was 69.5 tons, a decrease of 0.2 tons from the previous year's 69.7 tons.

2024 Waste Disposal Management¹



Note¹: All the wastes produced by Apacer are outsourced to qualified vendors for off-site disposal according to the legal disposal methods for various types of industrial waste, and no waste is disposed of onsite.

Note²: Qualified vendors: Authorized by competent authorities to remove and handle specified types of waste, these public or private waste disposal and treatment agencies are referred to as qualified vendors

Note³: Data sourced from the Industrial Waste Reporting and Management Information System, Ministry of Environment, Executive Yuan.

2024 Waste Disposal Management

Item	Hazardous industrial waste		General business waste	
Disposal quantity (tons)	Subtotal (tons) 9.4		Subtotal (tons) 60.1	
	0	9.4	0	60.1
Disposal method	On-site Disposal Off-site Disposal		On-site Disposal Off-site Disposal	
Waste Disposal Vendors	C-0399:Sunny Friend Environmental Technology Co., Ltd. C-0301:CHORD SWISS TECHNOLOGY CO.,LTD. C-0299:DI NAI ENVIRONMENTAL PROTECTION CO., LTD E-0221:YUI SHIUAN INDUSTRIAL CO., LTD.		Yilan, Bali, Chiayi, and Shulin City/County Government Environmental Protection Bureau Incineration Plants and Tucheng Private Recycling Vendors	

Note¹: Qualified vendors: Authorized by competent authorities to remove and handle specified types of waste, these public or private waste disposal and treatment agencies are referred to as qualified vendors

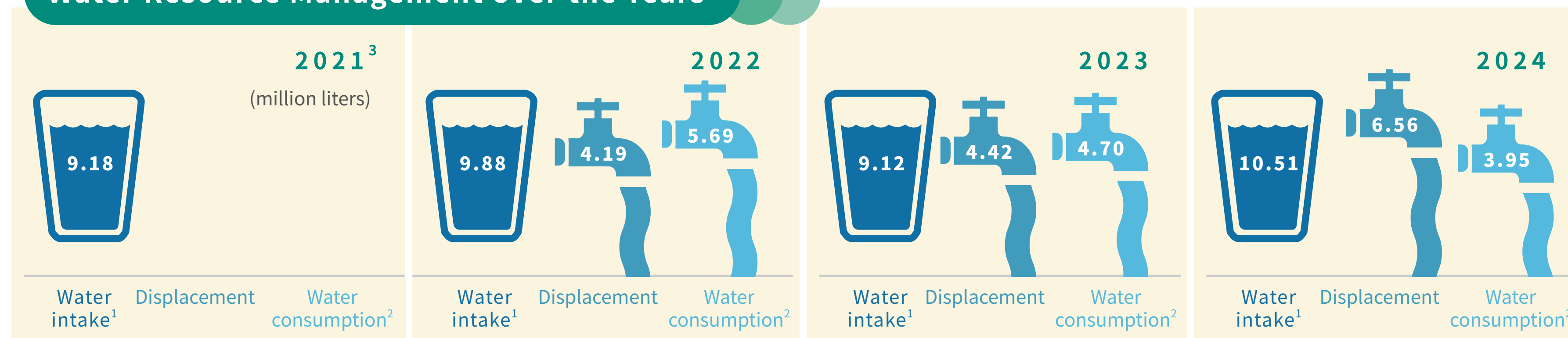
Note²: Data sourced from the Industrial Waste Reporting and Management Information System, Ministry of Environment, Executive Yuan.

Note³: Note 3: Starting from 2024, Apacer has adopted an "on-site weighing" method to calculate D1801 industrial waste, in order to better reflect the actual output of company operations.

Water Resource Management

Through the ISO 14001: 2015 environmental management system certification, Apacer has established pollution prevention and improvement mechanisms to conserve energy usage and reduce the environmental impact of its operations. The Company's internal resource usage mainly involves domestic water at the headquarters, and the manufacturing process does not require water, hence no industrial wastewater is generated. The Company's water supply comes from Taiwan Water Company, sourced from the Shihmen Reservoir. Domestic wastewater is collected via sewage pipelines and treated at a sewage treatment plant. The intake and discharge of water does not cause significant environmental impact. In 2024, the Company introduced new waste sorting for lunchbox disposal and replaced the air compressor with a water-cooled unit to ensure stable operation of production equipment, resulting in a slight increase in water usage for cleaning purposes.

Water Resource Management over the Years



Note¹: Apacer draws water from Shihmen Reservoir, which is surface water, and evaluation indicate it does not originate from water-stressed areas.

Note²: Apacer's products do not require water to be used in the manufacturing process. Apacer's wastewater discharge is categorized as domestic wastewater. After being discharged into the sewage pipeline, it undergoes treatment at the sewage treatment plant before being discharged.

Note³: Since mid-2021, a flow meter has been installed to accurately monitor Apacer's water usage performance.

2.4

Green Product

In response to the global trend of environmental protection and our commitment to fulfilling our core brand value of "being a good partner", Apacer continuously strives to operate its core businesses in ways that bring positive impacts on the global environment. We extend the concept of environmental protection and sustainability to the entire value chain of the enterprise. This includes implementing environmental management systems, managing the supply chain, designing green products, and providing environmental education. By practicing green production and product concepts, we aim to meet the latest international environmental standards and ensure that Apacer's products maintain a competitive edge in the global market.

🌿 [Procurement] Responding to Hazardous Substance Control in Advance

Apacer has fully implemented the RoHS directive in the management of manufacturing processes and materials to comply with REACH regulations and relevant customer requirements. We also implement supplier management by auditing component suppliers and requesting environmental commitments to ensure that sourced materials comply with environmental regulations. Additionally, supplier conferences are held to communicate management policies and procurement standards, effectively managing the sources of raw materials.

Replace manual email sending with system notifications. Before raw materials enter Apacer, suppliers must provide sufficient information and upload the "FMD Material Composition Table" to ensure that the components comply with the hazardous substance regulations of Apacer and its customers. At the same time, to internalize employees' awareness and implementation of hazardous substance process management, Apacer regularly reinforces employees' knowledge and understanding of hazardous substance management and related trends through physical and online training courses to ensure that personnel possess the required expertise.

- ✓ Annual training pass rate: 100%
- ✓ In 2024, total employee training hours reached 1,164 person-hours

Hazardous Substance Process Management (HSPM) Training



Note: The above data is only from Apacer's headquarters.

🌿 [Design] Environmentally friendly products with high efficiency and low energy consumption

In order to meet market demands and future trends, Apacer is developing designs that prioritize high efficiency and low energy consumption. In terms of material usage, we employ precise calculations to ensure the most effective use of materials, thus avoiding waste. Additionally, any leftover or scrap materials from production process are recycled and reused, promoting a circular and sustainable use of resources. In packaging designs, we prioritize considerations such as ease of disassembly and recyclability. Additionally, we aim to minimize volume to reduce waste generation and lessen environmental impact. All Apacer's products are free from hazardous substances, thus contributing to the preservation of natural ecosystems.

In 2024, two green packaging material designs were introduced, utilizing recycled materials in the design and application of paper boxes. The adoption rate of green paper box packaging has reached 11%. In addition to paper boxes, green PCR blister packaging was also implemented, with three new types added, bringing the total adoption rate of green PCR blister packaging to 7%.

🌿 [Process] Intelligent green production

● Smart factory - further upgrade of process management

Apacer leverages automation equipment, network communication technology, and manufacturing production systems to create an "intelligent factory production system", aiming to enhance overall production efficiency and cost competitiveness. Use IoT smart sensing devices to monitor the production and warehousing environment to reduce quality risks and improve customer satisfaction. Equipped with advanced production equipment, autonomous R&D capabilities, and comprehensive factory management, we establish a green production environment that complies with international standards. We tailor the best processes for our customers and use the APS to precisely control production schedules and progress, aiming to maximize production efficiency and optimize capacity. With the advancement of AI visual recognition, Apacer has also implemented an AOI+AI automated inspection system for detecting product appearance defects.

In 2024, to enhance energy usage monitoring and environmental awareness while reducing environmental impact, smart electricity meters were installed in July 2024 to monitor energy consumption of SMT process equipment. The goal is to collect and analyze energy usage data to identify areas for improvement.



🌿 [Recycling] Comply with EU WEEE regulations

Improper disposal of electronic waste may lead to the release of hazardous substances, causing serious pollution hazards. Apacer upholds the spirit of "producer responsibility" and follows the EU WEEE standard to join the waste electronics recycling system. Products are labeled with the WEEE (Waste Electrical and Electronic Equipment) recycling label, aiming for a recycling rate of 80% for Recovery, and 70% for Re-use and Recycling, in line with the global sustainability expectations of consumers. All Apacer products sold in Europe can be properly disposed of by local qualified vendors to protect the earth's environment and recycle resources.

At present, in the implementation of green products, the USB flash drive adopts the recyclable halogen-free casing design, accounting for 52% of total sales. In addition, packaging designs use at least 70% recycled paper, and two series of products have been introduced accordingly. All consumer DRAM memory products have also adopted the green polymer casing design using recycled materials.

To enhance product environmental protection, Apacer introduced a new green polymer casing design in 2024, using PCR (Post-Consumer Recycled) polymer casing with over 30% recycled materials. This has been applied to more than two product models, with products using PCR polymer casing now accounting for over 7% of total offerings.

Apacer's fully lead-free DDR5 industrial-grade memory modules utilize high-quality original chips, not only exceeding current EU RoHS environmental standards, but also avoiding reliance on the RoHS 7(c)-I lead exemption clause. In addition, DDR5 memory modules feature power management capabilities, with Power Management IC (PMIC) integration for efficient system power load control, enhancing signal integrity and compatibility. Moreover, the operating voltage of only 1.1V helps reduce system power consumption and heat generation, making it especially suitable for industrial computer systems requiring low power and efficient thermal performance.

3 A Good Partner That Shares Progress and Growth

Vision

Apacer remains committed to delivering high-quality products and services, adhering to international environmental standards, and building a trustworthy international green brand. We also aspire to play a role in driving growth and progress across the entire industry chain. Therefore, Apacer has formulated various management policies related to suppliers and customers to achieve cooperative growth and mutual progress, which is in line with Apacer's core brand slogan of "Deliver on promises, strive to be better, advance together".

Policies and Commitments

Apacer adheres to the quality policy of "delivering competitive, defect-free, and environmentally safe products and services on time to satisfy customers", pledging to fulfill social responsibilities by providing consumers with safe and reliable green products.



3.1

Sustainable Supply Chain Management

Supplier Management Strategy

Apacer is dedicated to not only fulfilling its corporate social responsibility and responding to the needs of stakeholders but also fostering mutual growth with its supplier partners. We seek continuous improvement in areas such as regulations, human rights, environmental safety, and health to reduce risks, build robustness, and engage in sustainable management and development. This is all aimed at constructing a sustainable supply chain. Apacer has set "promoting sustainable supply chain management" as a mid- to long-term goal. Besides the original four management aspects of QDCS (quality, delivery, cost, service), it has added three more aspects of ESG (environmental friendliness, social inclusion, corporate governance). We are gradually incorporating ESG considerations into supplier evaluation, classification, and guidance systems to implement the spirit of sustainability.

● Apacer Sustainable Supply Chain Management

Supplier Management Process

New supplier introduction stage

New suppliers must undergo a review process, with the main evaluation criteria including economic and environmental aspects. We conduct on-site audits depending on the type and risk of the supplier to evaluate their equipment and capabilities.

Compare the process flowchart with the original 2022 version

Supplier search

NO 

Creation of basic data

Document review and on-site audit

YES 

- ✓ **Supplier search:** Find suitable suppliers based on quality, delivery time, and price according to requirements.
- ✓ **To establish basic information,** the following documents must be provided and the basic information must be completed:
 - "Apacer Environmental Commitment"
 - "Conflict Minerals Survey": Investigation of the mineral sources of tin, tantalum, tungsten, gold, cobalt, and mica.For outsourced contractors and manufacturers of electronics/packaging materials/mechanisms/PCB, in addition to the above information, an "RBA Declaration" is required.
- ✓ **Document review:**
 - Vendor Investigation, Evaluation, Review and Approval
 - Provide RoHS test report/Fill in the REACH SVHC Substances of Extremely-High Concern survey
 - Sign the Non-use of Conflict Minerals Commitment
 - For outsourced contractors and manufacturers, in addition to the above information, an ISO 9001: 2015 certificate is required.

New supplier introduction stage

The introduction of the evaluation system for suppliers encourages supply chain partners to prioritize and implement corporate sustainability.

NO

Supplier evaluation

YES

✓ **On-site audit:** Outsourced contractors and PCB manufacturers must conduct on-site audits of RBA and process system.

✓ **Supplier evaluation:**

Upon completion of the above requirements and passing the evaluation, suppliers become qualified suppliers. Form an investigation team as needed to conduct onsite evaluation of their equipment and capabilities.

New supplier introduction evaluation project

Economic aspect**79%**

Business management, quality management, manufacturing capabilities, equipment management, delivery time

Environmental aspect**21%**

Free from hazardous substances (HSF), environmental health and safety

Social aspect (required)

Non-use of Conflict Minerals Commitment, compliance with RBA standards

Supplier periodic assessment stage

All raw material suppliers are required to undergo regular assessments and conduct actual audits as necessary. We have included RBA regulations as annual assessment items. In the future, we will continue to expand the scope of assessment to gradually enhance the sustainability management capabilities of our suppliers.

Regular supplier evaluation

Tiered supplier management

✓ **Regular supplier evaluation:**

- Outsourced contractors: Quarterly
- Outsourced purchasers and manufacturers: Semiannually
- Distributors and traders: Annually

✓ **On-site audits will be conducted depending on the supplier type and risk classification.**

Supplier Annual Evaluation Items

Quality, HSF (Hazardous Substances), delivery time, compliance, RBA audit

✓ **Supplier classification management:**

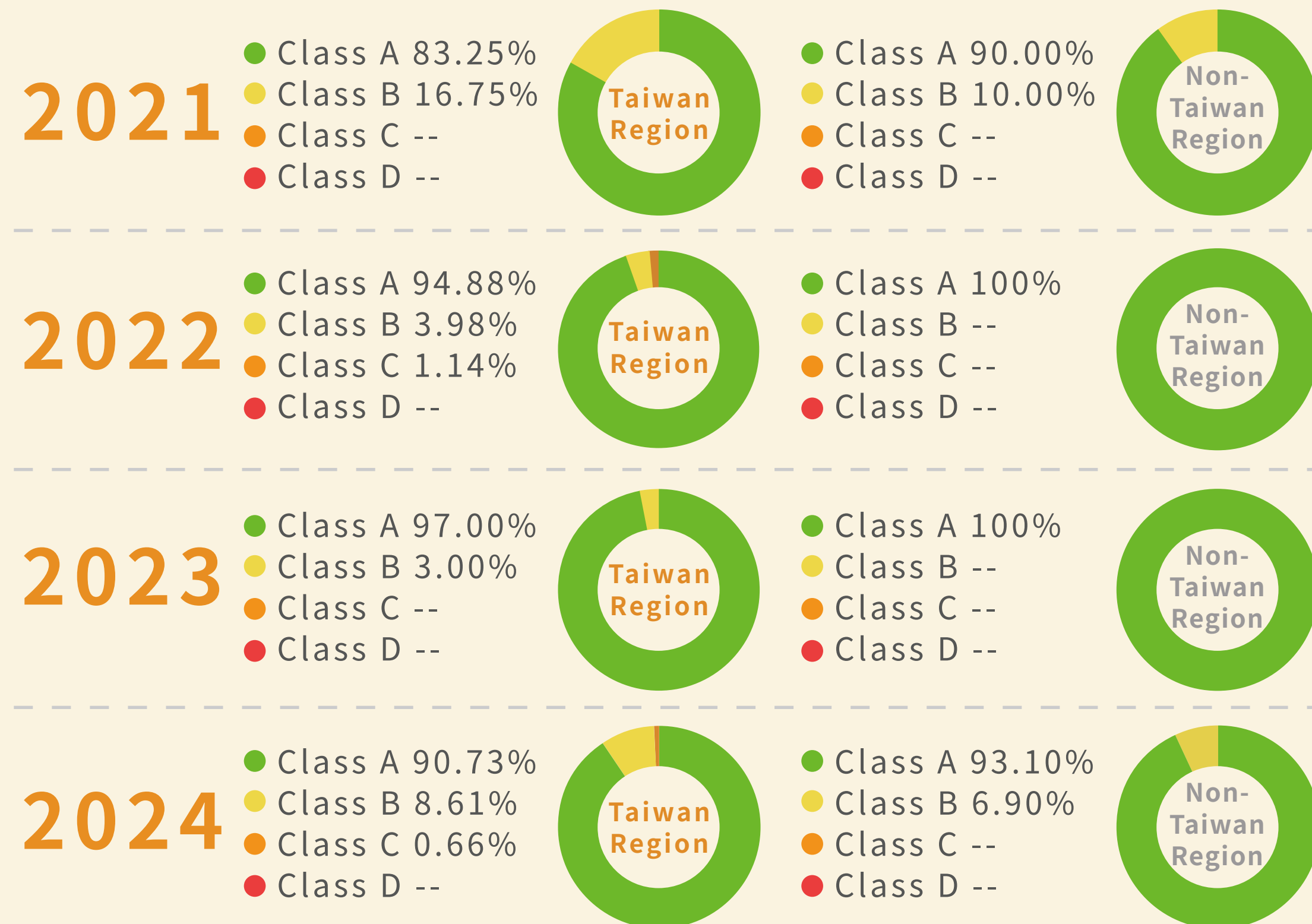
Suppliers are classified into four levels, A, B, C, and D, according to the evaluation results. Supplier quality improvement measures and subsequent procurement operations will be carried out accordingly.

Supplier classification	Scoring standards	Management system
Class A	90 to 100 points	Increase the order quantity or provide incentives as appropriate
Class B	80 to 89 points	No reward or punishment
Class C	70 to 79 points	Reduce the quantity ordered and set a deadline for improvement
Class D	Below 69 points	Revoke the qualification of HSF qualified supplier

Note: General service suppliers are excluded from this management process.

2024 supplier evaluation and classification results

Since the implementation of the evaluation system, Apacer has continued to conduct non-audit and related counseling activities, expecting to make progress together with its partners. We have also included the five RBA standards: Labor, health and safety, environmental protection, ethics, and management system into the annual assessment items. In the first stage, manufacturers of considerable scale with factories that can cooperate with the implementation of RBA requirements will be given priority. In the future, we will continue to expand the scope of assessment to include institutional manufacturers, aligning with international standards, and gradually enhancing the sustainable management capabilities of our suppliers. In the 2023 RBA assessment, all suppliers must be A-grade and 100% comply with RBA regulations.

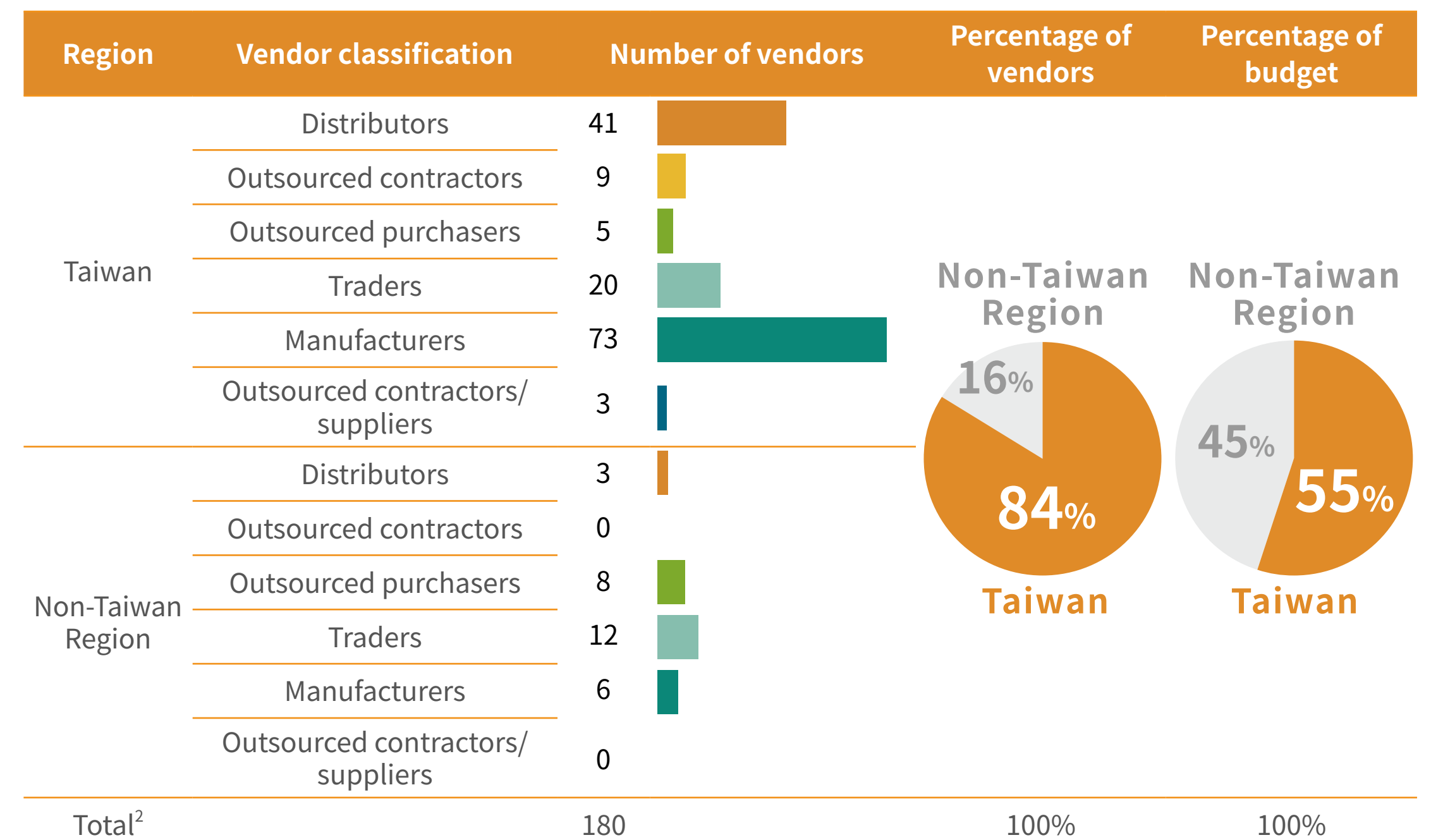


Note: This figure includes only from Apacer's headquarters.

Supplier Procurement Policy

Apacer considers various factors when evaluating suppliers, including product quality (ISO 9001: 2015), delivery time, price, green product capability (IECQ QC 080000: 2017), and implementation of RBA policies. We conduct regular evaluations of suppliers from different regions who provide raw materials, ensuring a comprehensive risk assessment process. With the support of these policies, Apacer ensures stable product quality and meets customer demands while adhering regarding hazardous substances (HSF). Apacer adopts the principle of local procurement, aiming to retain the economic benefits of business operations in Taiwan and reduce the carbon emissions generated by raw material transportation. Currently, 84% of Apacer's suppliers are based in Taiwan, and in terms of procurement budget, local suppliers in Taiwan account for 55%.

Procurement status by vendors in 2024¹



Note¹: The supplier policy mainly covers raw material suppliers and does not include suppliers for general services.

Note²: This figure includes only from Apacer's headquarters.

Sustainable Supplier Management – Historical Actions and Critical Raw Material Risk Management Methods

In the modern globalized business environment, the challenges of the supply chain are increasing day by day. Apacer has established a comprehensive set of critical raw material risk management methods to improve the stability of the supply chain and reduce the risk of raw material shortages. Apacer's critical raw material risk management method includes the following four aspects:

01 Regularly review material delivery dates and update market information

Understand the market supply status through the system's regular delivery updates.

02 Enhance material commonality

Reduce the use of single or specialized materials and reduce the reliance on unique raw materials.

03 Establishment of secondary suppliers or substitute raw materials

Actively seek multiple sources of materials to reduce the risk of shortages in the supply chain.

04 Spot market backup

Maintain good interaction with spot dealers to cope with unexpected demand.

