

2023

Sustainability Report



Notice to readers:

This English version report is a summary translation of the Chinese version. If there is any discrepancy between the English and Chinese versions, the Chinese version shall prevail.



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Message From the Top Management



Chairman & CEO



In recent years, the surge of artificial intelligence, including breakthroughs like ChatGPT's generative AI, has captured global attention. This AI boom is driving the proliferation of high-performance computing. AP Memory Technology Corporation is well-positioned to leverage this trend by continuing to develop high-performance, energy-efficient chips, which will be key to our long-term growth potential and momentum. AP Memory remains committed to excellence in product quality, investing resources to explore new application areas and develop differentiated product specifications. The Company also seizes opportunities in emerging memory markets as part of its long-term strategy. Recognizing the importance of corporate sustainability, AP Memory actively integrates ESG principles into its operations. We focus on promoting "Corporate Sustainability," "Innovative Sustainability," "Talent Sustainability," and "Environmental Sustainability," faithfully documenting ESG management and performance to drive ongoing sustainable practices.

Corporate Sustainability

AP Memory is founded on ethical management, aiming for long-term corporate value maximization and prioritizing shareholder interests. The Company implements management systems to ensure stable operations, continually enhancing board functions, enforcing risk management, and improving information transparency. We are committed to strengthening intellectual property protection and establishing and enforcing corporate governance mechanisms from the top down. Additionally, we provide diverse communication channels to engage more closely with stakeholders.

Innovative Sustainability

AP Memory focuses on energy efficiency, high performance, miniaturization, and customization in its product innovation. Driven by applications in artificial intelligence and the Internet of Things, the demand for DRAM has become increasingly diverse. Committed to innovation and technological breakthroughs, AP Memory has achieved milestones such as the world's first 3D heterogeneous integrated DRAM and VHM™, followed by the launch of VHMLInK™ and S-SiCap™. These achievements have earned us long-standing trust and recognition from our customers and secured our leading position in the market. We actively collaborate with leading companies across various fields to drive innovation and development in memory technology, meeting the demands of new applications and advancing the industry.

Talent Sustainability

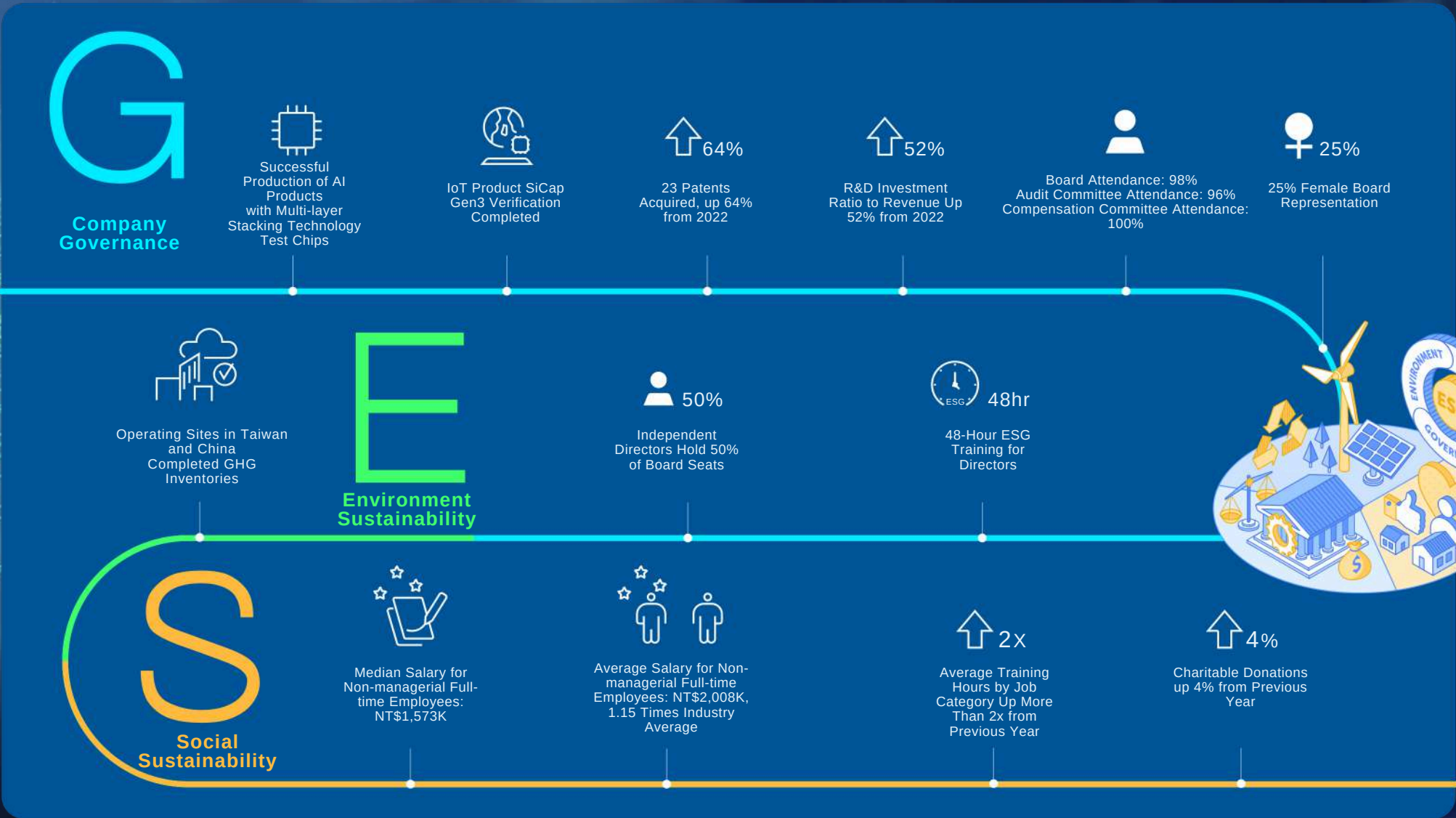
In addition to offering competitive compensation and benefits, we prioritize the physical and mental well-being of our employees and provide a safe and reliable work environment. We are dedicated to creating a friendly workplace, offering support for personal and family care, and promoting a diverse, equitable, and inclusive culture where every employee feels valued. Moreover, we focus on talent development through the establishment of the "AP Memory Academy," which strengthens organizational learning and competitiveness. Our diverse talent strategies aim to foster team collaboration and vitality, ensuring sustainable development for our employees within the Company.