Responsible Supply Chain



Supplier Green Grading System

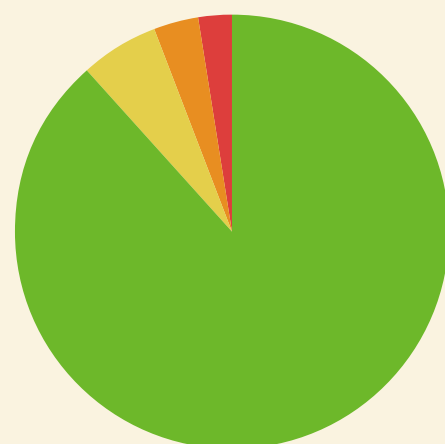
Apacer launched the "Supplier Green Grading System" based on its original supplier management process. The score is calculated based on the "Audit Pass Rate" and "Expired Renewal Timeline" uploaded from the supplier's RoHS test report. Procurement personnel can adjust the supplier assessments and ratings based on the scores from the green grading system. This allows them to request improvements in the suppliers' management of hazardous substances (HSF) to meet the latest international and customer requirements and regulations. Apacer encourages suppliers to upgrade their green grading through channels such as the AGP Green Level automatic calculation and supplier conferences. The combined proportion of suppliers rated A and B remains above 90%, while fluctuations in other grades are within a normal range. We will continue to actively provide guidance and education to suppliers to further improve their grading.

Percentage of Suppliers in Supplier Green Classification over the past years

2021

- Class A 88.4%
- Class B 5.9%
- Class C 3.2%
- Class D 2.5%
- Not rated¹ --

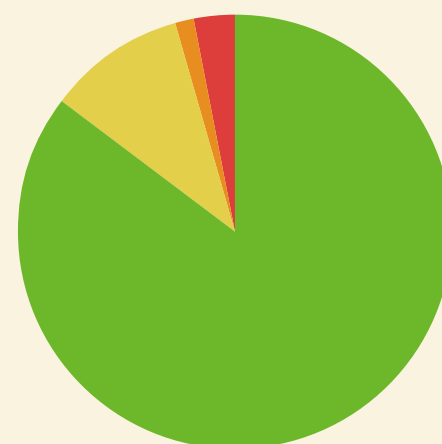
Total 100%



2022

- Class A 85.4%
- Class B 10.4%
- Class C 1.4%
- Class D 2.8%
- Not rated¹ --

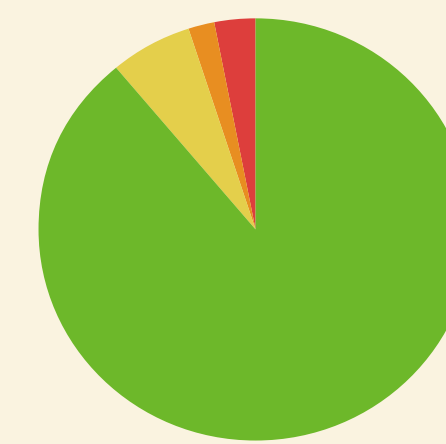
Total 100%



2023

- Class A 89%
- Class B 6%
- Class C 2%
- Class D 3%
- Not rated¹ --

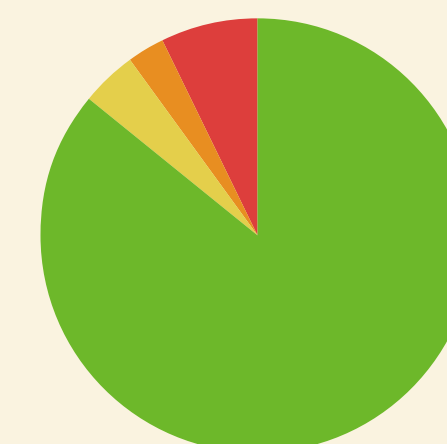
Total 100%



2024

- Class A 86%
- Class B 4%
- Class C 3%
- Class D 7%
- Not rated¹ --

Total 100%



- Class A : 90 points or more
- Class B : 75 to 89 points
- Class C : 60 to 74 points
- Class D : Below 59 points

Note¹: Supplier not rated refers to a supplier that only provides outsourced services or a new supplier.
Note²: This figure includes only from Apacer's headquarters.

Supplier Commitment

Supplier signs RBA declaration

Apacer has implemented the RBA (Responsible Business Alliance) standards among its first tier suppliers. Labor intensive suppliers including key raw material providers, subcontractors, intermediaries, and waste disposal vendors are required to respond with an RBA Declaration. Through this effort, Apacer and its supplier partners jointly uphold labor rights, environmental protection, and ethical transparent business practices.



100% response rate to the supplier's RBA declaration

Suppliers and hazardous substance management

Apacer has introduced the IECQ QC 080000: 2017 Hazardous Substance Process Management System. Through our supplier management process, we ensure the quality and stability of our products, as well as compliance with international standards and customer requirements regarding hazardous substance management (HSF). Suppliers must sign the Environmental Protection Commitment, provide raw material test reports and complete substance surveys while complying with international standards.



100% of raw materials provided by suppliers comply with EU RoHS and REACH regulations

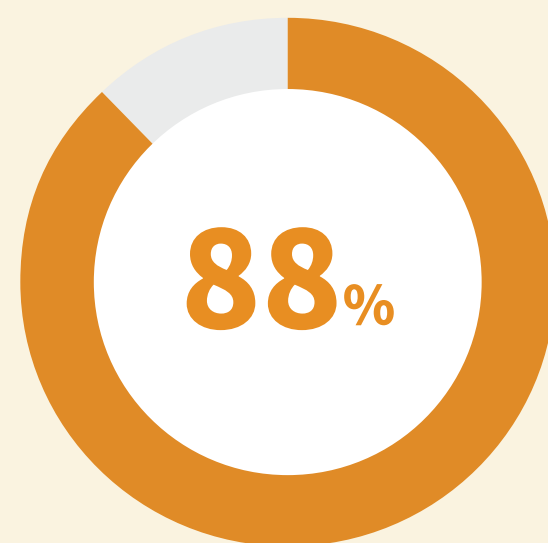
● Prohibition on conflict minerals

Apacer requires all qualified suppliers to fill out the Conflict Mineral Reporting Template (CMRT) and Extended Minerals Reporting Template (EMRT) based on the Responsible Minerals Initiative (RMI). This ensures that the metals and minerals used in Apacer's products come from regions in Europe, Asia, and the United States, and are not sourced from OECD-listed high-risk areas. In addition, suppliers must comply with the Responsible Business Alliance (RBA) Code of Conduct regarding related trading activities.

Ensure that suppliers understand and comply with the regulations of the non-use of conflict minerals. All qualified suppliers are required to sign the Non-use of Conflict Minerals Commitment and fill out the Conflict Metal Survey Form.



100% of suppliers sign the Non-use of Conflict Minerals Commitment



88% of suppliers responded to the conflict mineral survey

Note: The OECD defines conflict-affected and high-risk areas as regions where there is a risk of armed conflict, widespread violence, or other circumstances harmful to the people. Armed conflicts may take many forms, such as international or non-international conflicts that may involve two or more countries, or may include liberation wars, rebellions, civil wars, etc. High-risk areas may include regions with political instability or repression, weak governance, insecurity, civil infrastructure breakdown, and widespread violence. These regions are often characterized by widespread human rights abuses and violations of national or international law. Conflict minerals refer to minerals mined in conflict-affected and high-risk regions.

Sustainable Interaction and Recognition with Suppliers

● Annual Supplier Conference: Communication and Guidance

We continue to learn and grow together with our supplier partners on environmental sustainability issues, enhancing the industry's ability to manage green environmental topics, and taking action to implement global environmental sustainability trends. In 2024, Apacer held its first in-person supplier conference in two years, presenting awards to outstanding supplier partners. The event received positive feedback and active participation from the suppliers.

2023 Supplier Conference Key Performances



Attendance rate
96.6%



In responding to environmental protection, **electronic questionnaires** were used



Questionnaire recovery rate
96.0%



Satisfaction level
99.5%

Feedback from Supplier Partners

Shenzhen Longsys Electronics Co., Ltd. - Asia Pacific Region

Name of Partner: **Arthur Yeh**

Title: Senior Vice President

I came to know about the company Apacer because of the word "Acer" in its name—Apacer is a company that spun off from Acer's procurement department. However, I truly began to understand the company in March 2020, through an interview with Apacer's President, Chang Chia-Kun, in EMBA magazine titled "Coexisting with Risk in Harmony — Apacer President Chang Chia-Kun".

What left a deep impression on me about this interview was the rapid changes in the storage industry, where the waves have washed away many corporate heroes. Yet Apacer manages to engage in both industrial control products and consumer products, which are two categories with very different product life cycles. In theory, economies of scale from consumer products can help reduce costs and support the high-margin industrial control products. However, in actual operations, industrial control products require a high degree of customization and a strong technical team to back up the sales force, the required competitiveness for these two types of products is very different. Therefore, it is not easy for any company to succeed in even one of these categories, yet Apacer is capable of managing both high-difficulty categories simultaneously, clearly demonstrating a unique management philosophy in balancing risk and profit.

Later, I had the opportunity to interact with Apacer myself and personally realized that the company's success comes from having a pragmatic leader and a professional, efficient management team. Each of them works diligently in their role to steadily push the company forward.

The kind of customers of a company determines the kind of future it will have. We sincerely thank Apacer for its continued trust and support toward Longsys Electronics, giving us valuable business opportunities and allowing us to learn from a successful company. Throughout our past collaborations, I have personally experienced how every communication and cooperation has greatly benefited us.

To meet the needs of a professional and efficient company like Apacer, Longsys has also been continuously learning and improving, striving to enhance our capabilities in order to better fulfill Apacer's product and technical requirements.

We firmly believe that collaboration is a process of mutual benefit and win-win outcomes. In the future, we will continue to uphold the principles of professionalism, integrity, innovation, cooperation, and mutual success, working closely with Apacer to explore more possibilities for collaboration and create greater value together. Once again, thank you for Apacer's support and trust. We believe that our partnership will continue to grow, with both companies achieving even greater success—on a path with no limits.



3.2

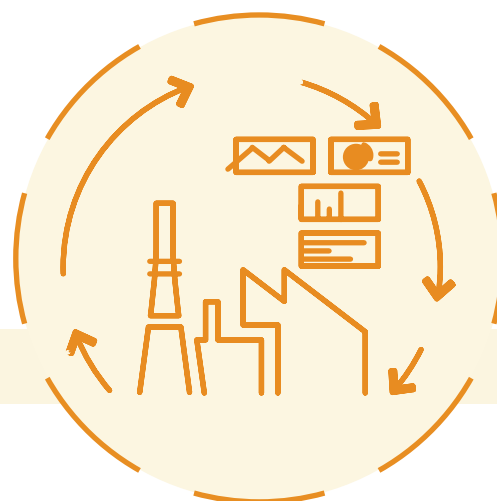
Customer Relationship Management

Customer Relationship and Quality Management

In order to provide customers with high-quality products and meet customers' requirements, Apacer has introduced a quality management system (ISO 9001: 2015) and through the Plan-Do-Check-Act (PDCA) management cycle, Apacer ensures that all stages of operations and production comply with policy and regulations and achieve set objectives. This systematic management approach guarantees the quality of our products.

Quality commitment

Continuous improvement



High-quality service



Create product value



Customer Service Niche: Providing the Best Service Experience

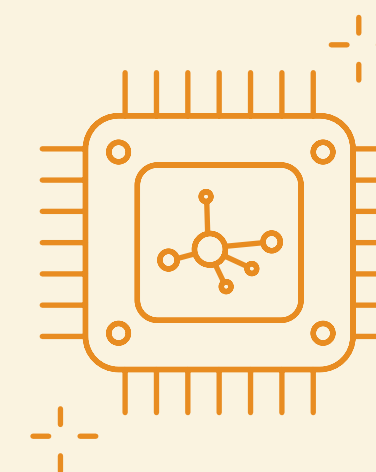
Global marketing channels

We are committed to grasping market dynamics in line with the characteristics of local markets, actively building global marketing channels, with operating locations in the U.S., the Netherlands, Japan, Hong Kong, China, and India. By marketing its own brand, Apacer deeply cultivates these local markets.



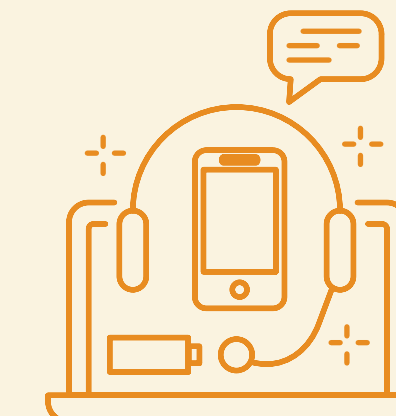
Provide customized services

As the memory demand of various mobile devices and equipment grows, Apacer is committed to providing customers with customized products and services. Starting from the needs of customers, Apacer collaborates with clients to achieve a leading market advantage together.



Excellent Customer Service Team

In response to the frequent occurrence of diversity and compatibility across different platforms and applications, Apacer conducts technical analysis based on customer requirements. Beyond the existing customer service system, Apacer collaborates with customers to develop next-gen platforms, facilitating product development and customer communication.



From R&D to after-sales, always putting customers' thoughts first

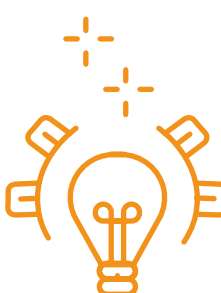
"Access the best, share memories" is Apacer's brand promise. We prioritize user experience, paying attention to every detail of product design. Each customer's feedback is considered an important cornerstone for our improvement, as we strive for perfection. We have established the quality and HSF (hazardous substance-free) policy: "Delivering competitive, defect-free, and environmentally safe products and services on time to satisfy customers" to provide customers with the best service experience.

R&D and design



Listen to customers

Assist in planning the best sales product mix based on user experience and build a convenient, high-quality, and abundant digital storage life for consumers.



Gain new technology insights

Gain insight into the evolution of the latest technology, industry trends, and customer needs from the most forward-looking perspective. We assist customers in creating the best solutions to enhance their market competitiveness together.

After-sales service



Global after-sales service

Provide localized real-time sales and technical services through local business and technical personnel to ensure a 100% satisfaction rate in consumer experience.

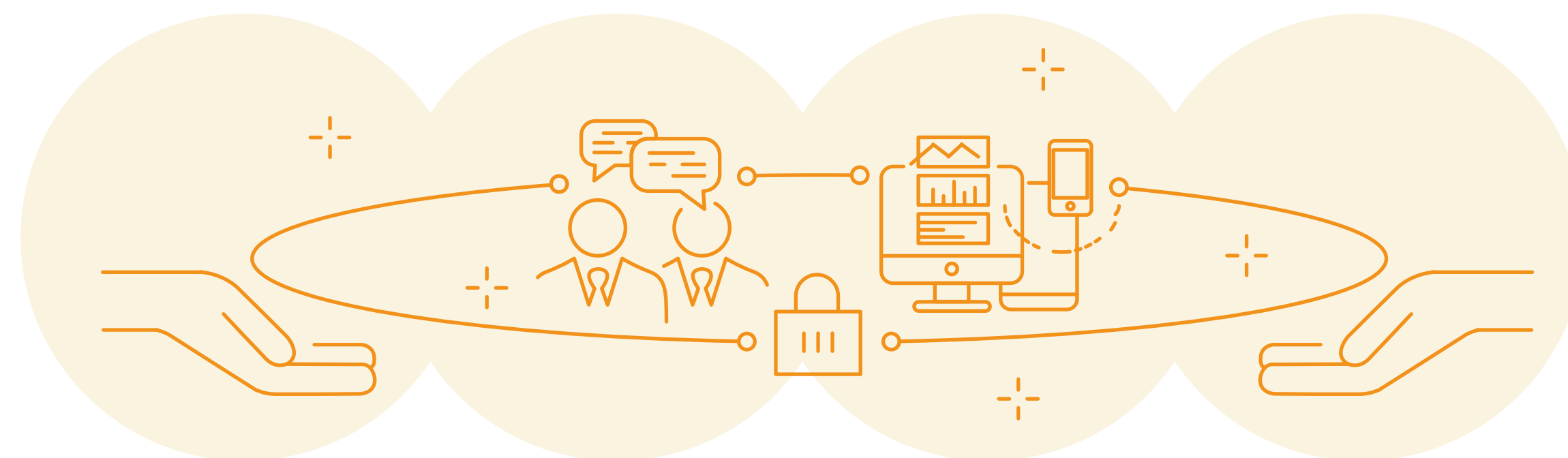


Global logistics system

Integrate various logistics and transportation technologies to enable customers to grasp the logistics status in real time and provide customers with the fastest, most effective logistics services.

Customer privacy protection

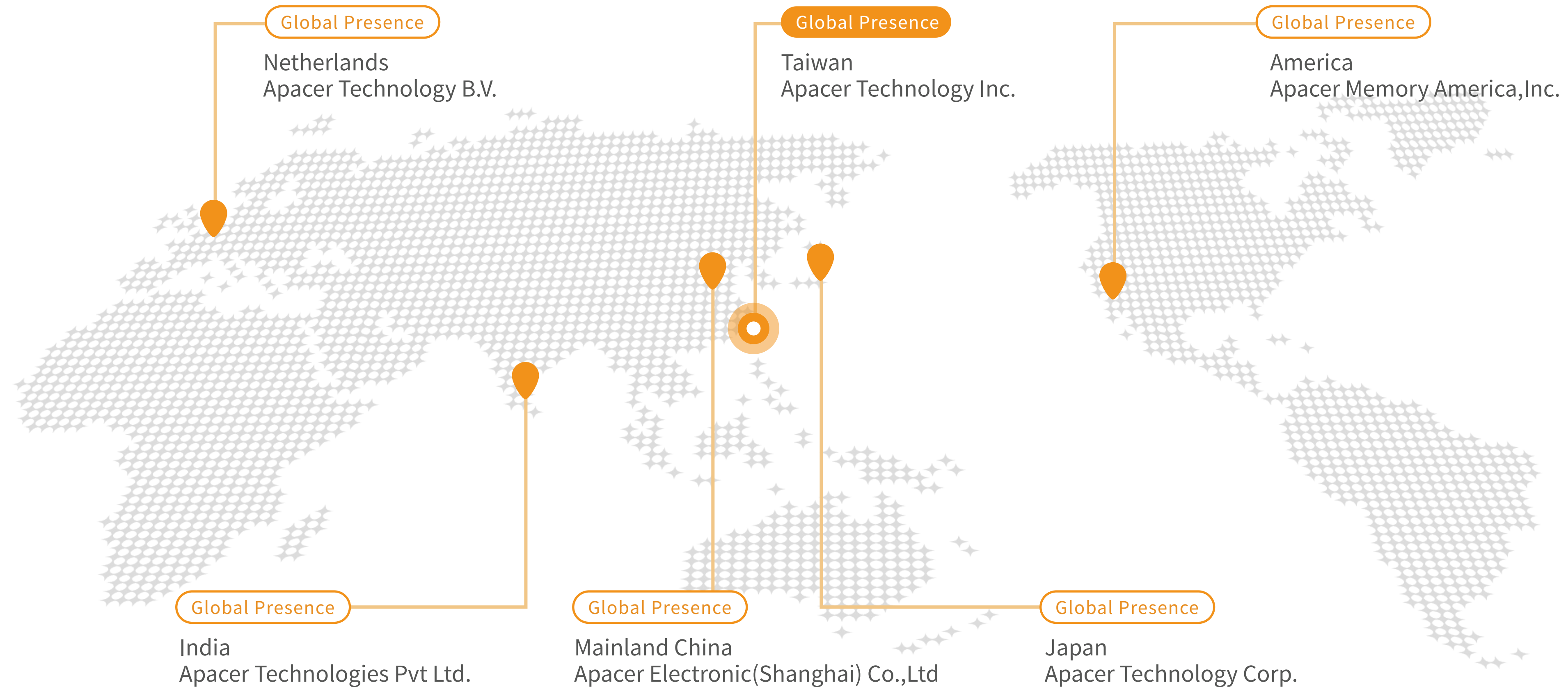
Apacer values the privacy of every customer and always ensures the highest standards to protect customer privacy rights. We have established comprehensive procedures and regulations to protect customer privacy data. In 2024, there were zero complaints regarding customer data breaches or violations of customer privacy rights. We will continue to maintain this excellent record and prepare in advance for possible future risks.



Customer privacy protection measures

Policy category	Technology category
✓ Contractual protection: The contract contains a confidentiality agreement. ✓ Customer code system: Use customer codes to conceal the real names of customers. ✓ Independent process specifications: Avoiding the disclosure of product privacy between customers due to similar processes.	✓ Information equipment security control: Prevent customer privacy leakage due to virus or hacker intrusion. ✓ Document access control: Restricting access to documents. ✓ System access control: Authorization control over customer data inquiries and operations. ✓ Access control: Access control systems are set up in the server room and production line.

Global after-sales service system



Global

- ✓ Provide localized real-time sales and technical services through local business and technical personnel.
- ✓ Provide customers with professional logistics solutions with real-time status updates, efficient process planning, competitive costs, and provide the fastest, most convenient logistics services.

Taiwan

- ✓ The Customer Service Department and Sales Department are responsible for the technical support, customer complaint handling, and return/exchange process (RMA) after the products are sold.
- ✓ There are service centers in the north, central, and other various regions, or agents that can provide after-sales service, such as product maintenance or replacement.

The tandem service system provides better services

To provide customers with better services, Apacer has integrated the Enterprise Resource Planning (ERP), Manufacturing Execution System (MES), and web Return Merchandise Authorization (webRMA), etc. This completely integrates information and databases, enhancing the traceability of processes, maintenance, shipment, after-sales service, and other information to provide customers with more comprehensive services and meet their needs.

Furthermore, through integrating cross-system data, data collection and analysis is more easily facilitated. For example, by connecting information to databases, we can collect data on material management, processes, customer information, inventory, maintenance, shipment, after-sales service, etc. Subsequent analysis and application allow us to understand the needs of different customer groups, improve product design, enhance process capabilities, provide products and service that exceed customer expectations, and strengthen the Company's competitiveness.

Customer Satisfaction Survey

We regularly conduct customer satisfaction questionnaires every year to collect customer opinions. In 2024, a total of 123 questionnaires were collected through a survey covering ten aspects. The overall customer satisfaction score was 88.40. Among all aspects, "Sales Service" received the most positive feedback, indicating that Apacer's service is highly recognized by its customers.

Key Performances of Customer Satisfaction Survey in 2024



Survey

123 customers



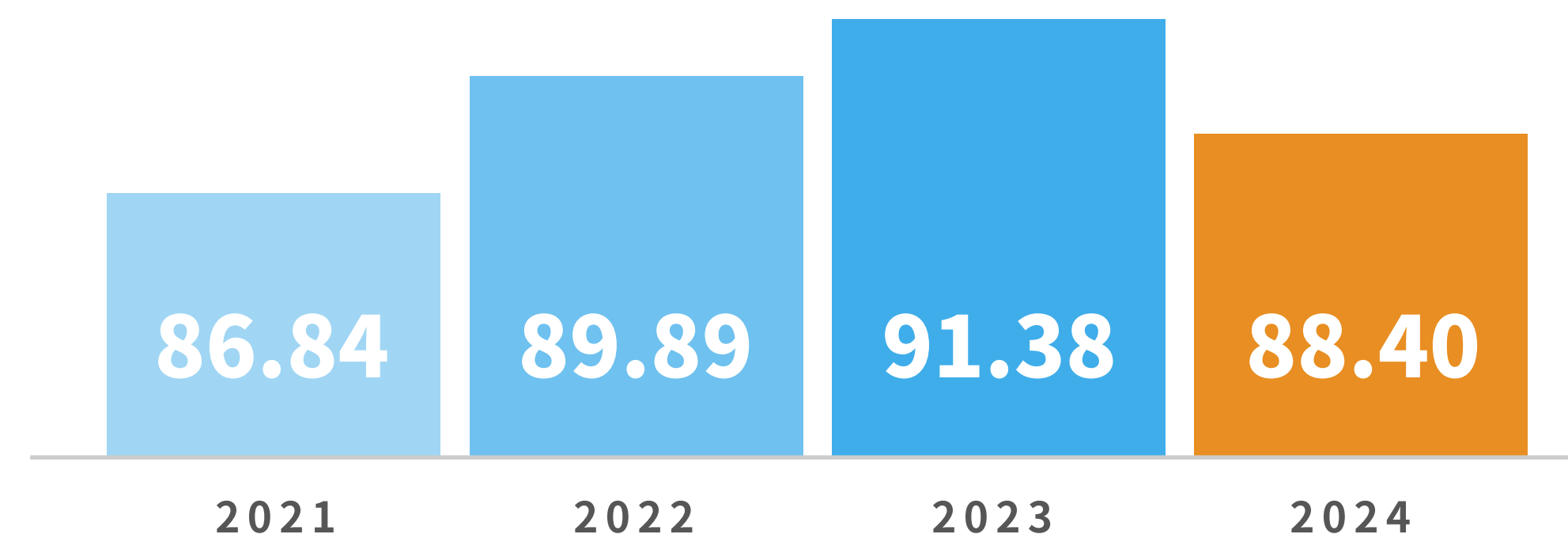
Satisfaction score reached

88.40 points

Note: This figure includes only from Apacer's headquarters.

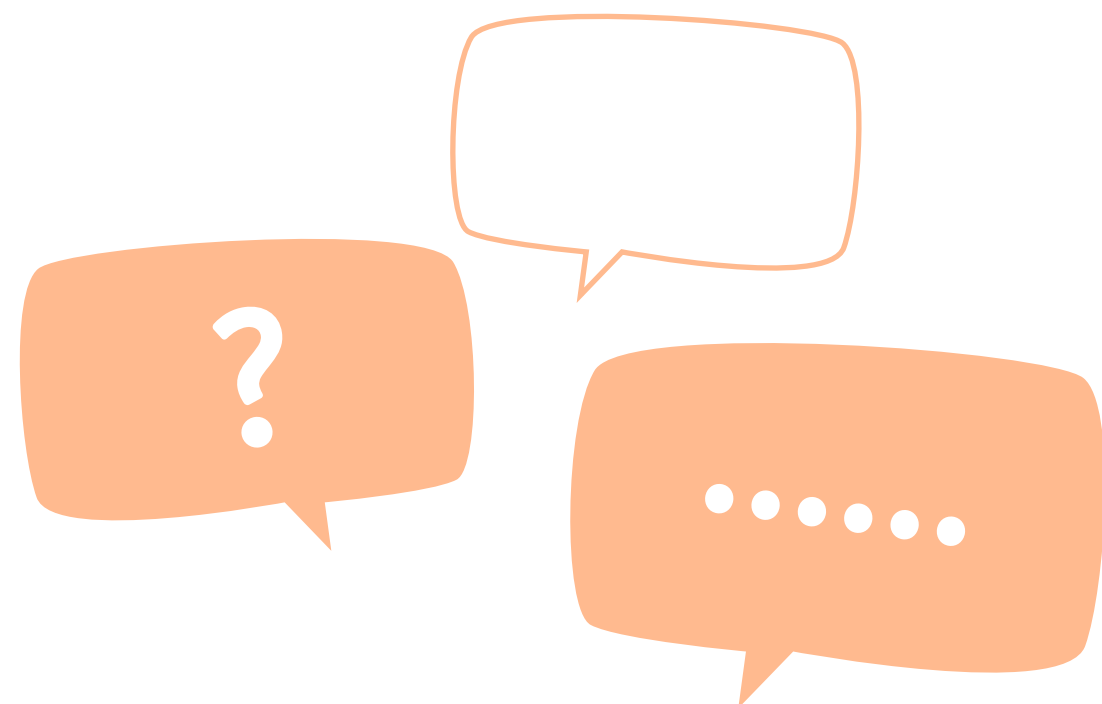
Customer Satisfaction Score

In the future, we will take this year's customer satisfaction survey scores as the benchmark and actively review, analyze, and make improvements to provide products and services that better meet customer needs.



Multi-faceted customer communication channels

Apacer adheres to the "service first" spirit and values communication with customers by actively establishing smooth and diversified communication channels to understand customers' needs and provide timely and comprehensive services. Our customer communication channels are divided into three categories: permanent, regular, and as needed. Listening to customers' feedback and opinions is an important way for Apacer to improve and develop its customer relationships.



Communication channel

Communication results in 2024

Permanent

- ✓ Official website
- ✓ Official social media(YouTube / LinkedIn/Facebook/Instagram)
- ✓ Customer service email
- ✓ After-sales service website
- ✓ Sales/Customer Service Team

- ✓ Annual website traffic: 408,000
- ✓ 126 articles published on LinkedIn
- ✓ 1,350 customer feedback emails received
- ✓ After-sales service target achievement rate: 100%
- ✓ Customer satisfaction target achievement rate: 100%

Periodically

- ✓ Customer Satisfaction Survey/annually
- ✓ Sustainability Report/annually
- ✓ Business review with major customers/quarterly

- ✓ Score: 88.40 points
- ✓ Completion
- ✓ Completed 4 times in 2024

From time to time

- ✓ Release of press release
- ✓ Release of promotional videos
- ✓ Customer visit
- ✓ Customer audit

- ✓ 17 press releases in total
- ✓ 23 videos, total reach: 5,675 people
- ✓ Completed 53 times in 2024
- ✓ Completed 8 times in 2024

4 A Friendly and Healthy Workplace Partner

Vision

Strategy of talent development: Introduce outstanding talent, develop future technologies, establish a trustworthy employer brand.

Mission of the human resource administration: Become an enthusiastic, innovative, and reliable professional team for human resource administration.

Vision for HR and Administration: Create a learning organization at Apacer with a friendly and healthy workplace.

Policies and Commitments

Apacer adheres to our core value of "Becoming Better Partners" by delivering on our promises, striving to do better, and making daily progress, and integrates corporate sustainability and human resource development. By doing this, our colleagues can keep learning in the organization, improving their knowledge and experiencing and promoting organizational performance. At the same time, we pay attention to the health and family life of colleagues, create a friendly and healthy workplace, and are thus able to achieve a healthy work-life balance.



Material Topics in This Chapter

Material Topics	Material Topic Management Policy		Comparison with International Frameworks and Indicators		
Occupational Health and Safety	Apacer complies with ISO 45001: 2018 International Occupational Safety and Health Management Standards and RBA regulations to provide a safe and healthy workplace, continues the A+ EAPs employee assistance program, and builds a friendly and healthy workplace to protect the physical and mental health and safety of all personnel, creating a win-win situation.		305-1~305-5		
Impact Description	We comply with laws and regulations to create a healthy and safe workplace, and conduct regular inspections and continuous improvement to provide employees with a protected workplace.		Actual	Potential	Positive Negative
			V		73.2% 26.8%
Management Actions/ Preventive and Remedial Measures	Actual Plans	2024 Targets	2024 Performance		Result Tracking
	Occupational Safety and Health Education and Training	100% training rate	100% training rate		Achieved
	Occupational Safety Committee Regular Inspection Report	4 times a year	4 times		Achieved
Stakeholder Engagement	Stakeholder Category	Communication Method		Frequency	Reporting System or Response Method
	Employee	● Strategy and Operational Management Committee meeting ● Occupational Safety and Health Management Committee meeting ● Sustainable Development Committee meeting ● We share knowledge and information on occupational safety activities through the intranet.		● Monthly ● Quarterly ● Quarterly ● Monthly	● Complaint Channels and links to Intranet ● Set up a confidential message box



Sustainability targets		Method of evaluation
Short-term targets (2025)	● 100% training rate of all employees for occupational safety and health education ● Percentage of employees self-reporting high stress levels: below 8% ● Number of occupational injury incidents every six months: no more than 1 (excluding commuting traffic accidents & non-OHS factors) ● Maintain ISO 45001:2018 and RBA certification	● Training rate of occupational safety and health training ● Percentage of employees self-reporting high stress levels ● Number of occupational accidents ● Third-party verification and affirmation
Mid-term targets (2025–2026)	Create a friendly and healthy workplace, earning recognition from at least one external third party for being a friendly/healthy workplace.	
Long-term targets (2027)	Zero occupational accidents (excluding traffic accidents and non-OHS factor)	
United Nations Sustainable Development Goals (SDGs)		
8.8 Protect labor rights and promote safe working environments for all workers, including migrant workers, and particularly women and those in precarious employment.		



Material Topics	Material Topic Management Policy			Comparison with International Frameworks and Indicators
Talent cultivation	Apacer follows the United Nations Sustainable Development Goal 4 and inherits the company's vision, mission, core values, long-term business strategy, and four major operational drivers to establish a dual-track talent development framework. The dual-track talent development framework is based on competency, and promotes the establishment of a talent supply chain mechanism and the Apacer Academy, aiming to enhance talent value and create a win-win situation.			404-1~404-3
Impact Description	Complying with laws and regulations, Apacer builds a friendly workplace environment and promotes talent learning and development through diverse learning programs offered by Apacer Academy, ensuring employees remain motivated to learn and sustaining the company's competitive momentum.			
	Actual	Potential	Positive	Negative
		V	100%	0%
Management Actions/ Preventive and Remedial Measures	Actual Plans	2024 Targets	2024 Performance	Result Tracking
	Apacer Academy competency evaluation	Competency evaluation rate: 100%	Competency evaluation rate: 100%	Achieved
	Apacer Academy education and training	Talent training execution rate: 90%	Talent training execution rate: 99%	Achieved
	Dual-Track Talent Development Framework	Dual-track talent retention rate: 80%	Dual-track talent retention rate: 98%	Achieved
Stakeholder Engagement	Stakeholder Category	Communication Method	Frequency	Reporting System or Response Method
	Employee	● Strategy and Operational Management Committee meeting ● Sustainable Development Committee meeting ● Share information regarding employee training and event information through the intranet.	● Monthly ● Quarterly ● From time to time	● Complaint channels and links to Intranet ● Set up a confidential message box



Sustainability targets		Method of evaluation	
Short-term targets (2025)	● Apacer Academy competency evaluation rate: 100% ● Apacer Academy talent training execution rate: 90% ● Percentage of female manager over 20%	Competency evaluation rate ● Training execution rate ● Percentage of female manager ● Project execution rate ● Third-party affirmation rate ● Employee turnover rate ● Competence/skill completion rate	
Mid-term targets (2025–2026)	● Industry-academia collaboration project execution rate: 100% ● Create a friendly and healthy workplace, and achieve at least one external third-party recognition for talent development		
Long-term targets (2027)	● Annual employee turnover below 2.5% ● Competence/skill completion rate more than 90%		
United Nations Sustainable Development Goals (SDGs)			
SDGs 4.4: By 2030, the number of youth and adults who possess relevant skills, including technical and vocational skills, required for employment, decent jobs and entrepreneurship will significantly increase.			



4.1

Personnel Overview

Apacer is committed to promoting a friendly and healthy workplace

Apacer values human rights and provides employees with a dignified and safe working environment! The Company implements workplace diversity and strictly prohibits any form of discrimination based on race, color, age, gender, sexual orientation, nationality, disability, pregnancy, belief, political stance, marital status, educational background, or any other category protected by law. It complies with government regulations to protect minority groups and fulfill the employment quota for persons with disabilities. Apacer respects the annual ceremonial rituals of indigenous peoples and grants one day of indigenous festival leave per year in accordance with the Ministry of the Interior's guidelines on commemorative days and holidays. It also ensures the employment of persons with disabilities as stipulated by the Ministry of Health and Welfare's People with Disabilities Rights Protection Act. If the monthly employment quota is not met, compensation is paid in accordance with the law.

Employee rights

Apacer adheres to the Responsible Business Alliance Principles, and the United Nations' Sustainable Development Goals, which are higher than national laws and regulations. To protect human rights, Apacer provides colleagues with a double assurance: We ensure workplace safety and health and ensure the rights and interests of our employees; we focus on maintaining smooth communication channels and creating a healthy work-life balance.

Relating to employee selection and retention, ranging from recruitment and appointment, training and development, performance development, promotion and transfer to salary and rewards, we have established relevant management regulations to ensure the integrity of the system.

Item	Ensuring safety and health in the work environment	Protecting the rights and interests of employees	Emphasizing smooth communication channels	Emphasizing work-life balance
Targets	Provide a safe and healthy work environment and build a reputation as a trustworthy employer.	Abide by national laws, international regulations, and the Company's human rights policy to build a reputation as a trustworthy employer.	Emphasize colleagues' opinions and feedback, providing diverse and smooth communication channels, and building a reputation as a trustworthy employer.	Create a friendly and healthy workplace and build a reputation as a trustworthy employer.
Complaint channel	Occupational Safety and Health Committee	✔ External Complaints: A "Reporting System for Violations of Professional Ethics" has been established on the official website through which external personnel can file reports. ✔ Internal reporting: The Company has established a reporting hotline/e-mail, sexual harassment reporting procedure, Employee Welfare Committee meetings, labor-management meetings, CSR Committee quarter-review meetings, RBA Committee meetings, etc.		

Item	Ensuring safety and health in the work environment	Protecting the rights and interests of employees	Emphasizing smooth communication channels	Emphasizing work-life balance
Action achievements	Received RBA silver certification	Received RBA silver certification	Annual employee turnover below 3%	Received Ministry of Labor work-life balance award in 2018 Received Ministry of Education sports enterprise certification in 2019 Received HR Asia Best Companies to work for in Asia Award in 2022 Received 1111 job bank Happiness Enterprise Gold Award in 2023 Received friendly migrant worker award from New Taipei City Labor Affairs Department in 2024 Received CommonWealth Magazine Sustainability Award in 2024 Received CommonHealth Magazine Healthy Enterprise Bronze Award in 2024
Corresponding Section	4.2	4.2	4.3	4.3

Profiles of employees around the world

Total number of employees around the world

As of the end of 2024, Apacer had 598 employees worldwide, with 27% being direct employees and 73% operating as indirect employees in the production line. In recent years, the change in the overall percentages of direct and indirect employees has been below 3%, indicating no significant difference.

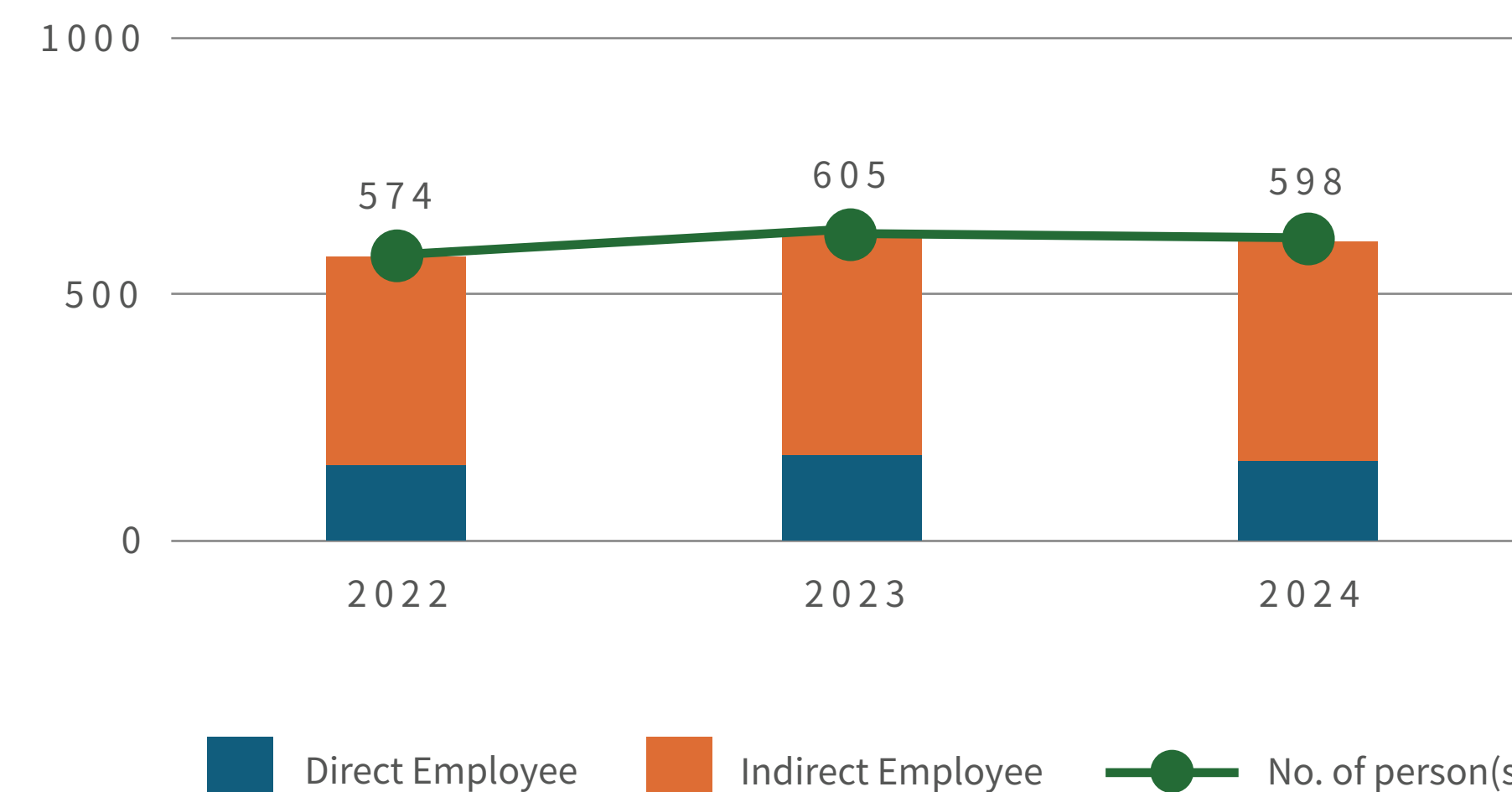
Apacer's total number of employees around the world

Yearly	2022 ³	2023	2024
Total number of employees	574	605	598
Direct Employee ¹ (%)	27%	28%	27%
Indirect Employee ² (%)	73%	72%	73%

Note¹: Direct employees: Refer to employees who actually engaged in machine operation or tasks related to production and manufacturing.

Note²: Indirect employees: Refer to indirect employees.

Note³: The 2023 data already includes the subsidiary UD Info.



Apacer's global employee distribution

In terms of the gender distribution of Apacer's global employees, 54% of Apacer's employees are female and 46% are male. The gender distribution is relatively standard.

Apacer's global employee distribution in 2024

Classification	Gender						Work area							
	Female		Male		Total		Operation headquarters		Taiwan subsidiaries ⁶		Overseas subsidiaries ⁷		Total	
	No. of person(s)	Percentage (%)	No. of person(s)	Percentage (%)	No. of person(s)	Percentage (%)	No. of person(s)	Percentage (%)	No. of person(s)	Percentage (%)	No. of person(s)	Percentage (%)	No. of person(s)	Percentage (%)
Total number of employees	320	54%	278	46%	598	100%	497	83%	37	6%	64	11%	598	100%
Permanent employees ¹	318	53%	278	47%	596	100%	495	83%	37	6%	64	11%	596	100%
Temporary employees ²	2	100%	0	0%	2	100%	2	100%	0	0%	0	0%	2	100%
Employees with non-guaranteed hours ³	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Full-time employees ⁴	318	53%	278	47%	596	100%	495	83%	37	6%	64	11%	596	100%
Part-time employees ⁵	2	100%	0	0%	2	100%	2	100%	0	0%	0	0%	2	100%

Note ¹ : Permanent employees: Full-time or part-time employees who sign an indefinite labor contract

Note ² : Temporary employees: Employees who have signed a fixed-term labor contract. The contract expires at a specified time, or ends when a specific task or event with an evaluation timeframe is completed (such as the end of a work project or in the case of an employee relinquishing duties).

Note ³ : Employees without guaranteed hours: Employees who are not guaranteed a minimum or fixed number of working hours per day, week, or month, but work on demand, such as temporary employees, zero-hour contract employees and on-call employees.

Note ⁴ : Full-time employees: Employees whose weekly, monthly or annual working hours are defined in accordance with national laws and practices related to working hours.

Note ⁵ : Part-time employees: Those working fewer hours per week, month or year than full-time employees.

Note ⁶ : Taiwan subsidiaries: The above data already includes the subsidiary UD Info.

Note ⁷ : Overseas subsidiaries: Including the United States, the Netherlands, Japan, China and India.

Note ⁸ : The number of employees is estimated based on the full-time equivalent (FTE) method. Number of persons = total working hours / daily working hours / total number of working days in the year. If the result is less than one person, it is counted as one person. The number of working days in 2024 is estimated to be 249 days.

● Profiles of non-employees around the world

Global non-employee types include security and property management personnel, dispatched workers, and consultants, totaling approximately 16 people, accounting for around 2%. This is nearly the same as the previous year, with no significant fluctuation.

Total number of non-employees in 2024

Work type	Apacer operation headquarters and subsidiaries in Taiwan	Overseas subsidiaries
On-site suppliers	-	-
Contractors	-	-
Security/property management personnel	10	-
Dispatched workers	4	-
Consultants	-	2

Note ¹ : The number of employees is estimated based on the full-time equivalent (FTE) method. Number of persons = total working hours / daily working hours / total number of working days in the year. If the result is less than one person, it is counted as one person. The number of working days in 2024 is estimated to be 249 days.

Note ² : The scope of this table covers Apacer's headquarters, Taiwan, and overseas subsidiaries.

● Employees at the headquarters and subsidiaries in Taiwan

Apacer attaches great importance to the development of local talent. As of 2024, there were a total of 534 employees at the headquarters and subsidiaries in Taiwan, with local employees accounting for more than 90% of the total number of employees. There are 11 managers, including the Chairman, who is the Chief Strategy Officer, President, heads of all centers, and Head of Accounting, and all of them are local employees in Taiwan.

Employee statistics are as follows:

Employee distribution for Apacer operation headquarters and Taiwan subsidiaries in 2024

Classification	Gender					
	Female		Male		Total	
	No. of person (s)	Percentage (%)	No. of person (s)	Percentage (%)	No. of person (s)	Percentage (%)
Total number of employees	293	55%	241	45%	534	100%
Number of permanent employees ¹	291	55%	241	45%	532	100%
Number of temporary employees ²	2	100%	0	0%	2	100%
Number of employees with non-guaranteed hours ³	0	0%	0	0%	0	0%
Number of full-time employees ⁴	291	55%	241	45%	532	100%
Number of part-time employees ⁵	2	100%	0	0%	2	100%

Note ¹ : Permanent employees: Full-time or part-time employees who sign an indefinite labor contract

Note ² : Temporary employees: Employees who have signed a fixed-term labor contract. The contract expires at a specified time, or ends when a specific task or event with an evaluation timeframe is completed (such as the end of a work project or in the case of an employee relinquishing duties)

Note ³ : Employees without guaranteed hours: Employees who are not guaranteed a minimum or fixed number of working hours per day, week, or month, but work on demand, such as temporary employees, zero-hour contract employees and on-call employees.

Note ⁴ : Full-time employees: Employees whose weekly, monthly or annual working hours are defined in accordance with national laws and practices related to working hours.

Note ⁵ : Part-time employees: Those working fewer hours per week, month or year than full-time employees.

Employee structure for Apacer operation headquarters and Taiwan subsidiaries in 2024

Item	Classification	Female		Male		Group subtotal and percentage	
		No. of person (s)	Percentage (%)	No. of person (s)	Percentage (%)	No. of person (s)	Percentage (%)
Production Category	Direct Employee ¹	118	72.4%	45	27.6%	163	30.5%
	Indirect Employee ²	175	47.2%	196	52.8%	371	69.5%
Job Category	Head of managers	4	36.4%	7	63.6%	11	2.1%
	Non-head of managers	34	43.6%	44	56.4%	78	14.6%
	Professional staff	121	49.8%	122	50.2%	243	45.5%
	Sales personnel	16	41.0%	23	59.0%	39	7.3%
	Technician ³	118	72.4%	45	27.6%	172	30.5%
Education distribution	Doctoral degree	0	0.0%	3	100.0%	3	0.6%
	Master degree	36	35.6%	65	64.4%	101	18.9%
	(Associate) Bachelor degree	186	54.7%	154	45.3%	340	63.7%
	Senior (vocational) high school	67	77.9%	19	22.1%	86	16.1%
	Others	4	100.0%	0	0.0%	4	0.7%
Age distribution	Below 20 years old	0	0.0%	0	0.0%	0	0.0%
	21 to 30 years old	49	62.8%	29	37.2%	78	14.6%
	31 to 40 years old	105	55.9%	83	44.1%	188	35.2%
	41 to 50 years old	107	52.7%	96	47.3%	203	38.0%
	Over 51 years old	32	49.2%	33	50.8%	65	12.2%
Marriage status	Married	153	52.4%	139	47.6%	292	54.7%
	Single	140	57.9%	102	42.1%	242	45.3%
Nationality distribution	Taiwanese	239	50.2%	237	49.8%	476	89.1%
	Foreigner	54	93.1%	4	6.9%	58	10.9%
Number of protected quotas	Indigenous peoples	2	66.7%	1	33.3%	3	0.6%
	Physically or mentally disabled	2	50.0%	2	50.0%	4	0.7%
Total		293	54.9%	241	45.1%	534	100.0%

Note ¹ : Direct employees: Refer to employees who actually engaged in machine operation or tasks related to production and manufacturing.

Note ² : Indirect employees: Refer to indirect employees.

Note ³ : Technical personnel: Refers to the direct employees of the production line.

Note ⁴ : If there are any vacancies caused by changes in personnel, in addition to paying the dues in accordance with the law, Apacer actively welcomes ethnic minorities and the physically and mentally disabled to join Apacer on the recruitment website

● Change of employees at Apacer's headquarters and subsidiaries in Taiwan

Apacer's employee turnover rate has been lower than 2.5% over the years, and this is part of our goal to maintain a stable manpower supply and appropriate talent cultivation and development

Turnover rate of employees at Apacer's headquarters and subsidiaries in Taiwan

Item		2022	2023	2024
Average number of employees at the beginning of the period		514	507	538
Number of new employees		93	119	74
Number of resigned employees ²	Management role	7	6	6
	Non-management role	81	72	72
	Subtotal	88	78	78
Average number of employees at the end of the period		507	538	534
Annual turnover rate ¹ (%)		1.6%	1.4%	1.2%

Note¹ : Turnover rate formula: Base on Ministry of Labor Work-Life Balance Awardthe standard calculation, which is: the number of employees resigned throughout the year / (annual average number of workers hired per month*12)*100%.