Environmental Sustainability

Since 2022, AP Memory has been conducting greenhouse gas (GHG) inventories and regularly disclosing the results. Moving forward, under the guidance of the board, we plan to establish a Sustainability Committee. This committee will set reduction baselines, carbon reduction targets, and develop action plans to implement energy-saving and carbon-reducing measures. Our goal is to respond to international net-zero carbon emissions initiatives, mitigate climate change caused by the greenhouse effect, and contribute to global sustainability efforts. Additionally, starting in 2023, AP Memory has adopted the Task Force on Climate-related Financial Disclosures (TCFD) framework to identify climate-related risks and opportunities, allowing us to address potential climate challenges and seize market opportunities in advance.

AP Memory will take proactive and steady strides to keep pace with industry advancements, continuing to invest significant effort and resources in fulfilling corporate social responsibility and sustainability development. This commitment aims to create greater value for all stakeholders and society, and to contribute our utmost to support global sustainability initiatives.

2023 AP Memory Sustainability Highlights



2024 Sustainability Goals

Corporate Governance

Corporate Governance	<ul style="list-style-type: none"> Enhance transparency of ESG report scope and data. Complete assessment of ESG performance and executive compensation linkage mechanism. Initiate Sustainability Working Group as preparation for establishing a Sustainability Committee.
Business Ethics	<ul style="list-style-type: none"> Enhance transparency of ESG report scope and data. Establish policies on "anti-discrimination" and "environment, health, and safety," integrating them with existing management practices.
Risk Management	<ul style="list-style-type: none"> Establish emerging risk identification mechanism and complete risk management awareness training.
Tax Transparency	<ul style="list-style-type: none"> Develop tax policy and commit to standard transaction principles.
Cybersecurity Management	<ul style="list-style-type: none"> Establish a cybersecurity incident reporting mechanism. Set emerging network risk management objectives.
Product Innovation	<ul style="list-style-type: none"> Successfully verify IoT low-power Dynamic RAM. Achieve mass production of 1.2V IoT Virtual Static RAM. Achieve mass production of next-generation IoT Silicon Capacitor products. Develop AI RAM-related products with a continued focus on reducing energy consumption.
Product Quality	<ul style="list-style-type: none"> Set yield targets for new and mature products.
Supply-Chain Management	<ul style="list-style-type: none"> Successfully formulate Supplier Code of Conduct (covering human rights, labor, safety, environment, and business ethics), and Supplier Code of Conduct commitments. Complete the establishment of a screening mechanism to identify critical suppliers. Achieve 100% procurement from suppliers certified for responsible mineral sourcing.

Environment Sustainability

Climate Governance	<ul style="list-style-type: none"> Establish climate change governance mechanisms and risk assessment processes.
GHG Management	<ul style="list-style-type: none"> Expand Scopes 1 and 2 inventory coverage Develop Scope 3 Inventory Plan
Energy Management	<ul style="list-style-type: none"> Plan for renewable energy procurement.

Social Sustainability

Human Capital	<ul style="list-style-type: none"> Link employee development plans to training effectiveness management and establish evaluation metrics
Labor Practice Indicators	<ul style="list-style-type: none"> Complete the formulation of anti-discrimination and harassment declarations, policies, and conduct advocacy and education training.
Human-Right Management	<ul style="list-style-type: none"> Complete the formulation of human rights policies and conduct advocacy, education and training.



About Report

AP Memory Technology Corporation (hereinafter "AP Memory" or "We") presents the information compiled in the 2023 Sustainability Report (hereinafter "this Report") as follows:

Disclosure Basis

Standards Followed:

- 1.GRI Sustainability Reporting Standards 2021 Edition (GRI Standards 2021)
- 2.AA1000 AccountAbility Principles (AA1000AP-2018)
- 3.Sustainability Accounting Standards Board (SASB): Standards for the Semiconductor industry within the Technology and Communications sector

Disclosure Scope

Time Frame:

- This Report, first issued in September 2022, is published annually.
- This edition covers the period from January 1 to December 31, 2023.
- Previous Chinese edition publication date: June 2023
- Current Chinese edition publication date: July 2024

Organizational Scope:

- The disclosure scope includes AP Memory (parent company) and all entities under its consolidated financial statements (subsidiaries in Hsinchu, Taiwan; Hangzhou, China; Portland, USA) in terms of economic, social, and environmental performance. Hsinchu, Taiwan, and Hangzhou, China, are the primary operating locations for information disclosure.
- If performance data for all operating locations is not fully disclosed, it is explained in the notes and detailed in the "Appendices - Data Disclosure Scope."

Disclosure Explanation

Financial Performance :

Financial data is based on the financial reports audited by Deloitte Taiwan, with the currency used for financial disclosures being New Taiwan dollars (NTD).

Non-Financial Performance :

Other relevant data in this Report is compiled by the report disclosure team, covering the past 1-4 years, using commonly accepted numerical descriptions and rounded to the nearest value.

Compilation Process

The data and information disclosed in this Report are provided by various responsible departments and compiled by the report team. The completed Report is reviewed and confirmed by department heads and senior executives to ensure accuracy, followed by an internal review process. The final Report is then published on the AP Memory official website.

Contact Information

If you have any questions about this Report or suggestions for AP Memory, please contact us through the following information.