Note² : Employees who left the Company: Including voluntary resignation, involuntary resignation, leave without pay, and retirement.

Statistics of new and resigned employees at Apacer's headquarters and subsidiaries in Taiwan in 2024

Type	Group	New employee ¹		Resigned employee ²		Total		
		No. of person(s)	Percentage	No. of person(s)	Percentage	Subtotal number of person(s)	Total number of person(s)	To the total percentage
Gender	Female	32	48.5%	34	51.5%	66	66	43.4%
	Male	42	48.8%	44	51.2%	86	86	56.6%
Age	Below 20 years old	1	0.0%	0	0.0%	1	1	0.0%
	21 to 30 years old	22	56.4%	17	43.6%	39	39	25.7%
	31 to 40 years old	40	50.6%	39	49.4%	79	79	52.0%
	41 to 50 years old	10	37.0%	17	63.0%	27	27	17.8%
	Over 51 years old	1	16.7%	5	83.3%	6	6	3.9%
Total		74	48.7%	78	51.3%	152	152	100%

Note¹ : Female/male ratio of new employees = number of female or male new employees/total number of active employees in the corresponding category in the year.

Note² : Female/male ratio of resigned employees = number of female or male resigned employees/total number of active employees in the corresponding category in the year.

Application for unpaid parental leave and reinstatement rate¹ of Apacer headquarters and subsidiaries in Taiwan in 2024

Item	Female	Male	Total
Number of employees eligible to apply for unpaid parental leave	18	16	34
Number of employees actually applied for unpaid parental leave	5	0	5
Number of employees required to be reinstated in the current year (A)	6	0	6
Number of employees applying for reinstatement in the current year (B)	4	0	4
Reinstatement rate % (B/A)	67%	0%	67%
Number of employees reinstated after unpaid parental leave in 2023 (E)	2	0	2
Total number of employees completing the parental leave and still working 12 months after reinstatement in 2023 (F)	2	0	2
Retention % (F/E)	100%	0%	100%

Note¹ : The calculated period is 2024/1/1 - 2024/12/31.

4.2

Employee Safety and Health (material topic)

Occupational safety and health management system

Apacer adopts the PDCA cycle to implement occupational safety and health management through risk assessment, risk control and management, and regular improvements. The company has obtained ISO 45001:2018 occupational safety and health management certification and undergoes annual external verification to ensure the system's effectiveness.

This occupational safety and health management system covers all workers at Apacer's headquarters and Taiwan subsidiaries, totaling 534 employees, accounting for approximately 98%. Non-employees (i.e. security and property management personnel, and dispatched workers), make up approximately 14 people, accounting for around 2%. This is nearly the same as the previous year, with no significant fluctuation.

Audit category	Audit method	Audit result
Internal audits	✔ Occasional internal audits: Internal audits are conducted from time to time every quarter, and the audit results are reported at the quarterly OHSC meeting. ✔ Regular internal audits: Internal audits are conducted on a regular basis every year before the external audits to ensure the sound operation of relevant management.	✔ Items conformed (OK): 114. ✔ Non-conformities (NG): 2. ✔ Non applicable (NA) items: 136. ✔ Non-conformance rate: 1.75%. ✔ Continuous improvement: The position of the fire extinguisher was changed without being checked, and the vacuum machine maintenance record was not recorded to the document control system. ✔ Improvement result: Completed.
External audit	External audits are carried out on a regular basis every year. Based on the verification period in the management system, the audits are renewed, and the certificates are renewed.	The system will continue to be effective after the verification in 2024.

Note¹: The occupational safety and health management system covers the plants and workers of the headquarters of Apacer and the Taiwan subsidiary UD Info, excluding overseas employees.

Note²: The above workers include: All employees at the headquarters of Apacer and the non-employees in the Taiwan subsidiary UD Info (such as in-plant suppliers, in-plant customers, contractors, security personnel, dispatched personnel, etc.).

Note³: The number of employees is estimated based on the full-time equivalent (FTE) method. Number of persons = total working hours / daily working hours / total number of working days in the year. If the result is less than one person, it is counted as one person. The number of working days in 2024 is estimated to be 249 days.

Occupational Safety and Health Committee

To provide a healthy and friendly workplace and reduce occupational accidents, Apacer has established the "OHSC" in accordance with the "Occupational Safety and Health Act" to review, coordinate, and advise on safety and health-related matters. The OHSC is subordinate to the CEO, and holds a committee meeting every quarter to review occupational safety and health matters.

Operation status of the OHSC in 2024 (Occupational Health and Safety Committee)

Number of labor and management representatives ¹	There are 13 labor representatives and 5 management representatives.
Election method of labor representatives	Elected by all full-time employees
Term of office of the labor and management representatives	2 years
Frequency of meetings	Quarterly (4 times a year)
Discussion matters	1. Occupational health and safety issues/management plans/operating environment testing. 2. ISO 45001:2018 Occupational Health and Safety Management System issues. 3. RBA system issues 4. Fire fighting system management issues 4. Occupational safety and health management issues related to foreign employees' accommodation. 5. Identification of occupational safety and health regulations.

Note¹: Labor representatives on the occupational safety and health committee account for more than one-third, in accordance with legal requirements.

Note²: This table includes information only from Apacer's headquarters.

Specific measures of the OHSC

The OHSC implements occupational safety and health management by following four specific measures: disaster prevention, operating environment testing, occupational safety control, and health management system. At Apacer, we implement operation control for operating procedures that may generate high risks. To minimize the operational risks of our colleagues, we conduct disaster prevention, education and training, regular commissioning of external qualified agencies to implement operating environment inspections, implementation of special operation control and work permits in accordance with the Occupational Safety and Health Act and safety risk assessment results, implementation of automatic inspections, and the health management system. There have been no cases of lost time due to occupational diseases over the years.

For personnel exposed to ionizing radiation, organic solvents, and other health and safety hazards, additional special medical examinations were conducted with tiered management. In 2024, a total of 29 employees engaged in specially hazardous operations received special health examinations, and no work-related abnormalities were found in the results.

Four major actions for occupational safety and health management



Management actions	Disaster prevention	Working environment survey	Operational safety control	Health management system
2024 management performance	100% occupational safety training	100% compliance with regulatory requirements	Implementation of occupational safety system management	Annual health check-up for all employees

2024 occupational accident statistics

0 cases

(excluding traffic accident)

Disaster prevention

Apacer has established an occupational safety and health management plan and implemented the ISO 45001:2018 occupational safety and health management system to prevent occupational accidents and ensure the safety and health of workers. Potential risks are identified, with unacceptable risks included in the target management plan and regular tracking and improvement measures executed.

For non-routine risk assessments (including changes in operating procedures or equipment, accident investigations, worker complaints or referrals, changes in workers or workflows, results from monitoring the work environment and workers' health, or other non-routine events), Apacer uses employee suggestion mailboxes, internal and external communication emails, and forms as channels to allow employees to provide suggestions and opportunities for improvements regarding safety and health. These are discussed, tracked, and improved during quarterly occupational safety and health committee meetings in order to update risk control measures in a timely manner. In addition, through the execution of the occupational safety and health management plan and unscheduled dynamic audits of the workplace, combined with environmental testing, Apacer applies tiered management to all unsafe environments and areas. All workplace environmental testing data are reported to the competent authority and published on the company website, so that employees are informed of the current work environment data and management measures, thereby enhancing their awareness of occupational safety and health.

Regarding personnel training and promotion, new employees must complete occupational safety education and training, and existing employees must participate in annual occupational safety training. In addition, the company intranet regularly promotes and shares occupational safety knowledge to enhance employees' self-protection awareness and to support Apacer's goal of becoming a friendly and healthy workplace in terms of occupational safety and health.



Accident response measures

To respond to unexpected accidents, Apacer has established an accident reporting, handling, and investigation management procedure in accordance with the Occupational Safety and Health Act. Upon the occurrence of an incident, corresponding actions are carried out to ensure peace of mind for employees. Company physicians and nurses provide health education, and preventive measures are reviewed in the Occupational Safety and Health Committee to prevent recurrence. To reduce the incidence of occupational safety accidents, emergency response training is conducted annually, accompanied by fire evacuation drills, which are also recorded with the local competent authority. These measures enable employees to take appropriate actions when facing emergencies.



Hazardous chemicals management

Hazardous chemicals used in the factory processes are managed by certified professional personnel. Regular occupational safety and health training is conducted to provide staff with operational training, emergency response procedures, and knowledge education. Safety data sheets are placed in clearly visible locations to enable effective on-site emergency response in case of incidents. In accordance with regulatory requirements, the CCB chemical classification management system is implemented to help employees understand and properly use hazardous chemicals through tiered management.



Risk and hazard identification

Risk and hazard identification is conducted annually by qualified personnel. After review by the occupational safety office, unacceptable risks are identified, followed by the establishment of targets for improvement and tracking, which are incorporated into the occupational safety management system for regular monitoring, in order to continuously eliminate potential occupational hazards in the workplace. During any operational procedure, if an imminent danger or emergency occurs, employees may independently decide to stop work and evacuate their workstation without facing any adverse consequences. In 2024, no such risks occurred. The main medium-to-high risk item involves the prevention of injuries caused by machinery. Risk is mitigated through enhanced employee training and the installation of photoelectric sensor gates, which shut off power and halt operations when foreign objects are detected entering the clamping area, thereby reducing the likelihood of hazards.



Periodic professional certification review

Apacer conducts an annual review of professional certifications, including those for occupational safety personnel, first aid personnel, forklift operators, organic solvent operation supervisors, fire prevention managers, and nurses. The human resources unit provides assistance in organizing regular retraining to ensure all relevant certifications remain valid. Through these retraining sessions, the professional competence of responsible personnel in occupational safety and health is effectively enhanced.



Regulations for Contractor Construction Management

Apacer has formulated procedures requiring contractors to undergo evaluation before commencing work. All relevant licenses, training, and insurance must be reviewed and verified. A coordination agreement must be signed, and a designated supervisor for the worksite is assigned to oversee and review the entire construction process before entry is permitted. After entry, a daily on-site hazard notification must be conducted before any work begins. The safety operations during construction and the restoration of the environment afterward must comply with the requirements and regulations of the Occupational Safety and Health Act. For 2024, occupational accident statistics for both Apacer employees and non-employees show no major violations in contractor management. No fines were issued, and zero occupational injuries were reported (excluding traffic accidents).

2024 Occupational Safety and Health Education and Training Statistics

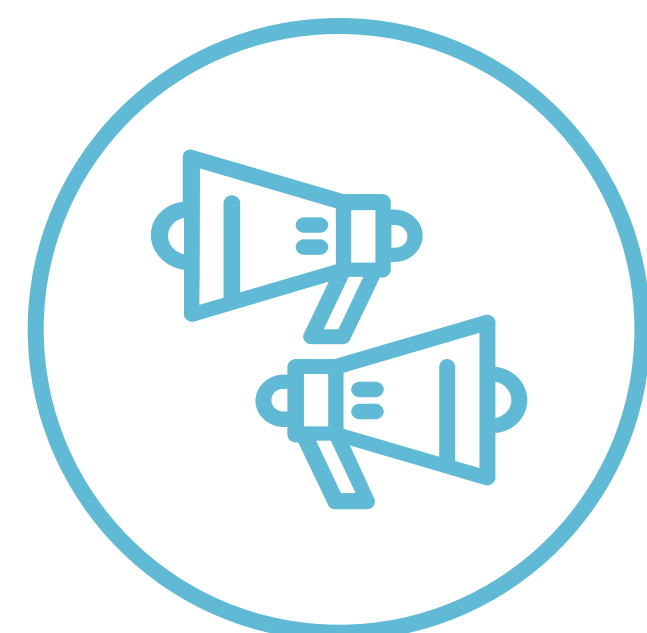
Trainees	Course	Number of Participants	Number of Hours
Employee	Occupational safety and health education and training for new employees ¹	69	207
	Occupational safety and health education and training for current employees ¹	525	525
	Occupational safety and health-related certification ² Initial training/Retraining	33	297
Non-employee ³	Occupational Safety and Health Education and Training	14	14
Total		641	1,043

Note¹: Occupational safety and health education and training for new and current employees: Including the subsidiary UD Info. Other data does not include UD Info.

Note²: Occupational safety and health-related licenses include: Occupational safety and health operation supervisors, occupational safety and health personnel, organic solvent operation supervisors, radiation protection, fire prevention managers, first aid personnel, and nurses.

Note³: Non-employees: Refer to those who work for the organization but have no employment relationship with the organization, such as in-plant suppliers, in-plant customers, contractors, security and property personnel, and dispatched personnel.

Emergency disasters



Before the occurrence

Formulated APA-EM-00011 Incident Notification, Handling, and Investigation Management Procedure to assist employees with reporting and subsequent follow-up and insurance claims.



During the occurrence

- ✓ Incident investigation
- ✓ Committee review



After the occurrence

- ✓ Preventive measure evaluation
- ✓ Insurance claim
- ✓ Relevant health education

In 2024, the number of occupational injury cases was lower than the previous year, and all incidents were traffic accidents that occurred during commuting. Through training, employees were encouraged to raise their awareness of defensive driving and to take public transportation. In conjunction with the company's daily "4,000 steps" activity group, this not only strengthened physical health but also effectively reduced the incidence of commuting accidents.

Statistics on the number of employee occupational injuries and diseases in 2024

Item	Female	Male
Total working hours ¹	564,904	480,072
Total working days	70,613	60,009
Total number of work-related injuries ²	4	1
Total occupational injury rate (IR) ³	1.42	0.42
Number of deaths	0	0
Number of work-related injuries ⁴	0	0
Total working days lost	0	0
Lost day rate (LDR) ⁵	0.00	0.00
Number of serious work-related injuries ⁶	0	0
Serious occupational injury rate	0	0

Note¹: Total working hours: Calculated based on "total number of employees for the year x total number of working days x 8 working hours per day".

Note²: Total number of work-related injuries: Including all commuting and business-related traffic accidents.

Note³: Occupational injury rate (IR) = (total number of occupational injuries/total number of working hours) x 200,000*.

Note⁴: Number of work-related injuries: Excluding commuting and business-related traffic accidents.

Note⁵: Lost day rate (LDR) = (total workdays lost / total hours worked) x 200,000*.

Note⁶: Serious work-related injuries refer to injuries that cause death or make it difficult for the worker to return to the state of health before the injury within 6 months.

Note⁷: The above data includes figures from the subsidiary, UD Info Corp.

Note*: 200,000 is calculated based on 50 weeks in a year, 40 working hours per week per 100 employees.

Statistics on the number of non-employee¹ occupational injuries and diseases in 2024

Item	Female	Male
Working hours	13,944	13,944
Working days	1,743	1,743
Number of work-related injuries ³	0	0
Number of deaths	0	0
Total working days lost	0	0
Lost day rate (LDR)	0	0
Number of serious work-related injuries	0	0
Serious occupational injury rate	0	0

Note¹: Non-employees: Refer to those who work for the organization but have no employment relationship with the organization, such as in-plant suppliers, in-plant customers, contractors, etc. In 2023, there were around 10 non-employees at Apacer.

Note²: Total working hours: Calculated based on "total number of employees for the year x total number of working days x 8 working hours per day".

Note³: Number of work-related injuries: Excluding all commuting-related traffic accidents.

Note⁴: The above data includes figures from the subsidiary, UD Info Corp.

Apacer has established a detailed investigation process for "occupational injuries". Investigators must work with labor representatives to investigate the cause of accidents, and the reports produced must be signed by the CEO. The Company provides guidance for the injured employees to improve their health. When returning to the workplace, a gradual return-to-work system has been established for employees. When employees are unable to perform duties due to injuries, the medical staff in the plant will provide medical care and relevant medical advice, helping employees apply for insurance claims.

4.3

Employee Benefits and Communication

Since its establishment, Apacer has upheld its core value of "Becoming Better Partners", valued the growth and development of employees, and continuously cared for employees to create a fulfilling work environment and culture, with a commitment to becoming a friendly and healthy workplace worthy of long-term dedication.



Results of A+ EAPs

In recent years, in conjunction with the ESG strategy, we have actively implemented the Employee Assistance Program (A+ EAPs), for which we have won the Work-Life Balance Award, the Badge of Accredited Healthy Workplace and the iSports Enterprise Certificate, and the Friendly Migrant Worker Award, etc. In terms of the social aspect of ESG, we regard employee care as an important part of our sustainability and social responsibility. The Company is committed to implementing various measures to achieve sustainable corporate development. Specific practices include but are not limited to:

- ✔ We establish a dual-track talent development system to accelerate talent promotion and promote outstanding talent.
- ✔ We establish a talent supply chain and Apacer Academy to promote talent sustainability and build a sustainable organization.
- ✔ We continue to train sports instructors and encourage employees to participate in club activities to strengthen physical and mental health.
- ✔ We purchase group insurance and pandemic insurance for all employees.



CommonWealth Magazine
- CommonWealth Talent
Sustainability Award



CommonHealth Magazine - Healthy
Enterprise Bronze Award



Friendly Migrant Worker
Companies Award

Apacer A⁺ EAPs Employee Assistance Program

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

With the even distribution of marriage and gender, and considering 73% of Apacer's employees in Taiwan are aged 31 – 50 years old, and more than 85% work in the back office (including more than 30% being shift workers), our activities at the operating headquarters are planned as closely as possible to the work and needs of each employee. We also consider the day and night shifts of the production line personnel to satisfy the needs of Apacer employees.



Employee Assistance Program		Food	Clothing	Living	Transportation	Education	Entertainment	Activities
A ⁺ work		Daily meals subsidies Monthly food allowance Annual departmental gathering	Apacer group uniforms Production line work clothes	Stress-relieving rest area Creative Development Room Professional property management cleaning	Flexible working hours Remote work Work from home	TTQS certification New employee orientation In-service training	Number of leave days better than prescribed by law Annual spring party event Birthday gift	Sports Business Certification Sport instructor
A ⁺ family		Intranet group buying Vendor booths Contracted vendors	Apacer employee purchase Vendor booths Contracted vendors	Gold Award Breastfeeding Room	Group insurance that exceeds regulatory requirements Insurance for dependents	Handbook for new mom Childbirth incentive Childcare support measures	Family Day Employee trips Parent-child art gallery	Sports Day
A ⁺ Health		Vegetable Day	Laundering of work clothes	Occupational Safety and Environmental Protection	Sports community	Health promotion activities Health promotion lecture	Weekly massage service Health checkups better than prescribed by law In-house consultation for occupational	Sports clubs Sports competitions
ESG	RBA	Qualified group catering suppliers	Free laundry room for migrant workers	Free dormitory for migrant work Subsidies for migrant worker	Transportation allowance for migrant workers	Migrant worker advocacy training	Gift vouchers for three major holidays Gift vouchers for three major holidays Festival activities	Stress-relief zone
A ⁺ Protection for All Employees - Employee shareholding trust								

A⁺EAPs_A⁺Work

We have hired sports instructors, which have been recognized with the iSports Enterprise Certificate

Apacer also encourages employees to participate in clubs that are beneficial to the body and mind, and provides funds for club establishment and subsidies for club activities to support the operation and development of clubs. We provide employees with a healthy stress-relieving channel through sports, and promote cross-departmental exchange between colleagues through these clubs.

In line with the Sports Administration's active promotion of sports instructors, Apacer has received subsidies from sports companies to hire sports instructors. Apacer has been certified with the iSports Enterprise Certificate by the Sports Administration of the Ministry of Education for the Employment of a Sports Instructor. Through our sports instructors, we provide counseling and recommendations to sports clubs to enhance the intensity and range of physical training for our colleagues, promoting the health benefits of exercising.



Birthday event

To create a fun work environment, Apacer launched themed birthday party events starting in 2023. The "Charades" activity was especially well-received by employees, and the celebration continued in 2024 with a new theme—"Jenga"—which achieved a 95% satisfaction rate among participants.

In addition to themed games, Apacer also integrates wellness by encouraging birthday celebrants to find a lucky number in the stairwell. Winners of the challenges or those who find the lucky number receive cash gifts or presents. Renowned brand cakes are also prepared so all birthday celebrants can enjoy the celebration together.



A⁺EAPs_A⁺Family

In September 2024, Apacer successfully hosted its Family Day event at the National Museum of Marine Science and Technology, attracting a total of 1,097 employees and their family members. Themed "Explore the Ocean, Safeguard the Future," the event featured a variety of interactive experiences, including an ARG puzzle game, DIY workshops using upcycled marine waste, and a "Sea Life Experience Zone", helping participants understand the importance of marine conservation and promoting the concept of sustainability education.

To embody the spirit of ESG, the event included eco-friendly hydration stations and distributed reusable shopping bags at check-in to reduce single-use plastic, demonstrating a commitment to environmental responsibility. A special "Sea Life Walk – Step Challenge" in the Sea Life Experience Zone encouraged participants to walk 1,000 steps. Those who completed the challenge received a special commemorative gift, the "Ocean Coaster," as a gesture of support for environmental protection through action.

The event concluded with a lucky draw offering a total prize pool of NTD900,000, adding excitement and joy to the day. With a satisfaction rate of 85%, the event reflected Apacer's strong commitment to sustainable development, while sharing it hand-in-hand with its employees and their families.

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A⁺EAPs_A⁺Health

Apacer has established a health management system for its employees with the four aspects of "Healthy Eating", "Exercising", "Health", and "Health and Safety". Healthy Eating:

Healthy Eating

- 3 meals are provided each day and are made by qualified group catering suppliers. Our employees can eat with no worries!



Apacer cares about the health and diet of its employees, providing or subsidizing three meals each day. In addition to strictly selecting hygienic, reliable, and reputable quality suppliers and providing healthy meals that have less sugar and oil, we hope to encourage colleagues to have healthy meals. At the same time, the Company encourages reducing the use of disposable tableware, promoting both health consciousness and environmental sustainability among employees.

Total number of people making food orders in 2024: 44,660

Average number of people making food orders per weekday: 180

- Promote the concept of vegan food for a healthy diet!



Apacer continues to promote low carbon vegan diet DIY activities every year to protect the Earth. Participation is voluntary, allowing employees to experience the benefits of vegetarian food in a relaxed and comfortable way. The activities are well received by employees and have changed many perceptions about the vegan diet. Many employees have started to appreciate its benefits, as low carbon diets have become a new trend, helping reduce environmental impact through mindful eating and contributing to the planet together.

Total number of people attending Vegan Day in 2024: 47

Exercising 1:

● Moving Community! If you want to stay healthy, we must move!

"Exercise to stay healthy!" This is a concept actively promoted by Apacer's Chairman, Austin Chen, after recovering from meningioma surgery. The Chairman realized the importance of health and encourages colleagues and workers to develop regular exercise habits.

For seven consecutive year, we have been implementing Moving Community activities for employees to help them establish the habit of exercising, integrating it into their lives. The number of people who participated in Moving Community activities reached 330 by the end of 2024, accounting for more than 66% of the total number of employees at the headquarters. A total of 2,322,390,161 steps were taken in 2024, equivalent to a carbon reduction of 386,446 kgCO₂e. Exercise not only improves personal health but also contributes to environmental protection, allowing us to continue to move towards a healthy lifestyle with carbon reduction.



Number of employees in the group chat in 2024: 330 people (participation rate 66%), with a cumulative step count of 2,322,390,161 steps over the years. (equivalent to a carbon reduction of 386,446 kgCO₂e¹)

Note¹: one step is approximately 80 centimeters, 100,000 centimeters equals 1 kilometer, and 1 kilometer saves 0.208 kgCO₂e in carbon emissions.

Note²: reference: Carbon Reduction Calculator on the Electronic Tax Filing and Payment Service Website of the Ministry of Finance (2024).

● Sports clubs! Exercise if you want to stay healthy!

Apacer encourages employees to participate in club activities that benefit both physical and mental health. The company provides startup funds and activity subsidies to support the operation and development of clubs. In recent years, it has also benefited by receiving incentives from the Ministry of Education's Sports Administration for hiring fitness instructors and receiving subsidies for sports clubs, which have helped accelerate the development of corporate sports activities.

In 2024, there were 10 different sports clubs, including golf, basketball, badminton, boxing aerobics, strength training, pilates, aerial yoga, yoga wheel, jogging, and mountaineering. The total number of club members reached 136, accounting for approximately 27% of the total workforce at the operations headquarters. Through the care of internal fitness instructors and external coaches hired by the clubs, exercise has become a healthy stress-relief outlet for employees. Additionally, cross-departmental interaction through club activities enriches employee lives through both health and social connection.



Sports clubs in 2024: 10
Participation in clubs: 136 people

Exercising 1:

Moving Competitions, adding fun and relief into work and life!

Apacer has been organizing various interesting Moving Competitions in conjunction with the Dragon Boat Festival, Mid-Autumn Festival, or Family Day.

In 2024, both the Dragon Boat Festival and Mid-Autumn Festival celebrations were held at the operations headquarters, combining delicious food with fun games. These events not only strengthened team cohesion but also promoted a culture of health and vitality within the Company. The celebrations included team-based challenge competitions such as badminton and ping pong matches, with a total prize pool of approximately NTD100,000. A total of 328 employees signed up to participate, demonstrating high enthusiasm.

The Company's Family Day event was themed "Grand Apacer Ocean Exploration." Employees were invited to bring their families to enjoy a day at the National Museum of Marine Science and Technology. Activities included an ARG real-world puzzle game that offered an in-depth understanding of Taiwan's maritime environment. At the end of the event, Miss Coral and Mister Starfish led everyone in singing and dancing, capturing the joyful memories of Family Day in laughter and music.



Exercise competition in 2024: 3

Total number of participants: 1,417 (including family members)

Stress-reducing Moving Area makes use of spaces flexibly!

Apacer has planned a stress-reducing Moving Area for indoor exercise clubs. In addition to the skin-friendly soft wooden floors suitable for exercises on the floor, a movable floor-to-ceiling mirror wall is installed to help employees correct their posture during exercise, creating a comfortable and varied place for employees and for various clubs to use flexibly.

Sports clubs used the stress-reducing moving area in 2024: 2
(Cardio Boxing Club, Muscle Training Club)



Health:

Health promotion activities (lectures) to enhance health knowledge and concepts

In the first half of 2024, Apacer invited the New Taipei City Health Bureau's Mental Health Center to host a "Workplace Mental Health & Stretching Lecture," helping employees relieve stress and understand effective stress-relief methods. In response to the ongoing pandemic, the Company arranged XBB Moderna vaccinations, and in light of recent earthquakes, organized a seismic simulator experience to teach proper emergency response and preventive measures. Additionally, CPR and AED training sessions were held to enhance employees' first-aid knowledge.

In the second half of 2024, Apacer invited the Garden of Hope Foundation to present "Family Sex Education – How to Teach Sex Education" and Orlistat to deliver a lecture on "Improving Health Damage from Prolonged Standing and Sitting." A professional dietitian was also invited to speak on "What Kind of Diet Suits Me," and a certified fitness coach led a "Health Promotion and Posture Correction" session focused on shoulder and neck stretching.

Health promotion lectures (events) in 2024: 8
People attended the lectures (events): 349 people

Health and Safety:

Weekly pressure-relieving massage

Apacer provides employees with a 15-minute massage per week, or two 30-minute massages per month.

Total number of people receiving pressure-relieving massages each week in 2024: 439 people

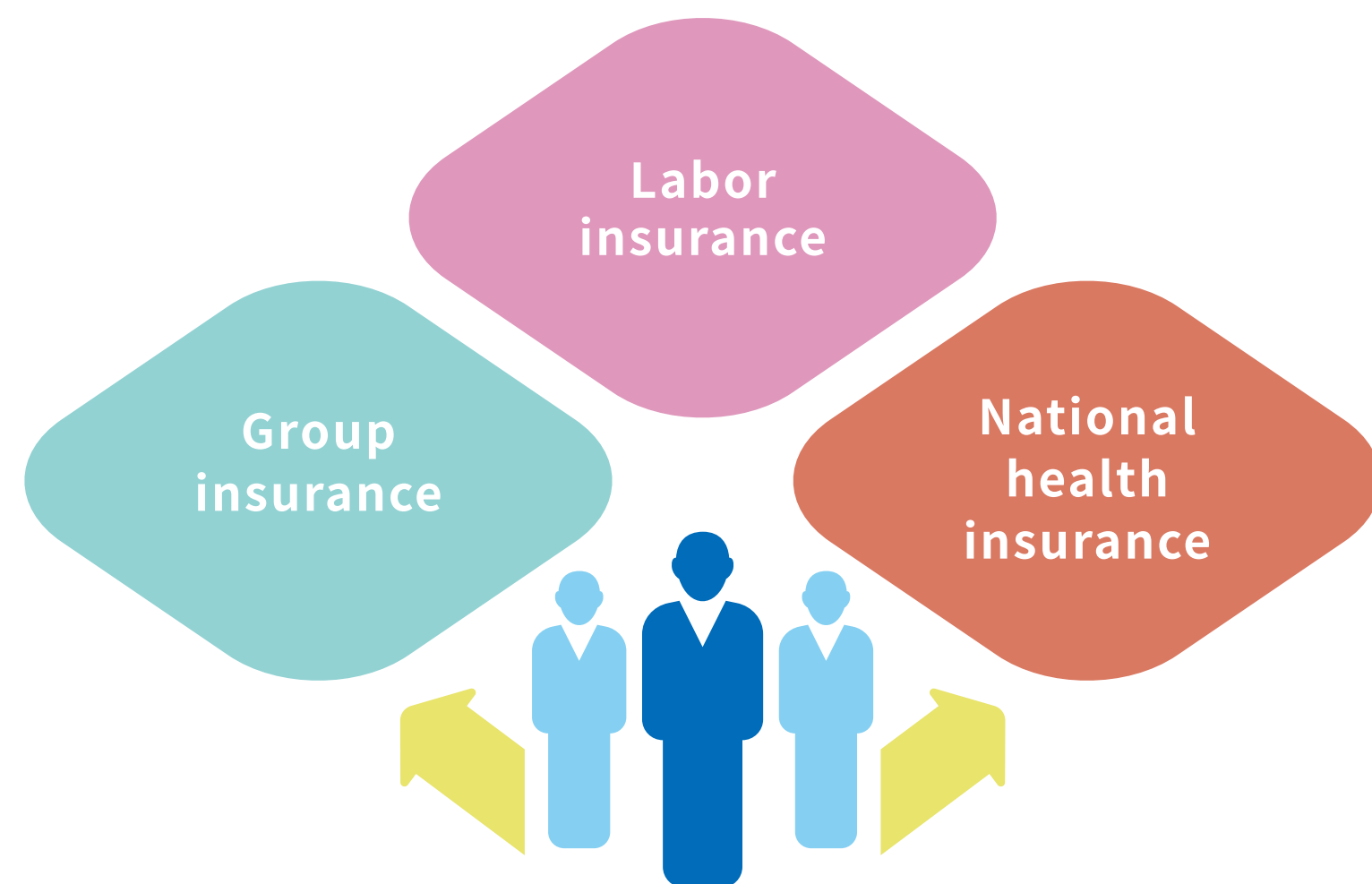
Consultation by an in-plant doctor & health checkups that exceed the legally required level to improve health management results

Apacer provides employees of all ages with health checkups that are better than those prescribed by laws every year to regularly check their health. We believe that "prevention is better than treatment." Based on the checkup result, interviews with the on-site physicians are arranged for employees with high risks to be treated with the on-site physician so as to help them find problems and provide correction and treatment early. The Company also provides them with professional medical assistance and services.

In 2024, 2 exam items that exceeded regulatory requirements were added.
Total number of people participating in the health checkup: 450
Total number of employees attending the in-factory physician consultation: 66

● Health insurance policy better than the regulatory requirements to ensure the achievement of health management

In addition to purchasing labor and health insurance for the employees, and paying the full pension in time under the old and new pension systems, Apacer also offers four kinds of major insurance (accident, medical, cancer, and life) for employees every year. We ensure that we are able to protect employees and their family members. Moreover, employees are allowed to self-fund insurance for family members to enjoy thorough protection together.



● Life, accident, medical and cancer insurance (paid by the Company)

In 2024, we provided group insurance that exceeds regulatory requirements (Accident insurance, medical insurance, cancer insurance and life insurance)

A⁺EAPs_A⁺ESG & RBA

● Migrant worker benefits

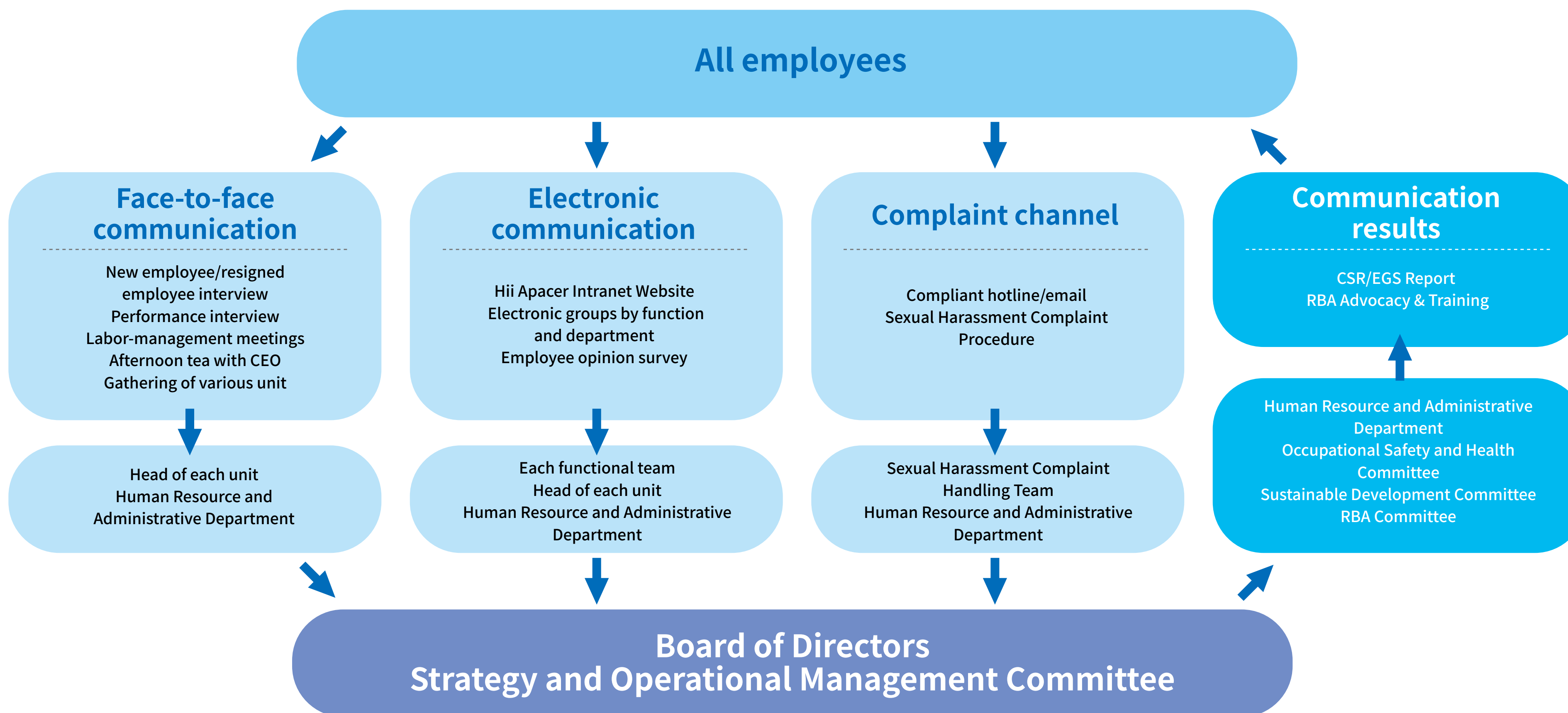
Apacer has been a member of the Responsible Business Alliance (RBA) since 2017. In fulfilling its responsibilities as an employer and ensuring the well-being of migrant workers, the company continues to provide monthly subsidies for local agency fees, offers three discounted meals and meal allowances, and additionally provides free dormitory accommodations and transportation subsidies. Additionally, we assist each migrant worker with overseas brokerage fees, fees for health checkups and licenses during their tenure, and inbound flight tickets. In response to the COVID-19 pandemic starting in 2020, besides providing promotion and training on prevention for migrant workers, we have improved the promotion of prevention information in the dormitory to help migrant workers understand and comply with prevention measures so that they are able to maintain their health and safety.

Received friendly migrant worker award
from New Taipei City Government in 2024



Diverse and smooth employee communication channels

Apacer has specially planned interesting Learning Passports and a Corporate Culture Learning Camp for new employees to help them integrate into Apacer's corporate culture. For all current employees, Apacer values their opinions and feedback. We have established a map of diverse and smooth communication channels for employees, and formulated the "Employee Reporting Procedures", "Workplace Sexual Harassment Complaint and Disciplinary Regulations", and "Sexual Harassment Complaint Prevention and Investigation and Handling Measures". These regulations and measures allow colleagues to fully express their thoughts and opinions, and we also provide care and assistance when necessary. For "Employee Complaint Handling Procedures", please refer to Apacer's official website





Face-to-face communication

New employee interview

To help new colleagues adapt more quickly and integrate into the workplace, Apacer interviews new colleagues on a monthly basis to answer and evaluate their suggestions and implement relevant improvements.

Performance interview

- ✓ At Apacer, we conduct performance evaluations for colleagues on a regular basis every six months, and encourage each unit head to take the opportunity to conduct performance interviews with colleagues to help them understand their strengths and shortcomings at work.
- ✓ Performance evaluation once every six months

Labor-management meetings

- ✓ Regular labor-management meetings are held each quarter for employees to discuss the Company's various systems and share opinions on the Company's policies, work environment, safety and health, etc.
- ✓ Quarterly regular labor-management meetings

Afternoon tea with CEO

- ✓ The CEO regularly interacts with members of the talent supply chain every year to understand the talent's expectations and suggestions for the Company's current operations and future development.
- The interaction results of the tea party will become an important reference indicator for the Company's development and the implementation of business plans.
- ✓ Regular interactive tea party every year

2024 labor-management meetings

Implementation status of labor-management meetings

Number of labor and management representatives	There are 5 labor representatives and 5 management representatives.
Election method of labor representatives	Elected by all full-time employees
Term of office of the labor and management representatives	4 years
Frequency of meetings	Quarterly (4 times a year)
Discussion matters	1. Corporate operations and profitability 2. In response to the revision of the Labor Standards Act 3. Discussion of employee benefit activities
Material resolutions	1. Resolution on adjusting salary structure in response to amendments to the income tax audit criteria for profit-seeking enterprises 2. Resolutions for the 2025 calendar All major resolutions are announced on the intranet website.

Electronic communication

Hii Apacer Intranet Website

The homepage of the website has three major functions: Promotion of the Company's important policies, various announcements, and all information. Colleagues can support, ask questions, or post opinions on the platform at any time.



Electronic groups by function and department

All functions and units are encouraged to use various social media to form their own communities to achieve common goals through real-time communication.



Employee opinion survey

We conduct employee opinion surveys every two years. We evaluate seven key engagement drivers: supervisors, colleagues, compensation, job content, development, corporate culture, and overall satisfaction. In 2024, a new sustainability factor was added to further understand employee commitment across three dimensions: value commitment, effort commitment, and retention commitment.

The 2024 survey achieved a 75% response rate, a 5% increase from 2022. The employee engagement score reached 80, an improvement of 3 points compared to 2022, and the highest in the past six years. This demonstrates the Company's proactive efforts to respond to employee feedback after each survey and its ongoing optimization of policies and practices. Moving forward, the Company will continue to deepen employee engagement and enhance overall performance through regular surveys and communication mechanisms.

Driving factors

Supervisor

- Supervisor motivation
- Supervisor commitment
- Supervisor communication
- Job guidance
- Team building

Colleagues

- Peer collaboration
- Cross-team collaboration

Work

- Work environment
- Work-life balance
- Job control
- Sense of achievement
- Workflow
- Organizational communication

Development

- Career development
- Performance management
- Training and development

Sustainability

- Corporate governance
- Social contribution
- Environmental protection

Corporate Culture

- Value proposition
- Value implementation

Survey response status

Response rate

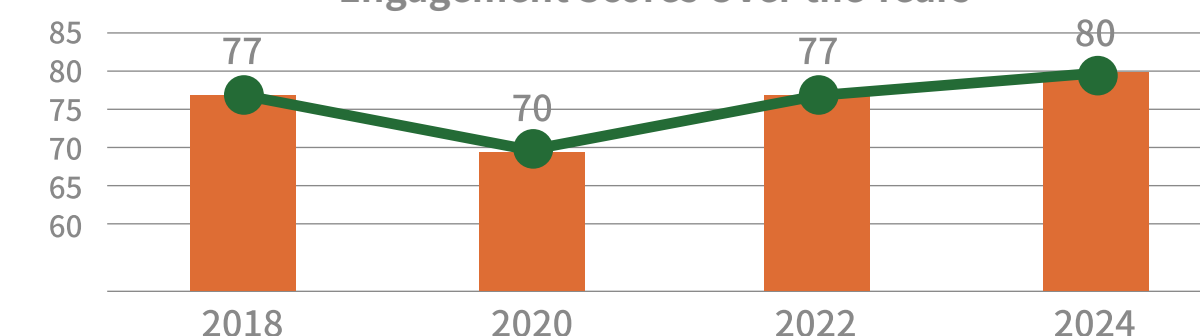
75% ↑ 5%

Questionnaires distributed
477

Questionnaires collected
359

Valid questionnaires
289

Engagement Scores Over the Years



Complaint channel

Compliant hotline/email

Apacer has established the "Employee Reporting Procedures" that applies to all employees of the Company, providing them with an open and smooth channel to file complaints about labor inequities or illegal acts that affect the Company. At the same time, the complaint counter also regularly communicates the information on the intranet website. The HR unit is the initial complaint handling unit, and the identity of the reporter will be kept confidential, unless unavoidable. After confirming the acceptance of the grievance case, the HR unit will reply to the reporter with the investigation result in writing within 30 days. If the reporter has any objection, he or she may appeal within 10 days after receiving the initial reply. As of the end of 2024, a total of three employee complaints were reported and all were responded to and resolved within the designated timeframe.



Employee feedback mailbox is here!

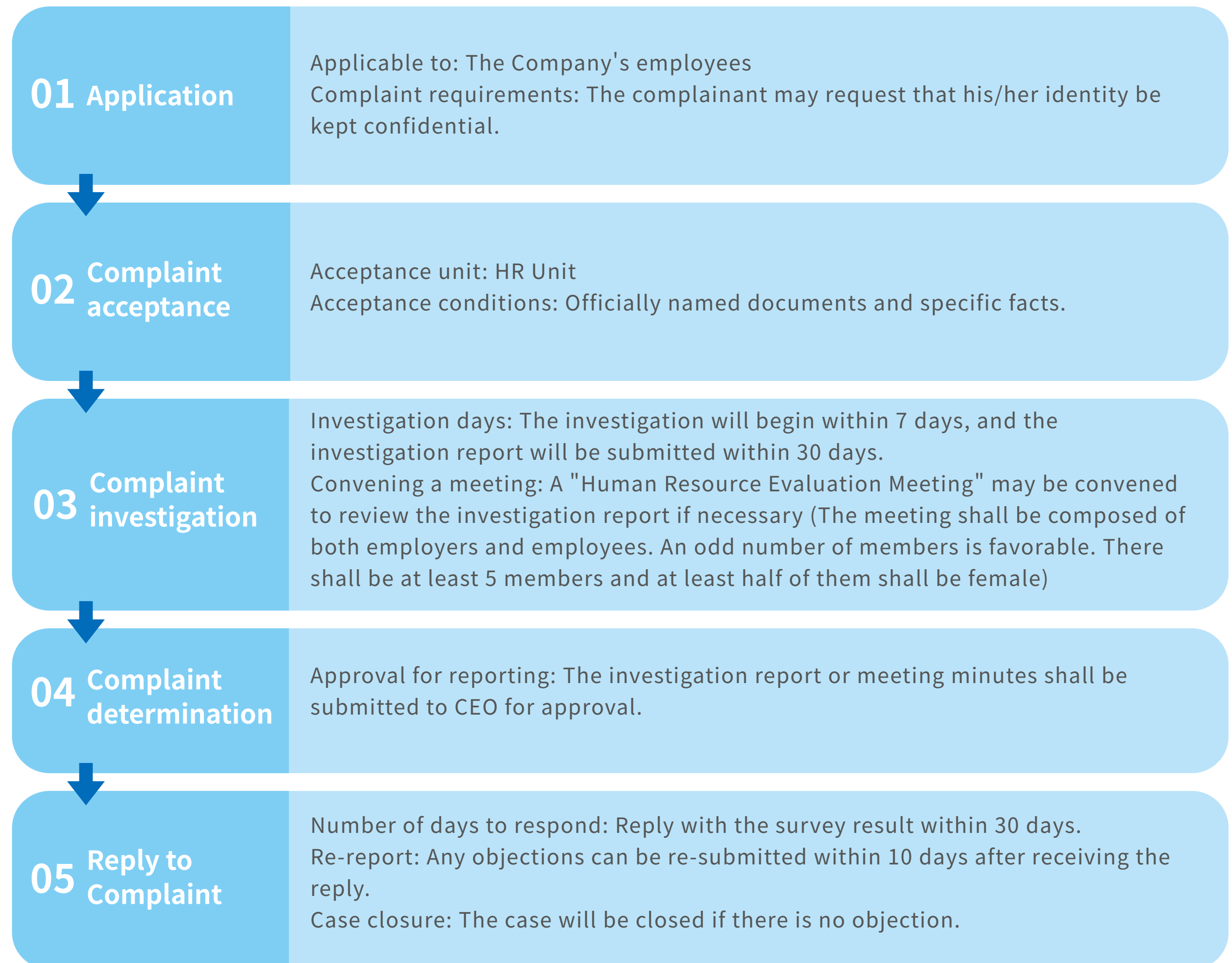
The Company has established a grievance mechanism for employees, managed by the Human Resources Department, as outlined below:

Complaint Channels: Human Resources Department or Employee Feedback Mailbox

Complaint Hotline: HR Manager at (02) 2267-8000 #5980 or Employee Feedback Email Box

Apacer

Complaint procedure



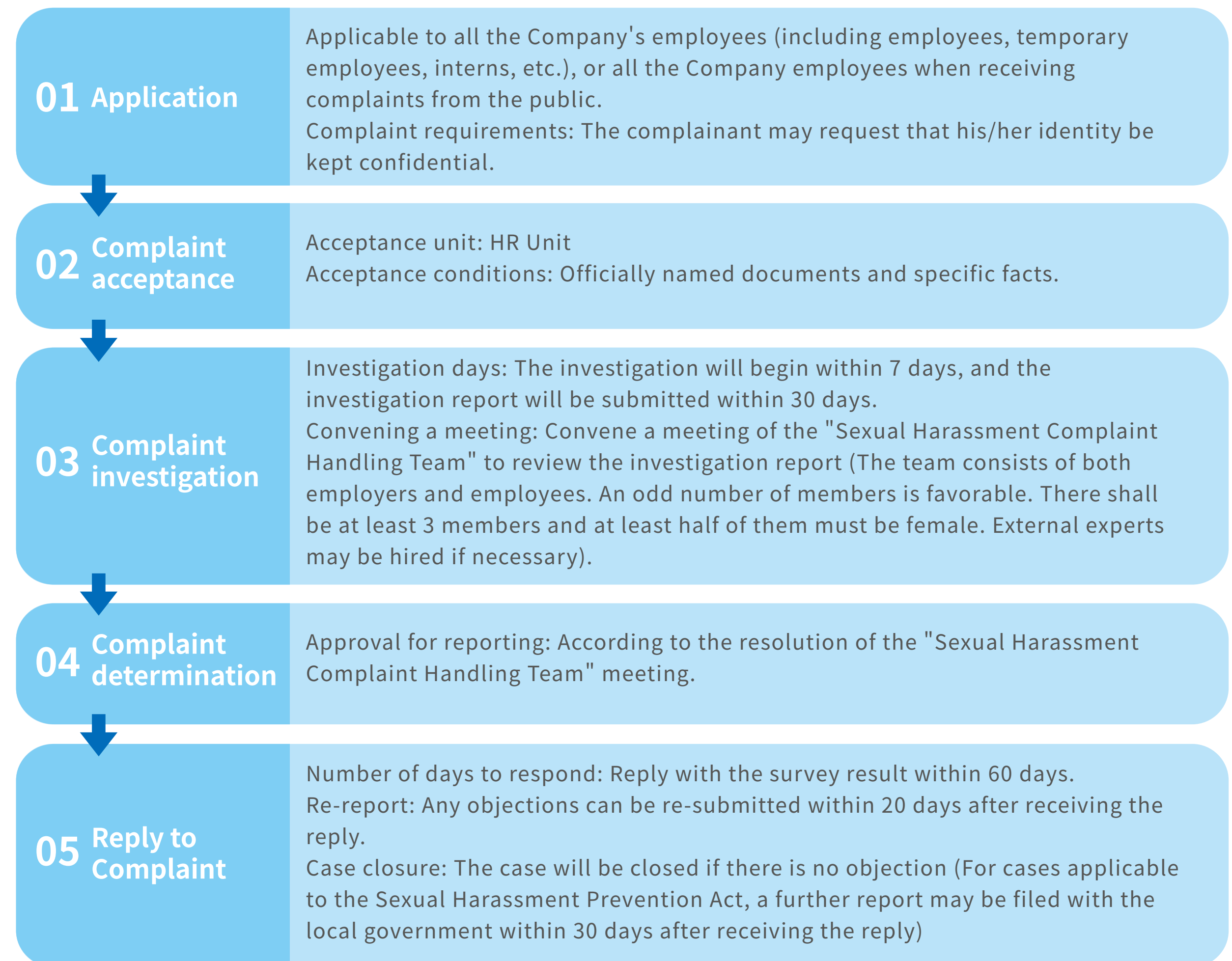
Sexual Harassment Complaint Procedure

Apacer has formulated the "Workplace Sexual Harassment Complaint and Disciplinary Measures" and "Sexual Harassment Prevention and Complaint Measures, Investigation and Handling Measures", which will apply to all of the Company's employees (direct employees, dispatched labors, technicians, and interns) to all the incidents where our colleagues have been sexually harassed by anyone (including non-employees). We prohibit any form of sexual harassment and protect the rights and interests of our colleagues and the general public. The HR department is the initial complaint acceptance unit, and the reporter may request that his/her identity not be disclosed.