- Company Address: 10F.-1, No.1, Taiyuan 1st St., Zhubei City, Hsinchu County
- Company Phone: (03)560-1558
- E-mail: ir@apmemory.com
- Company Website: www.apmemory.com



AP Memory

Leading Industry Development

1.1 Company Profile

1.2 Product Introduction

1.3 Operational Overview

1.4 Social Impact

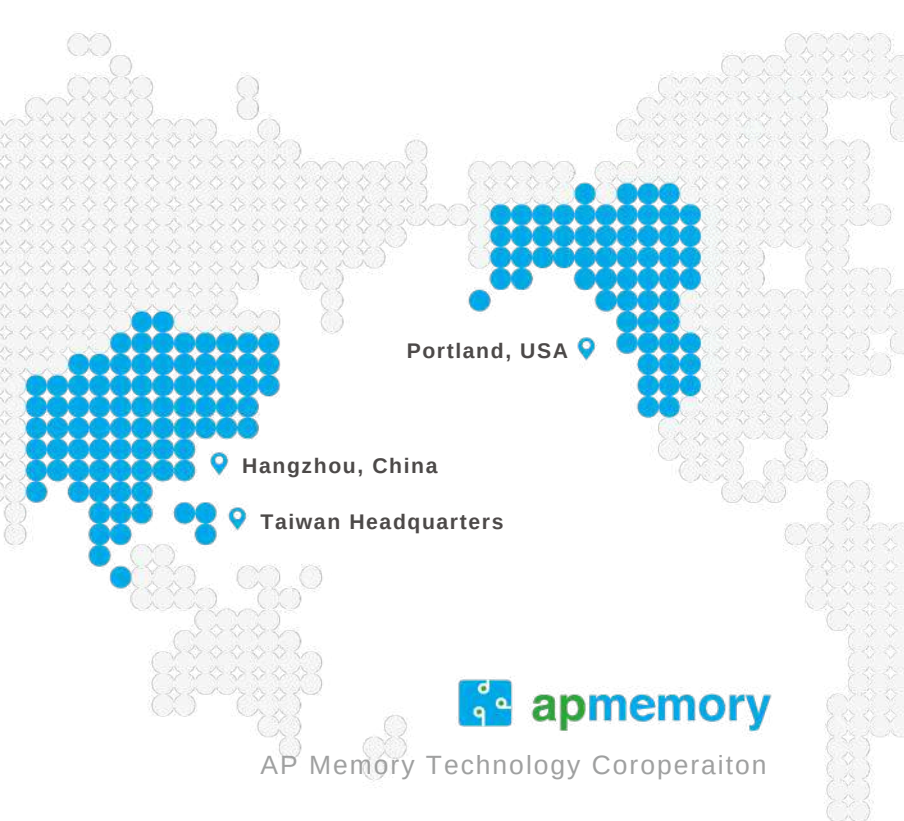
1.1 Company Profile

AP Memory Overview

Founded in 2011, AP Memory publicly issued common stock in April 2015 and was listed on the Taiwan Stock Exchange on May 31, 2016. Headquartered in Hsinchu County, Taiwan, the Company has research and development, as well as sales offices in the United States and China.

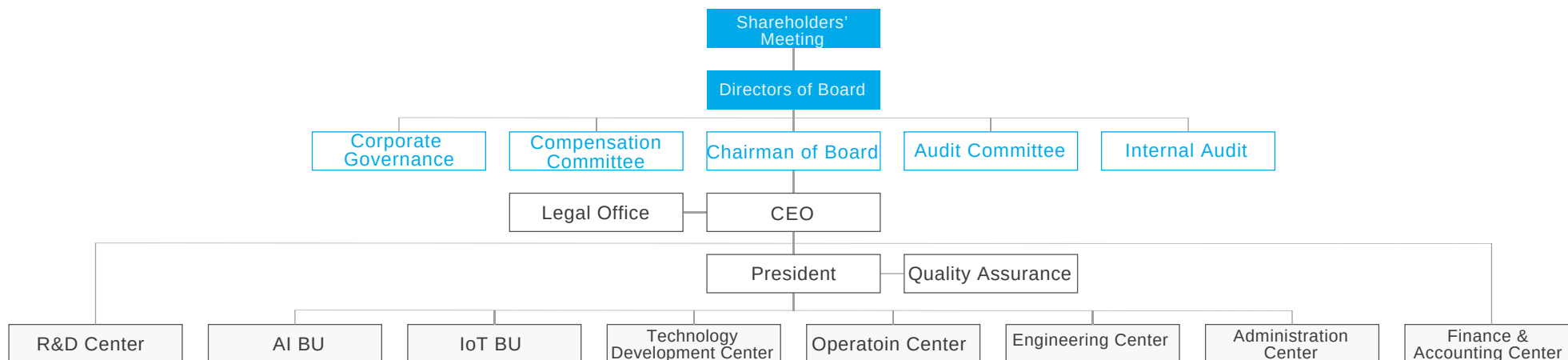
AP Memory specializes in the development, design, licensing, and sales of customized memory chip products and technologies. As a leading global provider of non-standard memory chip design, AP Memory leverages its R&D team's extensive professional experience to build robust technical capabilities. The Company focuses on customer needs, offering a wide range of customized memory products and design services.

Initially, AP Memory's primary revenue came from Pseudo SRAM (PSRAM), focusing on research, development, manufacturing, and sales of mobile memory integrated circuits, covering up to 80% of the functional cellphone market. In 2016, the Company ventured into the development of low-power random-access memory. In 2021, AP Memory pioneered VHMTM technology, the world's first true 3D stacked heterogeneous integration technology for DRAM and logic chips. In 2022, the Company introduced new ultra-high-speed (UHS) and ultra-low-power ULS PSRAM. In 2023, the S-SiCap™ (silicon capacitor-related products and IP licensing services) product line was added.