In terms of incident handling procedures, the complaint window convenes the "Sexual Harassment Complaint Handling Team" according to the needs of the event. The team tasked with handling sexual harassment cases is composed of representatives from both labor and management. The working group has one permanent member (the Head of HR) who records the meeting. During each meeting, a senior employee from a non-related unit is invited to serve as the meeting chairperson based on the case. The team must consist of at least 3 members (preferably an odd number). The ratio of female representatives shall not be less than 1/2, and the ratio of male representatives must be 1/3 or higher. In addition, experts and scholars may be hired to serve as team members with reference to the Ministry of Health and Welfare's "Professional talent for Sexual Harassment Investigation" (website: <https://expert.mohw.gov.tw/>).

For reports that are accepted, the HR unit shall investigate within 7 days after the report is filed or transferred, and complete the investigation within 2 months. The HR unit may extend the investigation for 1 month if necessary, and notify the parties concerned. As of the end of 2024, there were no reports of sexual harassment.

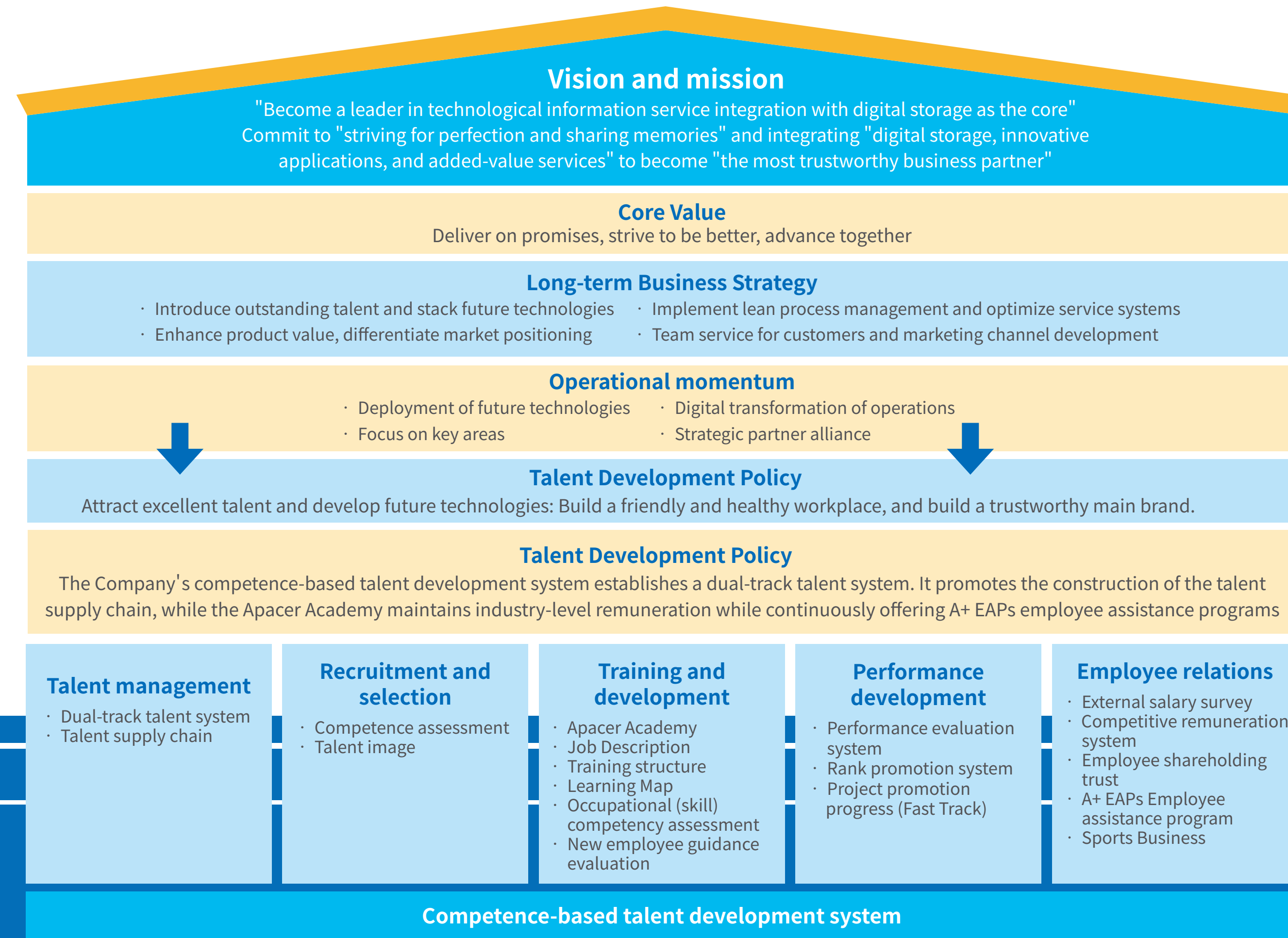
Complaint procedure



4.4

Talent Cultivation and Remuneration System (Material Topic)

Apacer talent Development System



The HR unit inherits Apacer's vision, mission, core values, long-term business strategies, and the four major operating momentums. The unit designs a function-based talent development system, plans talent development policies and strategies, and gradually implements five major HR functions, including talent management, recruitment, training and development, performance development, and employee relations. Moreover, the unit implements their respective plans, and reviews the internal and external environments every year to make rolling adjustments.

● Apacer's Talent Development Policy

Attract excellent talent and develop future technologies, build a friendly and healthy workplace, and establish a trustworthy employer brand.

● Apacer's Talent Development Strategy

We are committed to providing competitive remuneration and benefits in accordance with our talent development policy. We have established a dual-track talent development system, promoting the talent supply chain mechanism while establishing the Apacer Academy. With these establishments, we have created a friendly and healthy workplace possessing a healthy work-life balance and built a trustworthy employer brand, adding value to talent and creating a win-win situation.

● Apacer's Talent Development Targets

Based on the talent development strategy, talent development goals are set, including external compensation survey reaching over P50 ↑, the retention rate of dual-track talent reaching over 90% ↑, and the annual employee turnover rate remaining below 2.5% ↓. The goals are reviewed and improved annually at the Sustainable Development Meeting.

Apacer Talent Development

Input

- ✓ Manpower recruitment cost: NTD2,500,000
- ✓ Expenses for talent development and retention: NTD15,800,000
- ✓ Personnel remuneration and benefits: NTD655,000,000

Apacer Talent Development Policy and Strategy

- ✓ Policy:
Attract outstanding talent and advance future technologies, creating a friendly and healthy workplace to establish a trustworthy employer brand.
- ✓ Strategy:
 - Competence-based talent development system
 - Establishment of a dual-track talent system
 - Promoting the talent supply chain mechanism
 - Establishment of the Apacer Academy
 - (learning maps are planned based on the training framework)
 - Maintain industry-level remuneration
 - Continuous A+ EAPs Employee Assistance Program

Output

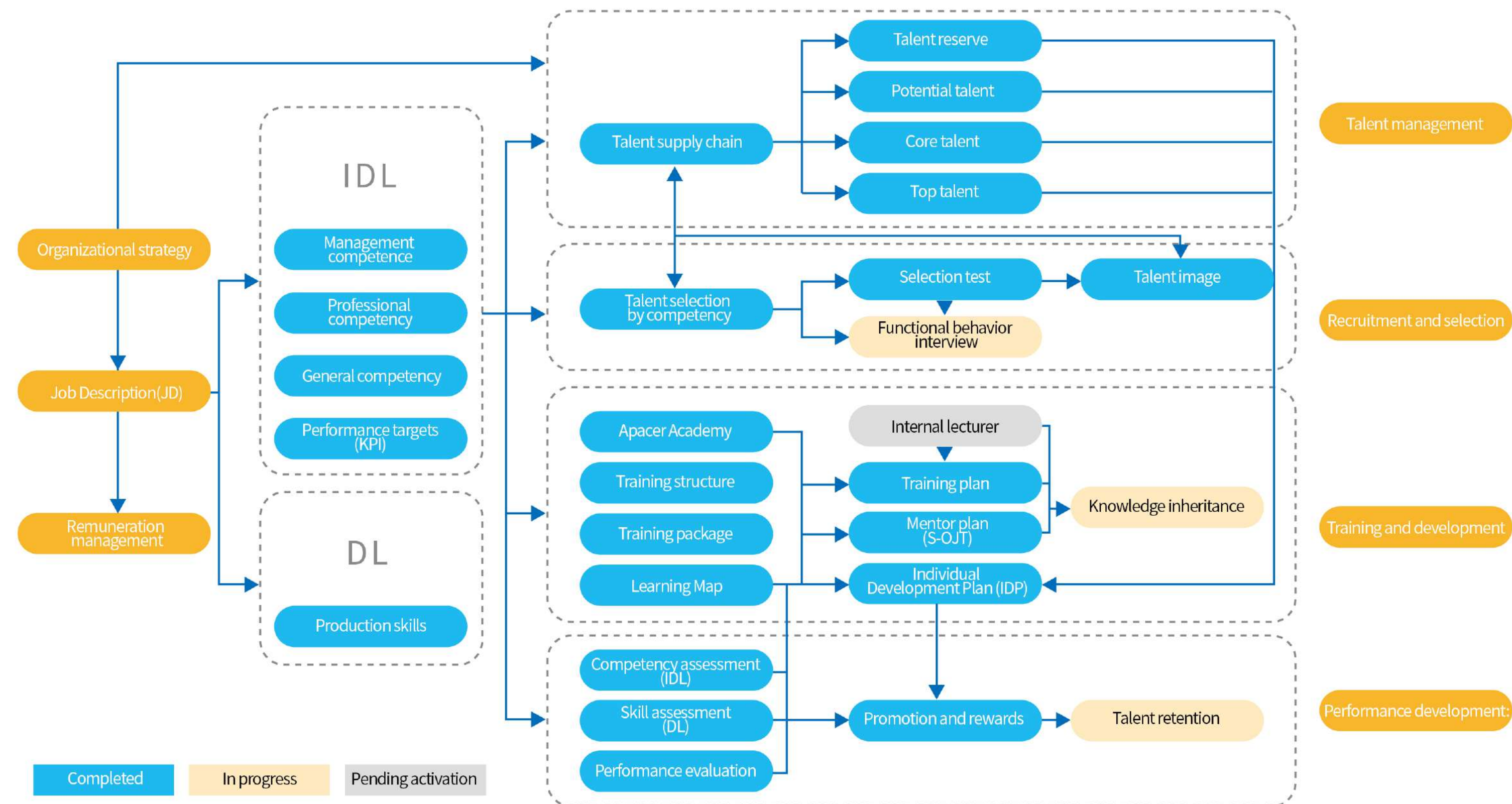
- ✓ Human capital efficiency
 - External remuneration survey percentile: Same industry P50 ↑
 - Talent match between dual-tracks: 60% ↑
 - Dual-track talent retention rate: 90% ↑
 - Annual employee dismissal rate: 2.5% ↓
- ✓ Social economy benefits
 - Relative contribution of employee remuneration and benefits to social economy: NTD655,000,000

Note: Total socioeconomic benefits include salaries and bonuses, insurance, retirement pension, and other benefits. These figures reflect the benefits Apacer employees have contributed to the economy and overall society.

Competence-based talent development framework

To establish a dual-track talent system for management and professional development, Apacer has planned a competency-based talent development framework. Starting from the job description, the framework distinguishes management, professional, and general competency, and then plans a series of talent development frameworks related to salary management, talent management, recruitment and selection, training development, and performance management.

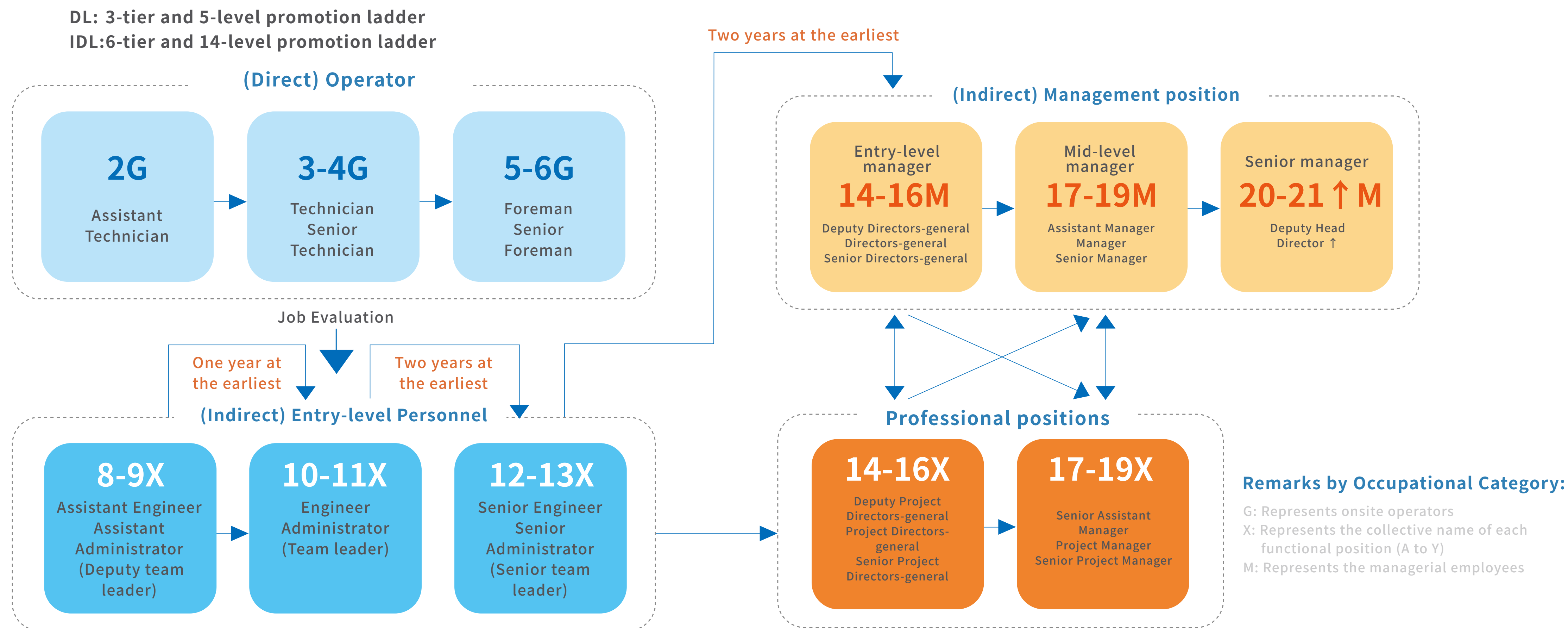
Competence-based dual-track talent development framework



Dual-track talent system

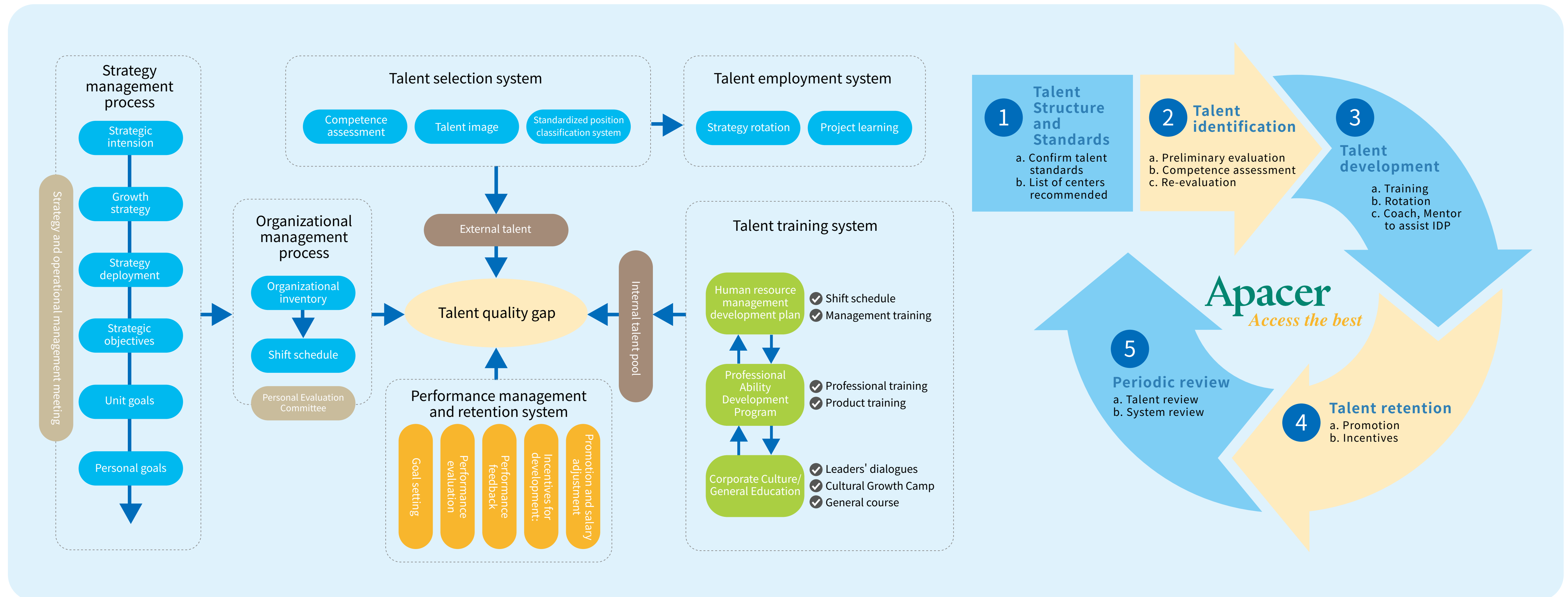
Since 2020, Apacer has established a dual-track talent development system that includes academic background, job description, competency evaluation, and performance evaluation results to solve the problems of promotion delay, which affects about 60% of our employees. In 2024, following the new dual-track talent development system and management regulations for all employees, a total of 79 colleagues (14 in management positions and 65 in professional positions), accounting for 14% of the total employees, were promoted, which exceeded 2023 by approximately 75%.

In 2023 and 2024, we established a talent development system to integrate post-employment processes, including education and working experience, personal competency development, training, and performance history. This data allows managers and superiors to make informed decisions on talent utilization.

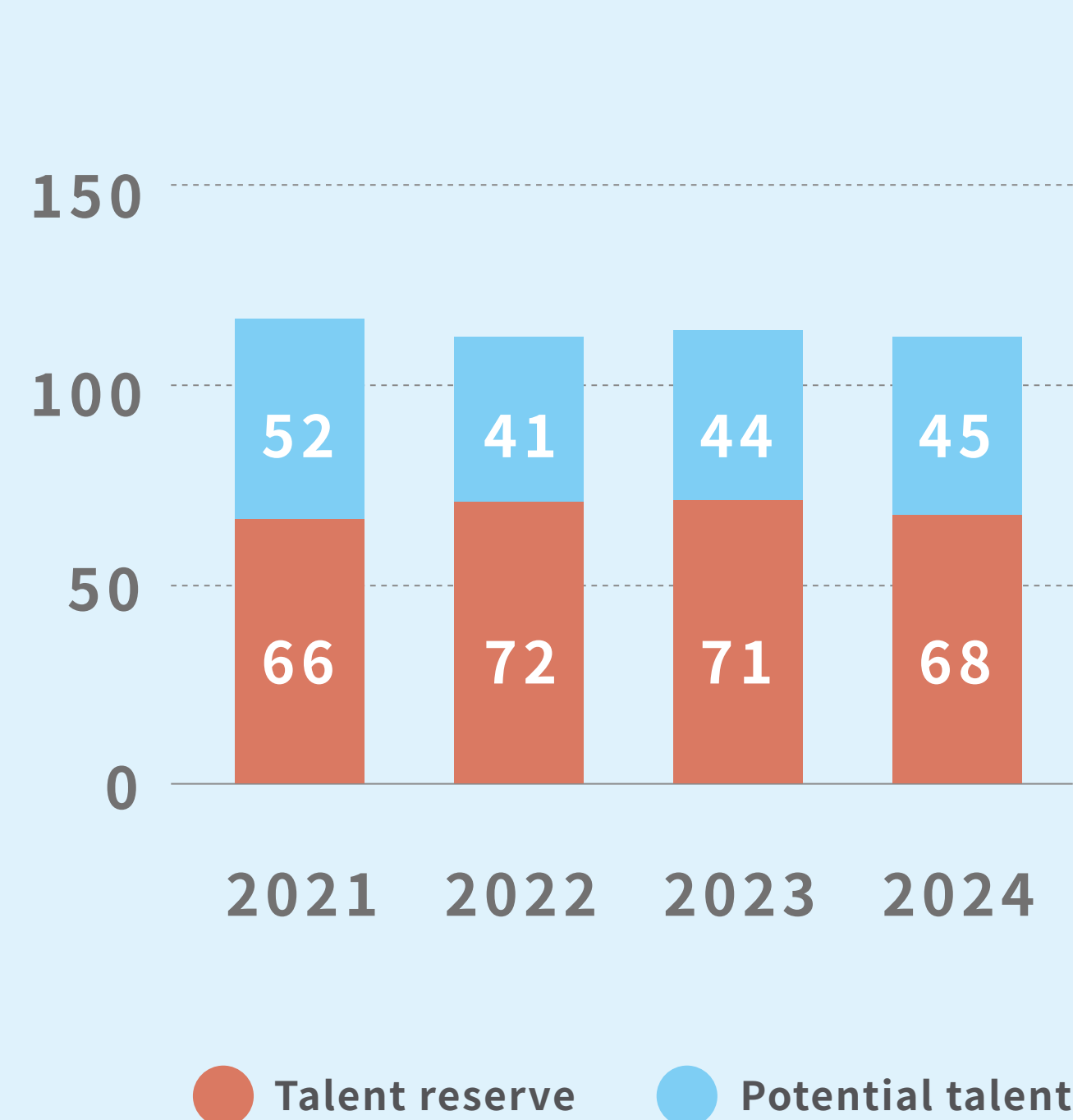
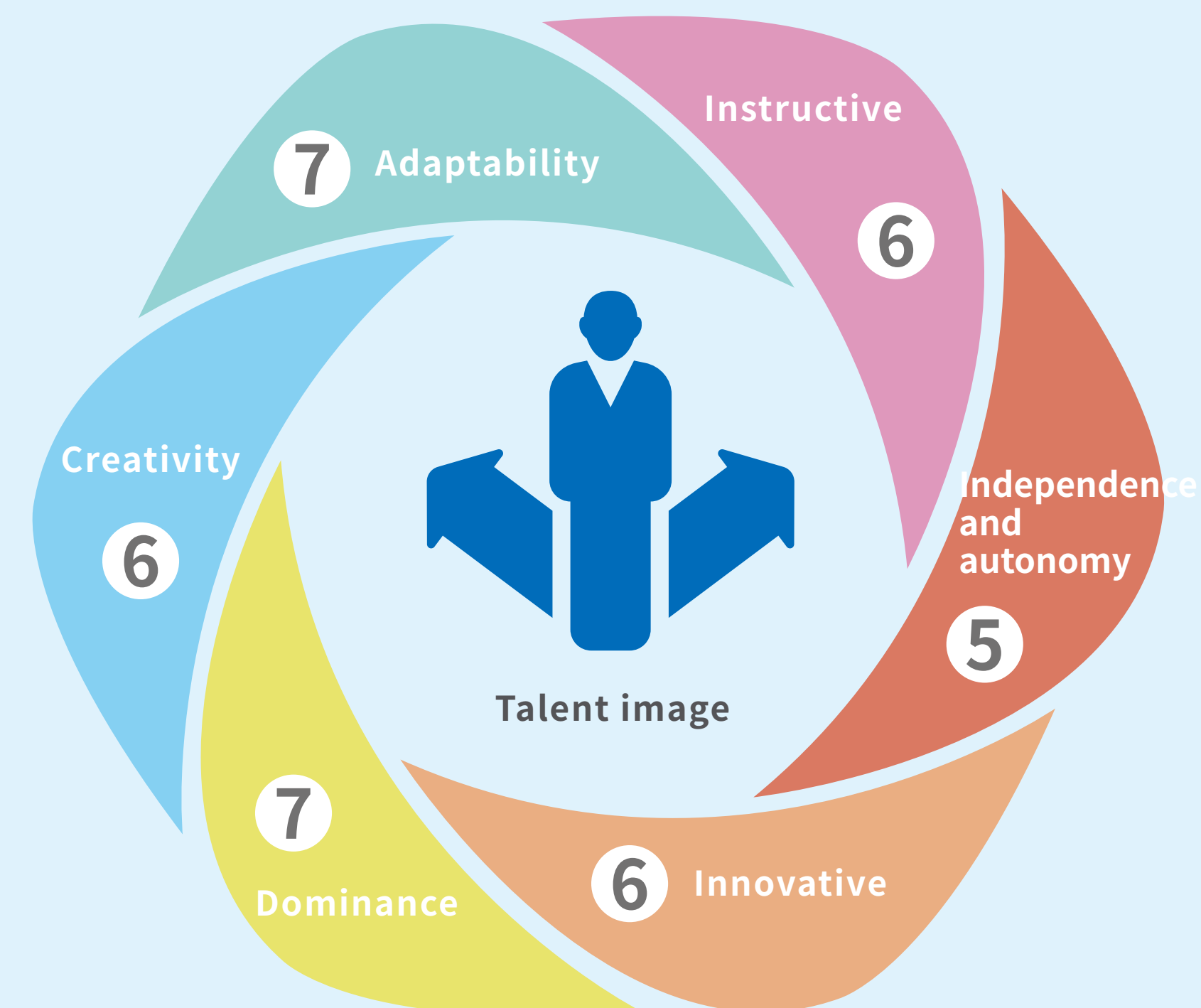
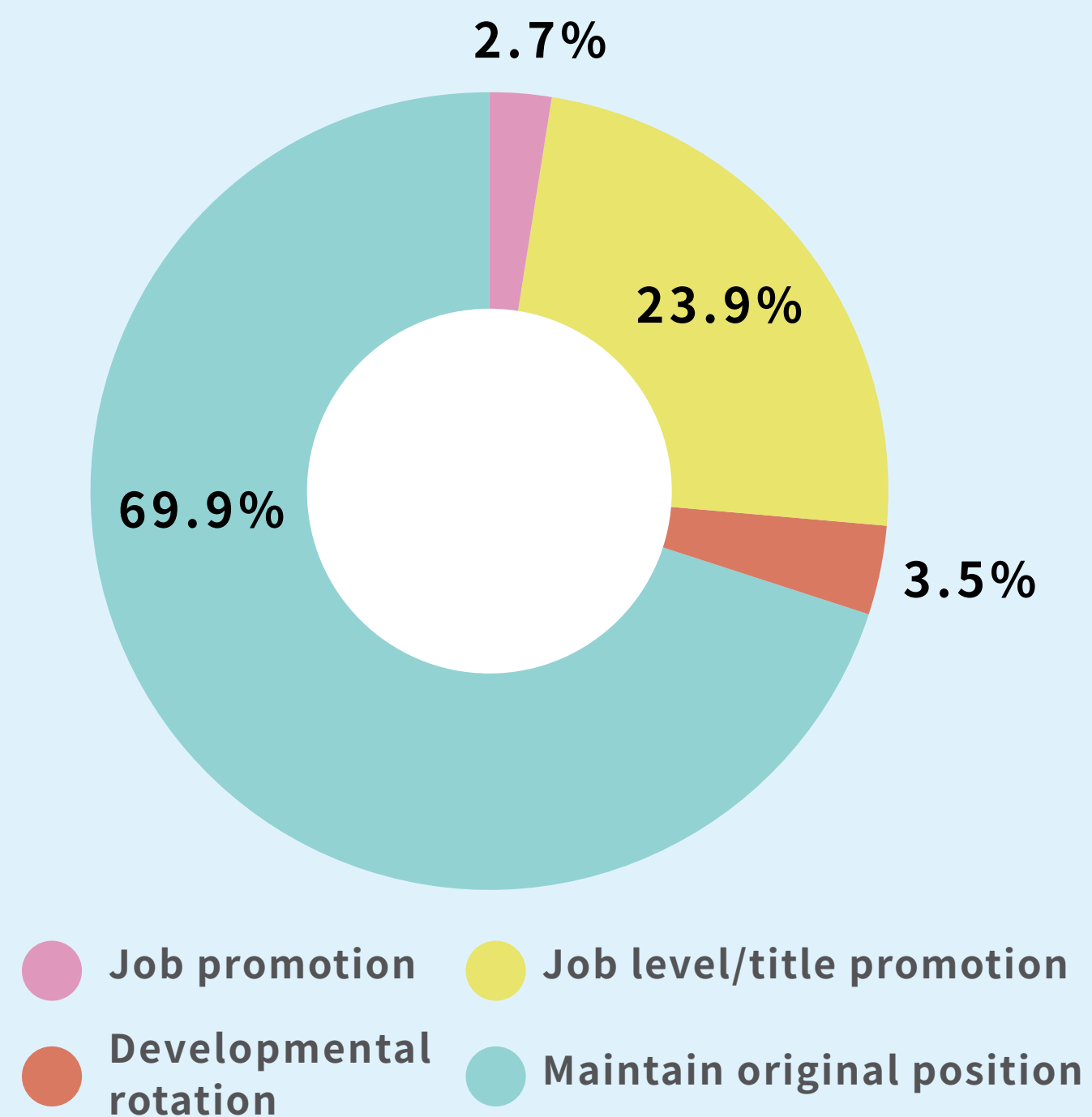


Talent supply chain

To continuously provide and train high-quality talent, Apacer responded to market competition and various business challenges by constructing a "Talent Supply Chain" in 2017, beginning with discovering potential talents through developing them into long-term assets of the Company. The HR unit is responsible for the overall planning and initiation of the talent supply chain. First, the talent structure and standards need to be confirmed for talent identification. Then, different talent development plans are provided based on different jobs, positions, and growth of talent. Lastly, talent retention is achieved through the reward mechanism. Talent development conditions are reviewed annually.

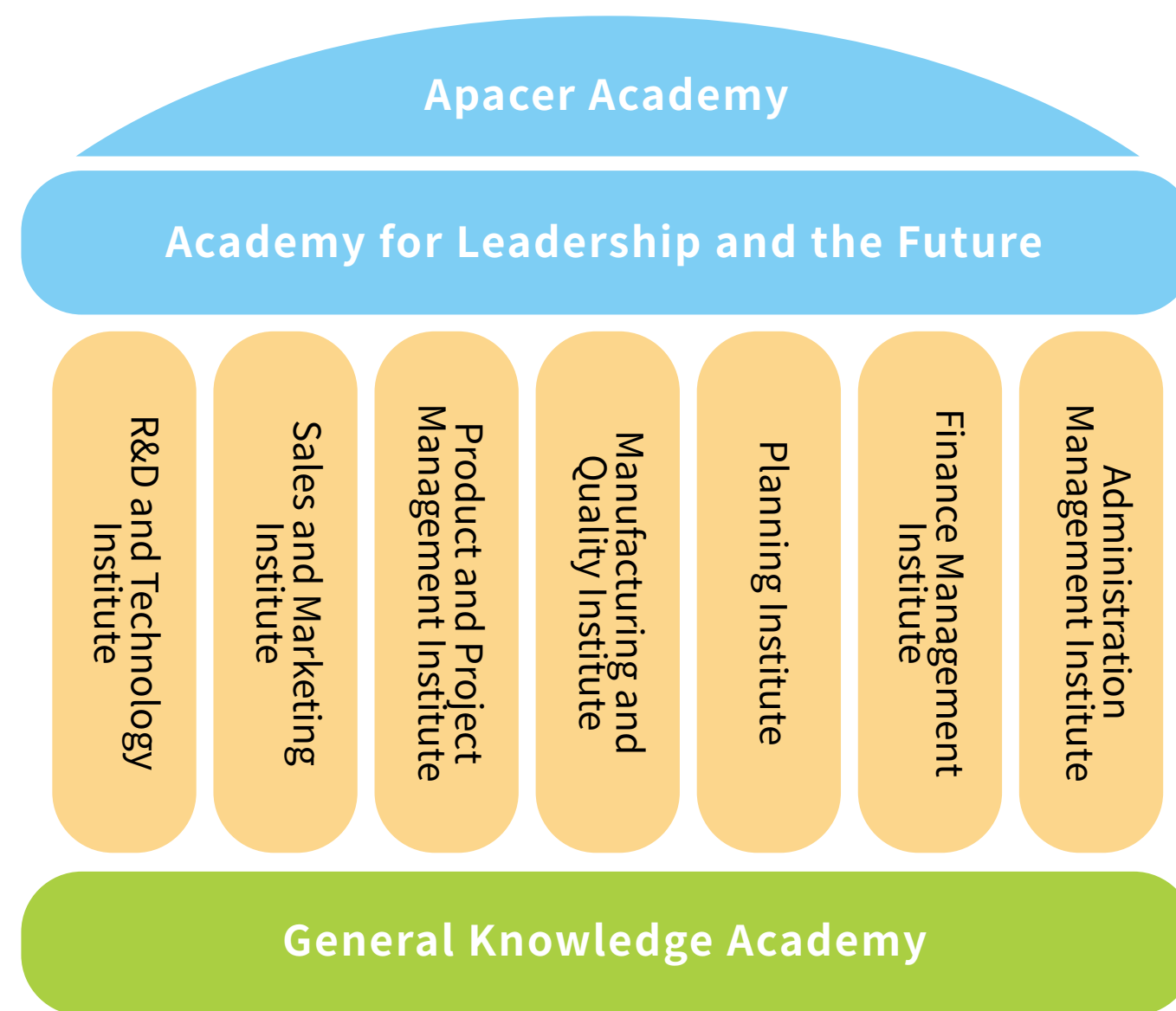


In 2024, Apacer had a total of 113 members, including 68 reserve talents and 45 potential talents. After training, about 26.5% were promoted and about 3.5% received developmental rotation. The retention rate was 99.1%. More than 80% of the strategic goals have been achieved. Apacer continuously refines its talent supply chain mechanism, with a focus in 2024 on enhancing the accuracy of talent identification. Compared to 2023, the retention rate has continued to rise, demonstrating the effectiveness of both the talent selection and development mechanisms.

Talent supply chain**Talent utilization**

Apacer Academy

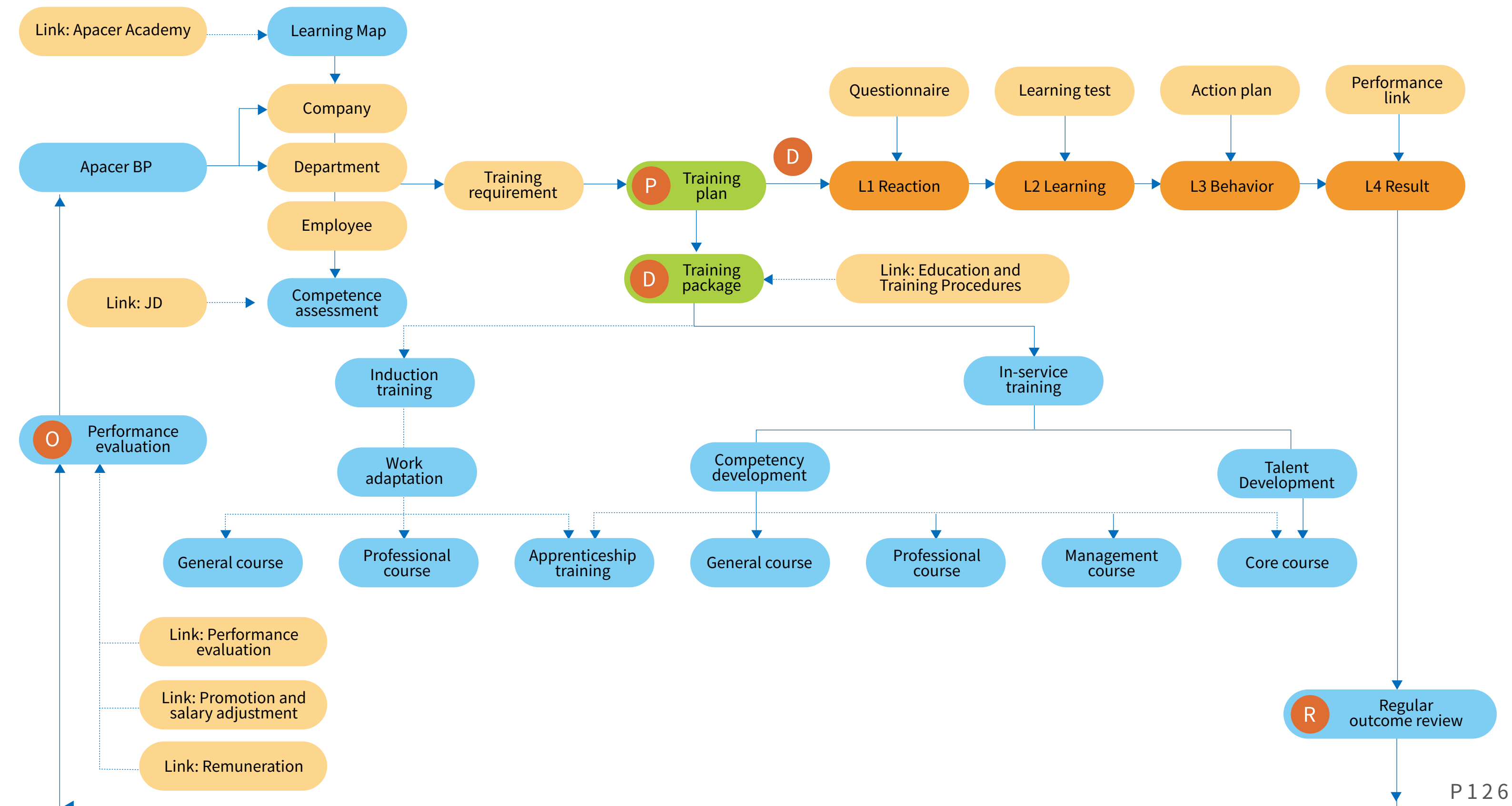
The CEO serves as the headmaster of Apacer Academy. We have distinguished 9 academies by competency and profession, and planned learning development paths and training programs for all employees. The academy provides a transparent learning and development framework for all employees, from new employees to management, thereby enhancing the competence completion rate and competitiveness of colleagues.



Education and training framework

Apacer adopts the five aspects of TTQS talent Development Management: P (Plan), D (Design), D (Do), R (Review), and O (Outcome) as the training management loop. The management ranges from inventory training needs, annual training plan and course designs and implementation, monthly regular meeting reviews, to training outcome presentations, and finally connects performance and rewards to establish a complete and systematic human resources training framework.

Apacer education and training framework



Education and training courses

Apacer understands that employees are the source of corporate growth and competitiveness. We provide diversified education and training courses to enhance the professional abilities of employees to face the challenges of the rapidly changing external environment. Unit heads and employees will be interviewed, and a post-course satisfaction survey will be conducted. Unit heads may also submit training needs along with the Apacer Academy Learning Map during the annual training survey to help colleagues achieve the Company's business development goals and make the course more accessible. To meet the needs of functional learning, in addition to hiring external lecturers to give lectures, we also invite internal colleagues with expertise as lecturers to gradually pass on their experiences.

Course type	Course highlights
New employee training (Including occupational safety and health training for new employees)	Company culture (vision, mission, values), business direction, RBA & ethical corporate management promotion, environmental safety and health policy and management system, HR systems and regulations, system operations, and occupational safety and health for newcomers to help them get used to the Company's core values and working environment as soon as possible.
General training (including legal training)	General and professional training includes: fire drills and training on other laws and regulations, and professional training for each duty to meet regulatory requirements and enhance the capabilities of all occupations.
Talent training (including management training)	Training for managers at all levels and talent development to solidify the management and professional capabilities of the succession team.
External professional training (including license training)	Professional training: Global issues of concern, international market trends, external professional training required for each position, etc. License training: Professional licenses, legal licenses, etc.
Training on RBA & Management Integrity & Insider Trading (including on-the-job occupational safety and health training)	RBA includes five major areas: Labor, health and safety, environment, ethics, and management systems. Ethical corporate management includes: Ethical Corporate Management Policy, Ethical Corporate Management Best Practice Principles, Code of Conduct, and Code of Ethics. Insider trading prevention includes: SEC regulations, prohibitions, penalties, and operating procedures for management. On-the-job occupational safety and health training courses
ESG training	Global corporate sustainability trends and issues of concern for global corporate sustainability, etc.

In 2024, Apacer introduced the Hahow Online Learning Platform. In addition to providing diverse learning resources, it also uses the Platform to designate compulsory courses and turn internal courses online to provide colleagues with a more flexible learning space and to further implement hybrid training. In addition, background data (such as class attendance time, number of courses completed, and test scores) are used to track the learning results of employees. The overall training hours in 2024 increased by 1,069 man-hours to 9,734 man-hours compared to 2022.

2024 education and training statistics

Course type	Total number of employees	Total number of participants	Number of Hours	Total cost (NTD)
New employee training (Including occupational safety and health training for new employees)	534	293	521	\$1,935,967
General training (including legal training)		5,129	8,015	
Talent training (including management training)		851	1,063	
External professional training (including license training)		133	1,246	
RBA & Ethical Corporate Management & Insider Trading Prevention Training (Including on-the-job occupational safety and health training)		527	566	
ESG training		45	31	
Total		6,978	11,441	
Average training amount per employee				\$3,625

Note: The above data includes Apacer operation headquarters and subsidiaries in Taiwan.

Average training hours of employees in 2024

Gender	Female			Male			Over average training hours
Job Category	Total training hours	No. of person(s)	Average training hours	Total training hours	No. of person(s)	Average training hours	
Head of managers	62	4	16	120	7	17	16
Non-head of managers	851	34	25	1,258	44	29	27
Professional staff	3,509	121	29	3,927	122	32	31
Sales personnel	365	16	23	592	23	26	24
Technician ¹	487	118	4	270	45	6	5

Note¹: The technical personnel training mainly focuses on onsite operation skills to meet the needs of online production, so the training hours are shorter.

Note²: The above data includes Apacer operation headquarters and subsidiaries in Taiwan.

Note³: Average training hours by gender = Total training hours of each employee category / Total number of employees in that category.

Note⁴: Overall average training hours = Total training hours of each employee category / Total number of employees in that category.

Effectiveness of education and training

To ensure the effectiveness and quality of all education and training courses, all courses are planned, designed, executed, and evaluated using the TTQS Training Loop and Kirkpatrick's Four-Level Training Evaluation Model to evaluate training effectiveness.

4 Level	Evaluation method/basis	Result
L1 Reaction	Course satisfaction survey	Satisfaction score: 92%
L2 Learning	Drills, after-class feedback, homework, tests, etc.	Implementation rate: 99%
L3 Behavior	Competency evaluation, pretest and post-test, action plan, presentation, etc.	18 sessions implemented
L4 Results	Quality improvement, reduction of customer complaints, maintenance of system effectiveness, improvement of employee engagement, etc.	4 sessions implemented

● Performance Management

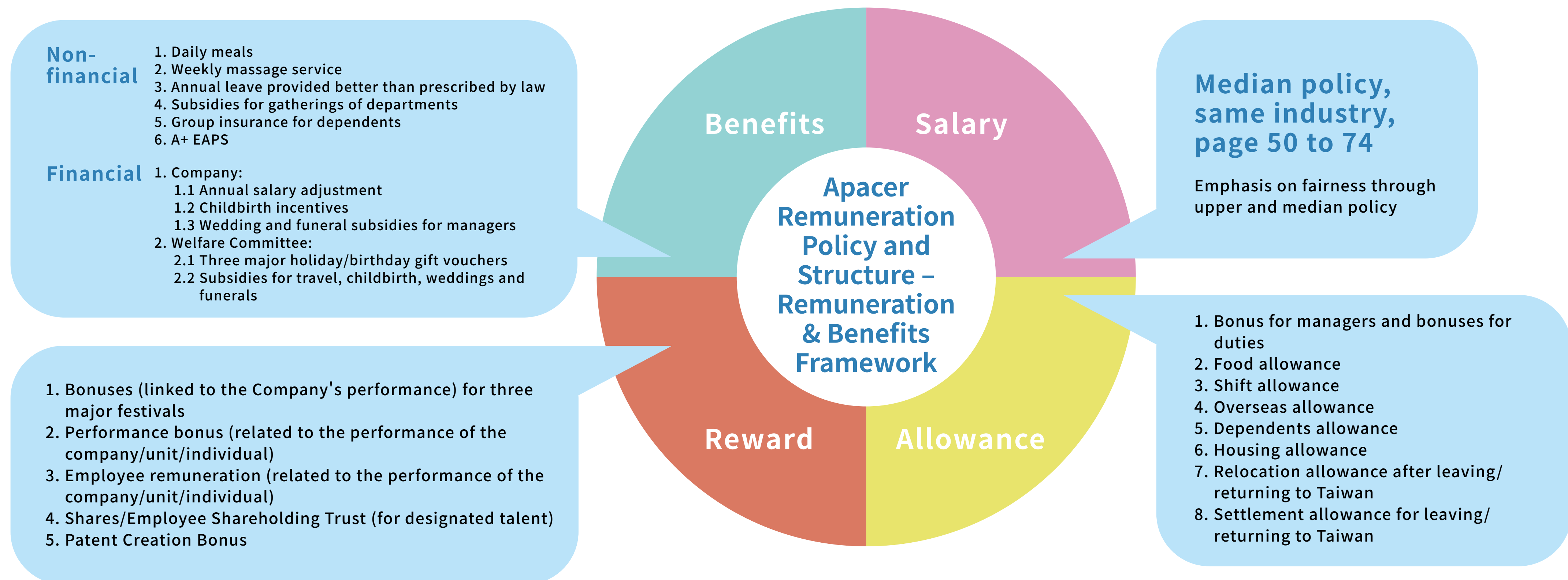
Apacer conducts skill evaluations for direct employees and competency evaluations for indirect employees on a yearly basis. The results of the skill evaluations/competency evaluations are also considered in the Company's promotion system as an effective result for the future development plans of employees. Moreover, the Company conducts performance evaluations on a regular basis. In the design of its performance management system, the performance evaluation items are divided into direct and indirect employees, and the performance evaluation is divided into management and non-management sections. The results of the performance evaluations are also closely related to the Company's reward and promotion system so that the overall performance management system can reward colleagues in a timely manner and integrate them into the Company's future development plans.

Type	Direct Employee	Indirect Employee
Skill appraisal and competency evaluation	We ensure that all operators strictly follow the standard operating procedures in the production process to reduce quality instability caused by human factors, and to cultivate multi-skilled workers to effectively adjust the use of manpower. ✓ Frequency of skill appraisal: Once/year ✓ 2024 skills evaluation execution rate: 100% ✓ Skill completion rate: 93.6%	The job description starts from the JD (job description) and divides the evaluation into three categories: management, professional, and general. If the evaluation results show a gap in competency, they will be linked to the relevant courses in the learning map in the hopes of improving the required competency and improving the capabilities of colleagues. ✓ Frequency of competence evaluation: Once/year ✓ 2004 competency evaluation and talent supply chain competency evaluation execution rate: 100% ✓ Competence completion rate: 94% ✓ From 2021, the completion rate of management competency increased by about 5% on average, and the completion rate of general competency and professional competency increased by about 2% on average.
Performance evaluation	✓ Frequency of performance evaluation: Conducted monthly ✓ Performance evaluation items: work quality, work discipline, work cooperation, attendance status	✓ Frequency of performance evaluation: Once every six months ✓ Performance evaluation items: ✓ KPI evaluation: The unit supervisor discusses with colleagues and cooperates with the Company's annual strategy and the unit's annual plan. KPI are set in January each year. ✓ Competency evaluation: To be formulated by the HR unit based on the core competency items for the competency development of each job category.
Performance bonus	Monthly and annual performance bonuses are distributed based on performance evaluation results.	Performance bonuses are distributed on a quarterly (for business) and annual basis based on the performance evaluation results, and we regularly review the performance of employees and the progress of their personal development plans.