Company Name	Listing Date	Capital	Products and Services
AP Memory Technology Coroperation	May, 2016	NT\$810 million (as of the end of 2023)	Providing customized memory chip products and technical development, design, licensing, and sales services
Stock Code	Markets Served	Number of Employees	<ul style="list-style-type: none">IoT-related memory products (IoTRAM™)AI-related memory products, licensing and design servicesSilicon capacitor-related products and IP licensing services (S-SiCap™)
6531	Asia, Europe, Americas	197 (as of the end of 2023)	
Chairman	Headquarters	Revenue Scale	
Chen, Wen-Liang	10F.-1, No.1, Taiyuan 1st St., Zhubei City, Hsinchu County, TW	NT\$4.23 billion (2023)	
Establishment Date	Operational Locations		
August, 2011	Hsinchu County, Taiwan; Portland, USA; Hangzhou, China		

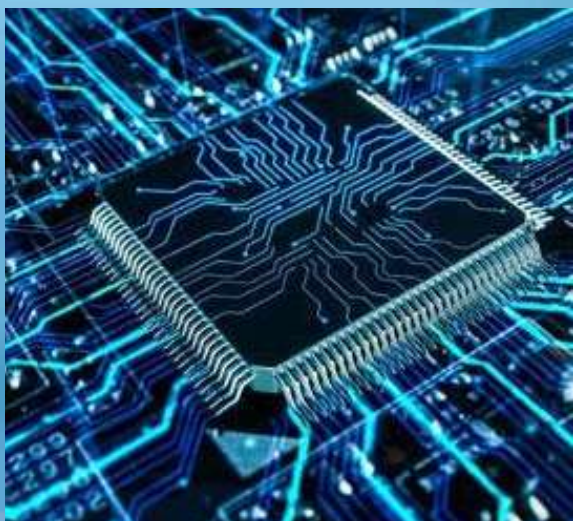
Organizational Structure and Responsibilities



Department	Responsibilities
Research & Development Center (R&D)	<ul style="list-style-type: none"> Design and development operations for new products.
AI BU	<ul style="list-style-type: none"> Managing market expansion for AI application memory products, industry trend analysis, market information collection, and competitor information investigation.
IoT BU	<ul style="list-style-type: none"> Managing market expansion for IoT application-related memory and peripheral products, industry trend analysis, market information collection, and competitor information investigation.
Technology Development Center	<ul style="list-style-type: none"> Design and development operations for new processes and innovative concepts.
Operation Center	<ul style="list-style-type: none"> Procurement of productive raw materials, management of outsourced product processing, execution of production management operations, effective control of raw material inventory, planning and execution of process issues, and enhancement of product yield.
Engineering Center	<ul style="list-style-type: none"> Assisting customers in introducing new product projects, developing product testing programs, circuit, logic, and software design, providing application technology and production support services to customers, and managing project development timelines and verification operations.

Department	Responsibilities
Administration Center	<ul style="list-style-type: none"> Planning and management of human resources, organizational and talent development, employee services, health and safety management, and general affairs. Evaluation, planning, maintenance, execution, and information security management of software and hardware systems.
Finance & Accounting Center	<ul style="list-style-type: none"> Financial planning, capital management, allocation, and investment planning. Budget planning, accounting operations, settlement, and tax system establishment. Investor relations maintenance.
Quality Assurance	<ul style="list-style-type: none"> Product quality inspection, reliability engineering, customer complaint handling, and RMA analysis and response. Planning, inspection, supervision, control, and execution of quality management systems.
Legal Office	<ul style="list-style-type: none"> Contract review and management, legal affairs, and intellectual property-related operations.
Internal Audit	<ul style="list-style-type: none"> Assessing and auditing the Company's internal controls, providing improvements and recommendations to enhance operational efficiency and effective execution of internal controls.
Corporate Governance	<ul style="list-style-type: none"> Assisting with procedural and compliance matters for resolutions of shareholders' meetings, board meetings, and functional committees. Assisting independent directors and general directors in executing their duties, providing necessary information, and arranging director training.

Management Philosophy



Vision and Mission

AP Memory is dedicated to "pursuing comprehensive chip design technology and high-quality execution capabilities." We are customer-oriented, striving to become the world's leading memory solution provider. We continuously refine product quality, actively invest resources to develop new application fields, create differentiated product specifications, and seize business opportunities in emerging markets for memory products.

Culture and Value

Ethics

Ethics is our core philosophy and value.

Cohesion

Cohesion is the cornerstone of our beliefs.

Proactiveness

Being proactive has always been a vital source of our progress, driving our company's growth whether in new industries, research and development, or sustaining development in existing industries.

Industry Association Participation

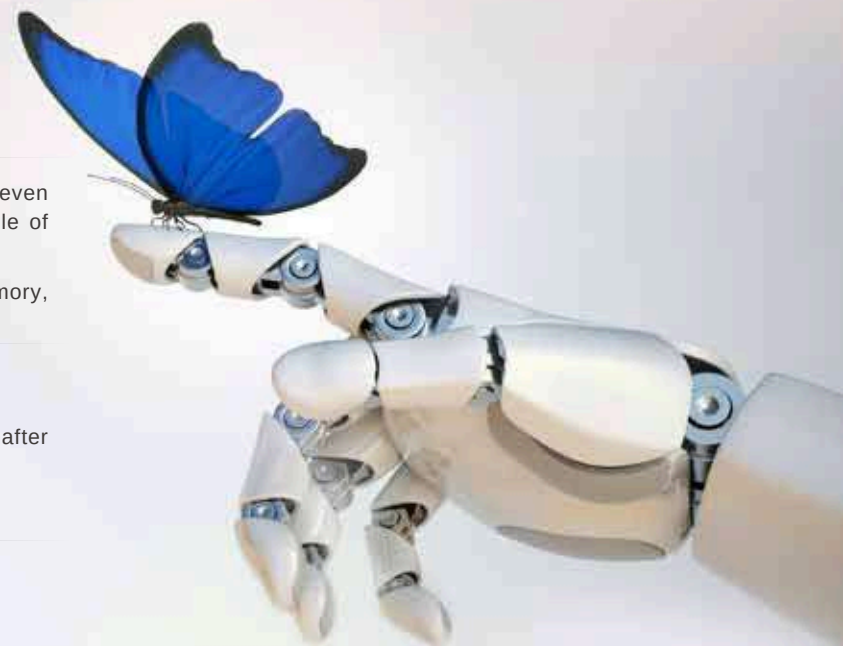
Membership in Industry Associations*

- Taiwan Semiconductor Industry Association
- Taiwan Advanced Automotive Technology Development Association
- EDEC Solid State Technology Association
- Universal Chiplet Interconnect Express (UCIe)
- Hsinchu City Human Resource Management Association

*: All memberships are general memberships.

Company Milestones

- 2023**
- Acquired a 9.4% stake in M3 Technology Inc. (6799.TW).
- 2022**
- Completed pricing and issuance of Global Depository Receipts (GDR), increased capital by issuing a total of 12,800 K shares, participated in the issuance of 6,400 K GDR units, raised a total of US\$189,760 K.
- 2021**
- The Annual Shareholders' Meeting resolved an amendment to the Company's articles of incorporation, changing the par value of the Company's shares from NT\$10 to NT\$5.
 - Completed the change of par value, increasing the number of outstanding shares from 74,340 K to 148,681 K shares.
 - Increased capital through the issuance of common shares participating in the issuance of Global Depository Receipts.
- 2018**
- Established AP Memory Technology (Hangzhou) Co., Ltd. in Hangzhou, China.
 - Established AP Memory Technology (Hong Kong) Co., Ltd. in Hong Kong, China.
 - The Board of Directors resolved to sell a 24% stake in Zentel Japan Corp.
 - Sold the remaining stake in Zentel Japan Corp.
- 2017**
- At the Annual General Meeting, the third term of the Board of Directors was re-elected, selecting seven directors, including three independent directors, and established the Audit Committee to replace the role of supervisors, ensuring effective corporate governance.
 - Effective October 1, 2017, Zentel Electronics Corp. became a wholly-owned subsidiary of AP Memory, delisting from the OTC market and terminating its public offering status.
- 2016**
- Approved by the Taiwan Stock Exchange Review Committee for listing application.
 - Officially listed and traded on the Taiwan Stock Exchange.
 - The Board of Directors approved the public acquisition of Zentel Electronics Corp. (3553.TW, hereinafter Zentel).
 - Completed the public acquisition of Zentel, making Zentel a 55.24% owned subsidiary of the Company.



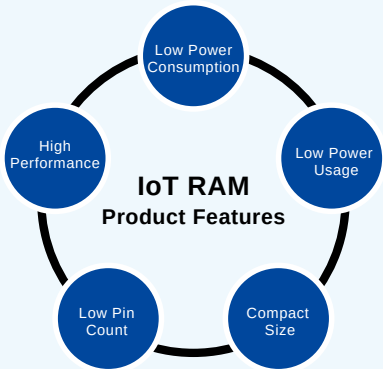
1.2 Product Introduction

Products and Services

AP Memory products have always excelled through innovation and customization, dedicated to providing customers with optimized memory solutions. The current three major product lines are IoT Random Access Memory (IoTRAM™), AI-related memory products (VHMTM), and silicon capacitor-related products (S-SiCap™).

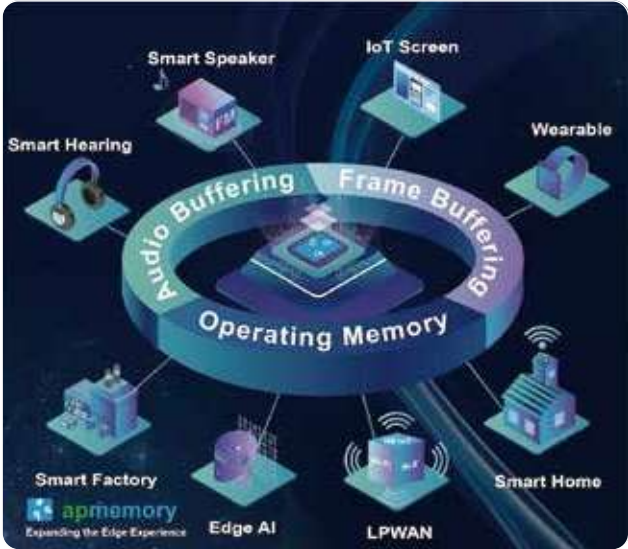
IoT Random Access Memory (IoTRAM™)

AP Memory's IoTRAM™ offers customers a series of high - performance, low pin counts, and low power consumption products. With years of deep cultivation in the customized memory market, we have established a leading position in the IoT market, maintaining the number one global market share. As emerging applications such as 5G and IoT continue to flourish, AP Memory has seized market opportunities, continuously promoting product lines like PSRAM and Low-power DRAM for applications in wearable devices, smart connectivity, and AIoT products, fully developing new markets, applications, and customers.



IoTRAM™ Product Features: Low power consumption, low power usage, compact size, low pin count, high performance

Product	Description	Features
Pseudo Static Random Access Memory (PSRAM)	PSRAM (Pseudo Static Random Access Memory) is designed with DRAM cell base product but with interface (I/O Interface) like SRAM. Compared to SRAM, PSRAM offers the large capacity and low cost of DRAM while retaining the easy operation advantages of SRAM. AP Memory's PSRAM products are optimized for low power consumption, high-speed transmission, and compact size, making them particularly suitable for IoT devices, wearable devices, and industrial displays.	<ul style="list-style-type: none"> Low Power Consumption: Supports self-managed refresh and Halfsleep™ Mode to extend battery life. High Performance: Data transfer rate of 1000MB/s. Low Pin Count: Compact size with a simple interface, simplifying customer device design and reducing system costs.
Low-Power Dynamic Random Access Memory (LPDRAM)	The product line adheres to JEDEC standards (Solid State Electronics Standards) and includes specifications such as LPDDR2, LPDDR3, and the newly introduced LPDDR4/4x. These products are applicable to various mobile connectivity devices.	<ul style="list-style-type: none"> High-Speed Transmission and Low Power Consumption.