Remuneration management

The HR unit formulates remuneration policies, designs financial and non-financial remuneration and benefit systems, and refers to multiple external remuneration survey reports every year to conduct rolling adjustments to ensure that Apacer's remuneration system is competitive in the HR market.

Over the years, Apacer has adopted the salary survey reports provided by a number of external professional consulting firms as the reference for the remuneration standard of peers in the industry. This is to ensure that Apacer can perform above the in the top 50th percentile of peers in the industry and to attract outstanding talent to contribute their talent and long-term investment. In addition, various performance bonuses, patent bonuses, and other reward systems are available to encourage colleagues to continuously improve their work performance, pursue excellence and break through.



Overall Pay Ratio in 2024²

Job classification ¹	Female	Male
Management personnel	1.0	1.2
Sales personnel	1.0	1.1
Professional staff	1.0	1.3
Technician	1.0	1.1

Note¹: Apacer applies fairness and impartial standards to classify employees and salary according to their academic background, job type, professional licenses, and special expertise.

Note²: The above data includes Apacer operation headquarters and subsidiaries in Taiwan.

In 2024, the ratio of basic-level employee² to the local minimum wage¹

Gender	Local minimum wage	Apacer's salary	Salary and remuneration ratio of male and female
Female	1.0	1.2	1 : 1.1
Male	1.0	1.3	

Note¹: The minimum wage in Taiwan is based on the monthly basic wage of NTD27,470 that was implemented on January 1, 2024.

Note²: Basic-level employees of Apacer are technical personnel.

Note³: The above data includes Apacer operation headquarters and subsidiaries in Taiwan.

Salary of non-head employees over the years²

Item	2021	2022	2023	2024
Employees not in manager positions ¹	438	445	455	472
Average annual salary of non-head employees (NTD)	\$1,084,000	\$1,178,000	\$1,130,000	\$941,000
Median annual salary of non-head employees (NTD)	\$959,000	\$1,014,000	\$1,023,000	\$837,000

Note¹: Employees refer to the number of employees in Taiwan after deducting managers, employees working part-time hours, and those on salary but serving for less than 6 months. They are calculated based on the average number of people. The total salary is an accrual basis and includes: Basic salary, various allowances, overtime pay, various bonuses, employee remuneration. However, the salary does not include the estimated amount of share-based payment that is expensed.

Note²: This salary profile follows the regulations of TWSE and only discloses that of Apacer, which is a listed company.

Note³: This figure includes only from Apacer's headquarters.

Annual total compensation ratio

Year	Ratio of highest compensation to median employee compensation ¹	Annual compensation change ratio ²
2023	622%	100%
2024	465%	140%

Self-defining calculations with reference to GRI Standards

Note¹: Ratio of highest salary to median employee salary = ratio of median annual total compensation of top management/median of annual total compensation of all other employees (excluding top management).

Note²: Ratio of annual total compensation change = ratio of annual percentage change in the total compensation of the top management/median of the percentage of change in the annual total compensation of all other employees (excluding the top management).

Retirement system and assistance plan

Apacer, in accordance with the Labor Standards Act, has established employee retirement regulations that specify the allocation of retirement funds, the conditions for employee retirement, and retirement benefit payments. The Company has also legally established the "Employee Retirement Reserve Supervisory Committee," which, each year, in the name of the committee and based on the evaluation of a third-party actuary, deposits the evaluated amount of the employee retirement reserve into a legally designated financial institution (the actuarial evaluation report is issued each January for the previous year). Starting from July 2005, in response to the government's new pension system, the Company, in accordance with the Labor Pension Act, contributes 6% of the employee's monthly salary to the individual pension accounts at the Bureau of Labor Insurance for those who have opted for the new system (employees may also make voluntary contributions within the 6% range). For employees who have opted to remain under the old system, the Company continues to allocate retirement reserves in accordance with the original method. In 2024, the total retirement payment under the old system amounted to NT\$1,180,830. To help retired employees for both current and future challenges, Apacer offers the following assistance programs:

1. Economy:

Since 2008, Apacer has introduced a preferential retirement procedure, which is subject to the approval of the competent authorities. Employees are able to choose to retire early, allowing them to plan and adapt appropriately but to also receive sufficient protection. Starting in 2024, Apacer launched a company-wide Employee Stock Ownership Trust. The Company provides a 50% matching contribution to support employees in purchasing and holding company shares. In the first year, the program was offered to 50% of the total number of employees and received an enthusiastic response, with the full quota being completely utilized.

2. Health:

Apacer has regular on-site doctors to provide middle-aged and elderly employees with health consultations. The Company also organizes regular health checkups and health promotion lectures to remind them to pay attention to their health and nutrition.

3. Workplace:

Based on employees' wishes after retirement, industry development trends, and in line with the government's policy of "Three Industries and Four Modernizations", we provide relevant official vocational training to enhance their future professional capabilities and to start a new career.

For employees whose employment is involuntarily terminated, Apacer provides job leave and severance pay in accordance with the Labor Standards Act to assist employee's post-employment.

5 A Good Partner of a Livable Home

Vision

With the idea of "A perfect home, Apacer is with you", Apacer is deeply committed to localization, and encourages its employees to act on sustainable solutions and give back to the community through concrete actions. These initiatives will gradually spread to neighboring communities and even other counties and cities. Furthermore, we work together as a group to create a sustainable environment and a happy homeland that is suitable for living and thriving together.

Policies and Commitments

The plant-office headquarters of Apacer is located in Tucheng District, New Taipei City. To give back to society, we continue to promote local care programs and establish long-term cooperative relationships with local groups. Through actions such as contributing to the community, we hope to inspire employees to participate and expand our social influence.



5.1

Local impacts

Apacer upholds the principle of "Deliver on promises, Strive for better advance together", demonstrating the spirit of "Being good partners". By working with different units or local non-governmental organizations (NGOs) to promote the "Apacer is with You" project. Launched in 2021, the project focuses on encouraging employees to engage in actions such as energy conservation and carbon reduction, adopting a plant-based lifestyle, and participating in charitable activities. The project has accumulated a total of 299 participations to date. Please refer to the table below for records of participation in related projects over the years.

Apacer is with You

Local Care	2024	Operation of protecting the local area	- Adoption of organic coffee plants - NTD 120,000
		Cultural Sponsorship	- Sponsored the Shin Kong Mitsukoshi Photography Exhibition, which showcased professional photographs preserving traditional culture.
		South-Link Medical Foundation	- A total of 72 participants responded to the fundraising initiative, raising NTD202,000.
	2023	Vegan Delight	- A total of 51 people participated in a vegan meal event for employees.
		Operation of protecting the local area	- Adoption of organic coffee plants - NTD 60,000
		Lecture on dementia	- Focusing on the prevention and understanding of dementia, the seminar attracted a total of 43 participants.
		Blood donation campaign	- Employees were encouraged to participate in blood donations. For every 250 c.c. of blood donations, the Company is granted 2 hours of volunteer leave, and for 500 c.c. of blood the Company is granted 4 hours of volunteer leave. · Total annual participants: 93 · Total volunteer leave hours: 282 hours · Total blood donated: 35,250 CC Total working hours

Apacer is with You

Local Care	2022	Humanity and culture activities	- We collected second-hand toys and donated both new and second-hand toys to New Taipei City Toy Bank. · Second-hand item exchange - 45 items in total · Donation of electronics: Benefiting 3 social welfare organizations · Employees were encouraged to participate in the Huashan Social Welfare Foundation's New Year dishes raising activity. · We continue to hold an invoice raising activity; with 577 invoices collected as of November 2022.
		Operation of protecting the local area	- Adoption of organic coffee plants - NTD 60,000
	2021	Charity activitiesarea	- 594 invoices collected · 1 batch of supply donated · 168 new year dishes collected · Charity sale of NTD 81,696 in red envelopes, with 550 sets
		Vegan Delight	- 40 employees participated - Experience the joy of living a vegan life

5.2

Apacer is with You and Cares for the Local Environment

South-Link Medical Foundation Fundraising

The South-Link Medical Foundation, initiated by the renowned "Super Doctor" Dr. Chao-Bin Hsu, aims to establish a major medical institution in the South Link region. Its mission is to ensure that residents in remote areas no longer have to endure long journeys to access quality healthcare. In recognition of Dr. Hsu's dedication, Apacer launched an employee fundraising campaign in 2024 to contribute to this meaningful cause. Through real action, we hope to help lay the foundation for this dream to come true. The campaign received enthusiastic support from our colleagues, and within just one month, 72 participants collectively donated NTD202,000.

Supporting the Shin Kong Mitsukoshi Photography Art Expo – Preserving Traditional Arts and Culture

The Shin Kong Mitsukoshi Cultural and Educational Foundation has long been committed to the development and preservation of cultural arts. Through organizing the Photography Art Expo, the foundation enables the public to appreciate the beauty of culture from a local perspective, fostering a rich and diverse humanistic spirit. Apacer has previously supported photographer Cheng-Che Wang, known for his focus on traditional temple festivals and performance troupes. In 2024, he was invited to exhibit his past works at the Expo. To carry forward this spirit of cultural preservation, Apacer also sponsored the event, hoping to help safeguard and promote these invaluable traditions—ensuring they endure and are passed on from generation to generation.



CEO Chang Chia-Kun attending the exhibition in person.

● Coffee tree adoption

Since 2022, Apacer has partnered with the Nantou Branch of the Soil and Water Conservation Bureau (SWCB) to support rural development by adopting 20 coffee trees at Gufeng Coffee Estate. The harvested beans are processed by a social welfare workshop into drip coffee bags, which are distributed to clients, suppliers, and other key partners. Situated at an altitude of 1,300 meters, the estate is managed by Lai Yan-He, who uses pesticide-free, eco-friendly farming methods with organic fertilizers. He has also preserved a dedicated area as a habitat for the Mikado pheasant, a protected bird species endemic to Taiwan, demonstrating a harmonious balance between cash crop cultivation and ecological conservation. The adoption initiative continued in 2023, culminating in a formal coffee tree adoption ceremony on December 18, co-hosted with the SWCB Nantou Branch and Gufeng Estate. Through this collaboration between corporations and local farmers, Apacer aims to promote sustainable land management while enhancing farmers' quality of life, achieving a win-win outcome. In 2024, Apacer increased its coffee bean procurement, investing approximately NTD120,000 to produce more drip coffee bags for distribution to important customers and partners, further sharing its commitment to local goodwill and fostering a positive impact for shared social benefit.

Charitable donations/Sponsorships

Apacer believes that the value of donations are not limited to the amount of money. Donations also allow organizations to connect with society. We maximize the value of each donation and deliver a positive impact on society. By the end of 2024, Apacer had donated a total of NTD 2.38 million to local communities, charitable organizations, and arts and cultural organizations.

Table of cumulative donations over the years

Donations/Sponsorships Item	Receiving unit	Project action	Amount donated (NTD)
Art and culture sponsorship	Tainan Municipal North District Daguang Elementary School	For three consecutive years, Apacer's sponsorship has been used for the operation of art clubs and external performances.	500,000
	OneSong Orchestra	Sponsorships are used for competition preparation and promotion purposes	100,000
Athletics education	Municipal Yulin Junior High School Track and Field Team	For five consecutive years, Apacer's sponsorship has been used to cover player training and equipment replacement.	297,220
Local community	Tucheng District Nature Landscape Conservation Association, New Taipei City	Apacer has commissioned the association to plan the One-day Volunteer activity for four consecutive years.	32,000
	Gu Feng Coffee	We adopted coffee trees and use the harvested coffee beans to create drip bag coffee through the charity factory.	240,000
Others	Charitable foundations, social welfare organizations, etc.	Apacer helped people in need with their problems and improved their living quality by donating supplies and money to social welfare organizations in need.	1,211,358
Total amount of donation			2,380,578

Appendix

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- Appendix 1: GRI Standards Disclosure Table
 - Appendix 2: Sustainability Accounting Standards Board (SASB) Indicator Comparison Table
 - Appendix 3: Indicator Disclosure for Regulations Governing the Preparation and Filing of Sustainability Reports by Listed Companies
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GRI Standards Disclosure Table

The following tables refer to the 2021 version of the GRI Standards and correspond to the contents of this report. As shown in the declaration of external verification, the relevant information has been verified to meet the requirements of GRI Standards for the external verification list.

- Declaration

Apacer Technology Co., Ltd. made reporting according to the GRI Standards from January 1, 2024 to December 31, 2024.
- Use of GRI1

GRI 1: Basic in 2021
- Applying of GRI standards

Not applicable

GRI 2: General Disclosure in 2021

Disclosure item		Description	Reference	Note
Organization and reporting practices	2 - 1	Organization details	1.1 About Apacer	
	2 - 2	Entities included in the organization's sustainability reporting	About the Report	
	2 - 3	Reporting period, frequency, and contact person	About the Report	
	2 - 4	Restatements of information	2.3 Waste and Water Management	
	2 - 5	External assurance	✔ About the Report ✔ Appendix 4: Declaration of Third-party Independent Assurance Opinion	
Events and workers	2 - 6	Events, value chains, and other business relationships	1.3 Product Diversification and Operational Performance 3.1 Sustainable Supply Chain Management	
	2 - 7	Employee	4.1 Personnel Overview	
	2 - 8	Non-employee workers	4.1 Personnel Overview	
Governance	2 - 9	Governance structure and composition	1.1 About Apacer 1.2 Corporate Governance	
	2 - 10	Nomination and selection of the highest governance body	1.2 Corporate Governance	
	2 - 11	Chairman of the highest governance body	1.2 Corporate Governance	
	2 - 12	Role of highest governance body in overseeing impact management	1.2 Corporate Governance	

Disclosure item		Description	Reference	Note
Governance	2-13	Person in charge of impact management	✔ Internal Sustainability Management Mechanism ✔ Materiality Analysis	
	2-14	Highest governance body's role in sustainability reporting	✔ About the Report ✔ 1.2 Corporate Governance	
	2-15	Conflicts of interest	1.2 Ethical Corporate Management and Corporate Governance	
	2-16	Communication of key significant events	1.1 About Apacer	
	2-17	Group intelligence of the highest governance body	1.2 Corporate Governance	
	2-18	Performance evaluation of the highest governance body	1.2 Corporate Governance	
	2-19	Remuneration policy	1.2 Corporate Governance	
	2-20	Remuneration Determination Process	1.2 Corporate Governance	
	2-21	Annual total compensation ratio	4.4 Talent Cultivation and Remuneration System	Please refer to 4.4. Remuneration Management
Strategies, policies and practices	2-22	Statement of sustainable development strategy	✔ Message from the CEO ✔ SSD, Sustainability Strategy Development	
	2-23	Policy commitment	✔ ESG commitments in all aspects are available on our website ✔ Supplier procurement policies are available on the website	
	2-24	Inclusion of policy commitment	Chapter 1 A Partner that Leads to Innovation Chapter 2 A Good Partner For A Green Environment Chapter 3 A Good Partner That Shares Progress and Growth Chapter 4 A Friendly and Healthy Workplace Partner	
	2-25	Procedures for remediating negative impacts	Chapter 1 A Partner that Leads to Innovation Chapter 2 A Good Partner For A Green Environment Chapter 3 A Good Partner That Shares Progress and Growth Chapter 4 A Friendly and Healthy Workplace Partner	
	2-26	Mechanisms for seeking advice and raising concerns	3.2 Customer Relationship Management 4.3 Employee Benefits and Communication	
	2-27	Regulatory compliance	-	The Company has no violations of relevant laws and regulations.
	2-28	Membership in associations	1.4 Innovative R&D	
	2-29	Stakeholder engagement policy	Stakeholder Engagement	
	2-30	Group agreement		Not applicable. The Company does not have collective agreements, but the opinions of the unions and labor-management meetings will still be considered.

Material Topics

Disclosure item		Description	Reference	Note
GRI 3:Material topics 2021	3 - 1	Process for determining material topics	Materiality Analysis	
	3 - 2	List of Material Topics	Materiality Analysis	
Material topic: Corporate governance				
GRI 3:Material topics 2021	3 - 3	Material topic management	Chapter 1 A Partner that Leads to Innovation	
Customized Material Topics			1.2 Corporate Governance	
Material topic: Operational Risk Management				
GRI 3:Material topics 2021	3 - 3	Material topic management	Chapter 1 A Partner that Leads to Innovation	
Customized Material Topics			1.2 Corporate Governance	
Material topic: Information security				
GRI 3:Material topics 2021	3 - 3	Material topic management	Chapter 1 A Partner that Leads to Innovation	
Customized Material Topics			1.2 Corporate Governance	
Material topic: Economic performance				
GRI 3:Material topics 2021	3 - 3	Material topic management	<u>Chapter 1 A Partner that Leads to Innovation</u>	
GRI 201 Economic performance	201 - 1	Direct economic value generated and distributed by the organization	1.3 Product Diversification and Operational Performance	
	201 - 3	Confirmed benefit obligations and other retirement plans	4.4 Talent Cultivation and Remuneration System	
Material topic: R&D innovation				
GRI 3:Material topics 2021	3 - 3	Material topic management	Chapter 1 A Partner that Leads to Innovation	
Customized Material Topics			1.4 Innovative R&D	
Material topic: Climate Change Risk Management				
GRI 3:Material topics 2021	3 - 3	Material topic management	Chapter 2 A Good Partner For A Green Environment	
GRI 305 Emissions	305 - 1	Direct (Scope 1) GHG emissions	2.2 Climate Change Risk Management	
	305 - 2	Indirect (Scope 2) GHG emissions from energy	2.2 Climate Change Risk Management	
	305 - 3	Other indirect (Scope 3) GHG emissions	2.2 Climate Change Risk Management	
	305 - 4	GHG emission intensity	2.2 Climate Change Risk Management	
	305 - 5	GHG emission reduction	2.2 Climate Change Risk Management	

Material Topics

Disclosure item		Description	Reference	Note
Material topic: Raw material management				
GRI 3:Material topics 2021	3 - 3	Material topic management	Chapter 2 A Good Partner For A Green Environment	
Customized Material Topics			2.4 Green Product	
Material topic: Occupational Health and Safety				
GRI 3:Material topics 2021	3 - 3	Material topic management	Chapter 4 A Friendly and Healthy Workplace Partner	
GRI 403 Occupational Safety and Health	403-1	Occupational safety and health management system	4.2 Employee Safety and Health	
	403-2	Hazard identification, risk assessment and incident investigation	4.2 Employee Safety and Health	
	403-3	Occupational health service	4.2 Employee Safety and Health	
	403-4	Worker participation, consultation, and communication on occupational health and safety	4.2 Employee Safety and Health	
	403-5	Worker training regarding occupational health and safety	4.2 Employee Safety and Health	
	403-6	Worker's health promotion	4.3 Employee Benefits and Communication	
	403-7	Prevention and mitigation for occupational health and safety impacts directly linked to business	3.1 Sustainable Supply Chain Management	
	403-8	Workers covered by the occupational health and safety management system	4.2 Employee Safety and Health	
	403-9	Occupational injury	4.2 Employee Safety and Health	
	403-10	Occupational disease	4.2 Employee Safety and Health	
Material topic: talent cultivation				
GRI 3:Material topics 2021	3 - 3	Material topic management	Chapter 4 A Friendly and Healthy Workplace Partner	
GRI 404 Training and Education	404-1	Average training hours of each employee every year	4.4 Talent Cultivation and Remuneration System	
	404-2	Programs for improving employee competency and transition assistance	4.4 Talent Cultivation and Remuneration System	
	404-3	Percentage of employees who regularly receive performance and career development inspections	4.4 Talent Cultivation and Remuneration System	

Sustainability Accounting Standards Board (SASB)

Indicator Comparison Table

Industry: Semiconductors

Indicator code	Disclosure indicators	Comparison disclosure			Chapter comparison
		2022	2023	2024	
Disclosure topic: Greenhouse Gas Emissions					
TC-SC-110 a.1	(1) Total emissions in Scope 1 (Unit:CO2-e)	125.212	132.51	125.264	2.2 Climate Change Risk Management
	(2) Total emissions of PFASs (Unit: %)	0	0	0	
TC-SC-110 a.2	Discussion regarding long-term and short-term strategies or plans for managing Scope 1 emissions, emission reduction targets, and performance analysis thereof.	Please refer to Climate and Energy Chapter: Green Plants, Energy Saving Improvements			2.2 Climate Change Risk Management
Disclosure topic: Energy Management in Manufacturing					
TC-SC-130 a.1	(1) Total energy consumption (unit: Gigajoule (MJ))	13,223	12,863	12,699	2.2 Climate Change Risk Management
	(2) Ratio of power grid consumption in total energy consumption (Unit: %)	100	100	100	
	(3) Percentage of renewable energy consumption in total energy consumption (Unit: %)	0			
Disclosure topic: Water Management					
TC-SC-140 a.1	(1) Total water withdrawn (Unit: thousand cubic meters)	9.88	9.12	10.51	2.3 Waste and Water Management
	(2) Percentage of water withdrawn in areas with high or extremely high-water pressure at the baseline (Unit: %)	100	100	100	2.3 Waste and Water Management
	(3) Total water consumption (Unit: thousand cubic meters)	5.69	4.70	3.95	2.3 Waste and Water Management
	(4) Percentage of water consumption in areas with high or extremely high-water pressure at the baseline (Unit: %)	100	100	100	2.3 Waste and Water Management
Disclosure topic: Waste Management					
TC-SC-150 a.1	(1) Total amount of hazardous waste produced (Unit: metric tons)	6.2	6.6	14.5	2.3 Waste and Water Management
	(2) Percentage of hazardous waste recycled (Unit: %)	100	100	100	2.3 Waste and Water Management
Disclosure topic: Employee Health & Safety					
TC-SC-320 a.1	Describe the methods used to evaluate, monitor, and reduce employees' exposure to harmful hazards	Four major actions for occupational safety and health management			4.2 Employee Safety and Health
TC-SC-320 a.2	Total amount of loss arising from legal actions related to employee health and safety violations	0	0	0	4.2 Employee Safety and Health

Indicator code	Disclosure indicators	Comparison disclosure			Chapter comparison
		2022	2023	2024	
Disclosure topic: Recruiting & Managing a Global & Skilled Workforce					
TC-SC-330 a.1	(1) Percentage of employees who are foreign nationals (Unit: %)	20 %	20 %	20 %	4.1 Personnel Overview
	(2) Percentage of employees who are overseas (Unit: %)	12 %	11 %	11 %	4.1 Personnel Overview
Disclosure topic: Materials Sourcing					
TC-SC-440 a.1	Describe the risk management approach for the use of key raw materials	Starting disclosure in 2023			3.1 Sustainable Supply Chain Management
Disclosure topic: Intellectual Property Protection & Competitive Behavior					
TC-SC-520 a.1	Total amount of loss arising from legal actions related to anti-competitive practices	0	0	0	1.2 Ethical Corporate Management and Corporate Governance
Operating indicators					
TC-SC-000.A	Total Production (Unit: Thousand)	12,909	14,534	10,869	N/A
TC-SC-000.B	Percentage of production at self-owned facilities (Unit: %)	32	32	43	

Indicator Disclosure for Regulations Governing the Preparation and Filing of Sustainability Reports by Listed Companies

Sustainability disclosure indicators - Semiconductor and electronic components

Serial No.	Indicator	Indicator type	2024 disclosure status	Department	Remarks
I	Total energy consumption, percentage of purchased electricity, and utilization rate of renewable energy	Quantification	12,909	Gigajoule (GJ)	
			100	Percentage (%)	
II	Total water intake and consumption	Quantification	10.51	Thousand cubic meters (1000m³)	
III	Weight of hazardous waste generated and recycle percentage	Quantification	69.5	Metric ton(t)	
			39.0	Percentage (%)	
IV	Describe the type of occupational disaster, the number of people involved, and the rate	Quantification	0.37%	Rate (%)	
			2 people	Quantity	
V	Disclosure of product life cycle management: Weight including scrapped products and electronic waste, and recycle percentage	Quantification	4.675	Metric ton(t)	✔ Apacer does not dispose of any products itself ✔ Waste comes from defective products in the manufacturing process. The statistics only include the clearance and transportation of PCB waste. Therefore, this data is explained and the data on the recycling rate is not available.
			Not applicable	Percentage (%)	
VI	Description of risk management associated with the use of critical materials	Qualitative description	3.1 Sustainable Supply Chain Management(Material Topic)	Not applicable	
VII	Total amount of loss arising from legal actions related to anti-competitive regulations	Quantification	No related incidents	Reporting currency	
VIII	Output of main products based on product category	Quantification	✔ DRAM 4,046K pcs ✔ SSD 8,575K pcs	Varies by product type	