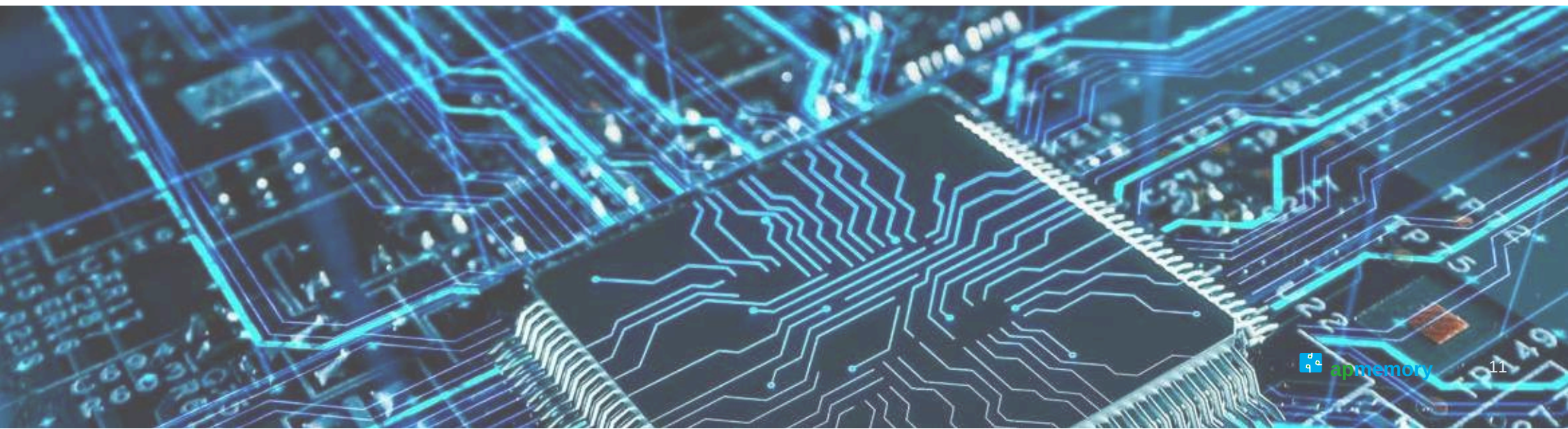


AI Memory Products

AP Memory's AI BU has also made significant breakthroughs in wafer stacking technology for three-dimensional integrated circuits (3D ICs). The application of 3D IC technology in heterogeneous integration, known as Very High Bandwidth Memory (VHM™), officially entered production and shipping in mid-2021. By leveraging relatively mature logic process technology combined with AP Memory's VHM™, customers can achieve computational performance several times greater than the most advanced GPUs. This leap in computational performance demonstrates the true potential of 3D ICs for the first time globally. This achievement is the result of joint efforts between customers, memory wafer foundries, logic wafer foundries, wafer stacking foundry partners, and design service partners with AP Memory in recent years. Looking ahead, in addition to existing VHM™ products, the AI BU will continue to invest in the development of high-efficiency, energy-saving memory applications to create more competitive product technologies.

AI Product Features: High Bandwidth, Low Power Consumption, High Capacity

Products	Descriptions	Features
VHM™	VHM™ is a series of high-bandwidth memories that utilize 3D heterogeneous integration with System on a Chip (SoC), maximizing performance for SoCs. It represents the world's first 3D heterogeneous integration solution combining DRAM and logic chips, advancing mainstream applications in AI, HPC, and networking.	Each VHM™ can achieve bandwidths of up to tens of TB/s.
VHMCube™	VHMCube™ uses TSV (Through-Silicon Via) technology for multi-layer DRAM stacking, enhancing DRAM capacity specifications. It is applicable in HBM-like high-performance computing (HPC) fields.	Each chip offers capacities of up to tens of GB, with bandwidths at the 10TB/s level, and supports small chiplet applications.
Cachelet™	Cachelet™ is a modular DRAM memory designed specifically for last-level cache, offering high bandwidth, sufficient memory density, and competitive performance. It is suitable for niche applications such as AR/VR and servers.	Meets LPDDR4 transmission speed specifications with lower power consumption (less than 2pJ/bit).



Silicon Capacitor

Silicon Capacitors are integrated passive devices (IPD) that utilize an advanced stacked structure to achieve high capacitance density while maintaining a thinner profile. They offer excellent temperature and voltage stability, meeting the needs of high-end smartphones and high-speed computing chips. The S-SiCap™ technology can be applied to various product types and, when combined with advanced packaging processes, provides a range of solutions.



Product	Descriptions	Features
S-SiCap™	AP Memory’s silicon capacitors, named S-SiCap™, stand for Stack Silicon Capacitor. Featuring an advanced stacked structure and coupled with cutting-edge packaging processes, they offer customers effective solutions.	High capacitance density in a thinner profile, with excellent temperature and voltage stability.

Product Development Strategy

IoTRAM™	Continuously optimize power consumption and performance: Expand and refine the UHS/ULS product lines to meet application scenarios.
AI Memory Products (VHM™)	Product Specifications: Ultra-high bandwidth (greater than 10TB/s), high capacity (up to 30GB), low energy Consumption (less than 0.5pJ/bit), custom design services. Product Technologies: Multi-layer WoW 3D packaging, silicon interlayer capacitors, silicon interlayer DRAM.
S-SiCap™	With the rise of generative AI, traditional memory may no longer suffice for system requirements. AP Memory is committed to developing customized memory and silicon capacitor products. By leveraging innovative memory architectures and advanced silicon capacitor integration technologies, AP Memory aims to address current memory challenges and substantially boost system performance, making it a key player in next-generation technology applications.

SASB Operational Activity Indicators

Indicator Number	Indicator Item	2020	2021	2022	2023
TC-SC-000.A	Total Production Volume (in K Pieces)	801,303	1,128,242	499,434	727,039
TC-SC-000.B	Percentage of In-house Production*	0	0	0	0

*Note: AP Memory is a memory chip R&D and design company without large-scale production facilities. It specializes in chip research, design, and sales, with no manufacturing stage. Therefore, the indicator data is 0.

1.3 Operation Overview

Financial Performance

AP Memory currently operates through two major divisions: the IoT BU and the AI BU. The IoT BU focuses on the development and sales of IoT Random Access Memory (IoTRAM™) and silicon capacitor products (S-SiCap™). These products are primarily used in areas such as cellular networks (4G/5G modems), WiFi, Bluetooth, wearables, and video/audio applications. The market for these applications is still growing, driven mainly by the upgrade demand from feature phones transitioning from 2G to 4G, as well as continued growth in mid- to low-tier IoT communication modules. AP Memory is committed to providing new solutions to enhance customer competitiveness and remains optimistic about the long-term growth of the application market and its own position within it.

The AI BU focuses on AI-related memory products (VHM™) and silicon capacitor products (S-SiCap™), primarily through IP licensing, 3D stacking DRAM, and SiCap interposer wafer sales. With the rapid growth of the AI and HPC markets, the AI BU is concentrating on mainstream applications, offering customers solutions with higher bandwidth and lower power consumption. These solutions provide significant advantages in performance and efficiency compared to current options and are expected to become the leading technology for future AI and HPC memory solutions.

As customers completed their inventory adjustments, AP Memory's revenue began to rise quarter by quarter from the low in Q1 2023. The annual revenue reached NT\$4.2 billion, marking a 17% year-on-year decrease. This decline was primarily due to the ongoing operational adjustments in the AI BU. For 2023, the net operating profit was NT\$850 million, down 43% from the previous year, with an operating margin of 20%, a decrease of 9 percentage points year-over-year. The annual pre-tax net profit was NT\$1.62 billion, resulting in a net margin of 34% after accounting for reduced gross margins, increased expense ratios, and external income contributions. The annual revenue growth rate decreased by 4 percentage points. The earnings per share for the year were NT\$8.93, a 26% reduction compared to the previous year.

Historical Revenue and Profit/Loss

In NT\$ K

Item	2020	2021	2022	2023
Revenue	3,549,497	6,617,215	5,094,775	4,226,907
Cost of Revenue	2,523,826	3,591,607	2,873,381	2,471,901
Gross Profit	1,025,671	3,025,608	2,221,394	1,755,006
Operation Exp.	505,925	655,451	720,874	902,225
Selling and Marketing Exp.	86,707	115,405	126,823	124,811
General and Admin. Exp.	103,602	181,544	132,623	164,854
Research and development Exp.	313,530	359,104	462,066	583,627
Expected Credit Loss	2,086	(602)	(638)	28,933
Profit from Operations	519,746	2,370,157	1,500,520	852,781
Non-Operatoion Income and Exp.	420,609	144,109	948,763	766,200
Income before Income Tax	940,355	2,514,266	2,449,283	1,618,981
Income Tax Exp.	124,985	488,809	507,587	174,011
Net Income	815,370	2,025,457	1,941,696	1,444,970
Other Comprehensive Income/Exp.	11,060	(1,314)	4,265	107
Total Comprehensive Income	822,735	2,024,143	1,945,961	1,445,077
Earnings Per Share	5.50	13.67	12.09	8.93

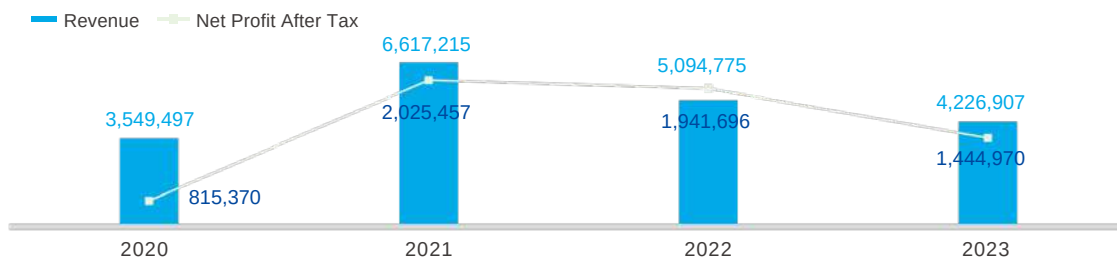
GRI-Related Disclosure / Government Subsidy Information

In NT\$ K

Item	2020	2021	2022	2023
Employee Salaries and Benefit	348,642	530,110	473,014	568,733
Interest and Dividend Expenses	373,176	970,226	1,134,02	1,136,851
Tax Exemptions and Deductions	7,860	23,529	839,368	44,738

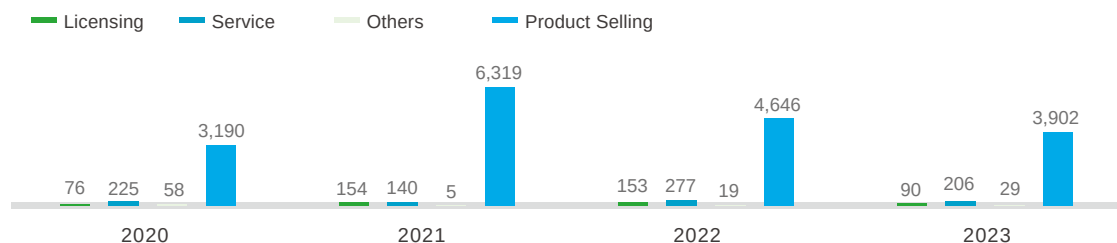
Historical Revenue and Net Profit After Tax

In NT\$ K



Historical Revenue by Product Type

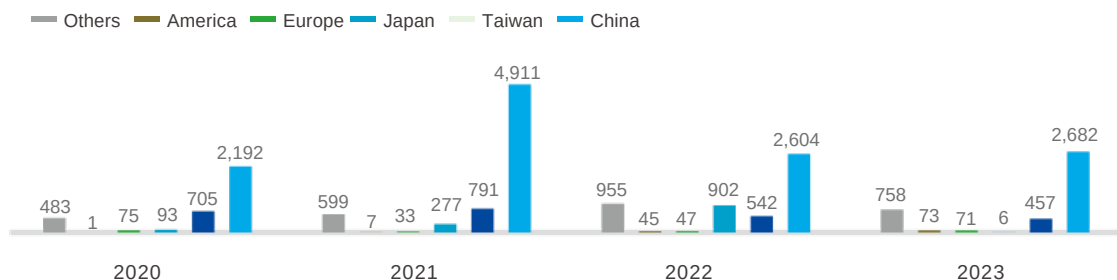
In NT\$ Million



Note: Other income includes revenue from the sale of samples and engineering products.

Historical Revenue by Region

In NT\$ Million



Dividend Policy

According to the Articles of Incorporation, AP Memory's Board of Directors is responsible for formulating a profit distribution plan. If there is a profit at the end of the fiscal year, it shall first be used to offset any accumulated losses from previous years. Subsequently, 10% of the profit shall be allocated to the legal reserve, unless the legal reserve has already reached the total capital of the Company. After complying with any legal or regulatory requirements to set aside or reverse special reserves as stipulated by the competent authority, the remaining balance, along with any undistributed earnings from previous years, will form the basis of a profit distribution proposal drafted by the Board of Directors. If the profit distribution proposal involves issuing new shares, it must be approved by the shareholders' meeting.

Considering the industry environment and the Company's current growth phase, future capital needs, and long-term financial planning, the dividend distribution amount is determined based on the following criteria: (1) 50% of the net profit for the year; and (2) an amount higher than the dividend distributed in the previous year. This is done without violating the Company's Articles of Incorporation. Dividends can be distributed in the form of cash or stock, with the cash dividend constituting no less than 20% of the total dividends distributed to shareholders. The proportion of dividends may be adjusted based on the actual profitability and financial situation of the Company for the year, subject to the approval of the shareholders' meeting.

Recent Dividend Distribution

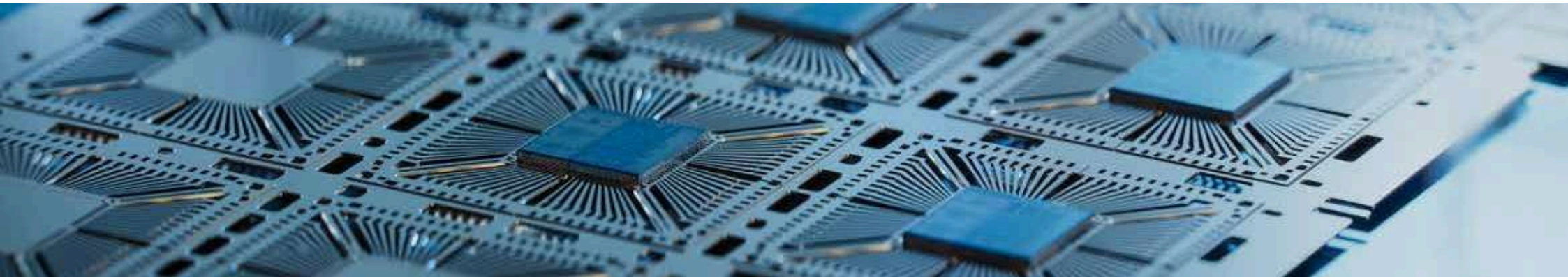
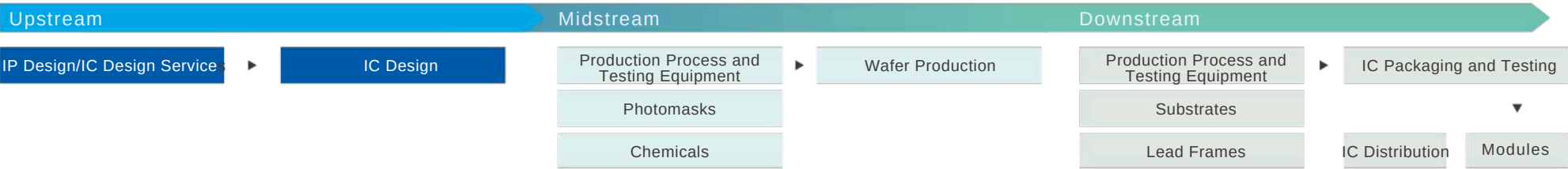
Year	Cash Dividend	Par Value per Share
2023	\$6.998	\$5
2022	\$6.997	\$5
2021	\$5.996	\$5
2020	\$4.999	\$10

Role in the Industry Chain

The IC design industry is positioned at the upstream end of the semiconductor industry chain. Its corresponding midstream and downstream industries include wafer foundries, wafer manufacturing, packaging, and testing. Unlike major foreign companies that adopt a vertically integrated structure encompassing design, manufacturing, packaging, and testing, Taiwan's IC industry features specialized companies at each stage of production, forming a horizontal division of labor.

AP Memory is a memory IC design company. Before the final product is completed, it must go through several stages: first, a professional wafer foundry manufactures the wafer as a semi-finished product. Then, it undergoes initial testing before being forwarded to a specialized packaging facility for cutting and packaging. Finally, a professional testing facility conducts final testing. The tested finished products are then sold through sales channels to system manufacturers for assembly into system products.

In light of this, AP Memory, positioned at the very upstream of the semiconductor industry chain, collaborates with a wide range of supply chain partners. These include wafer foundries, wafer testing facilities, IC packaging and testing facilities, photomask manufacturers, probe card manufacturers, and test equipment suppliers. AP Memory maintains close, long-term cooperation with these partners to provide customers with the highest-quality products and services. Compared to the previous reporting period, there have been no significant changes in the Company's activities, products, services, markets served, supply chain, or downstream entities involved in its operations.





1.4 Social Impact

In recognition of Professor Tso-ping Ma's contributions to the semiconductor industry and his support for the next generation, AP Memory, where he once served as an independent director, along with TSMC and other industry leaders, established the “Dr. Tso-ping Ma Future Innovation Leadership Scholarship” at National Taiwan University's Department of Electrical Engineering in 2022. This scholarship aims to encourage young talents to innovate and lead the advancement of global technology, continuing Dr. Ma's legacy of promoting technological research and innovation.

Additionally, starting in 2023, AP Memory sponsors the "Special Education Student Scholarship and Service Program for Persons with Disabilities" at National Tsing Hua University's Department of Special Education. This initiative not only helps special education students integrate theory and practice, cultivating future high-quality special education professionals, but also empowers children with disabilities in reaching their full potential by providing them with better and more supportive living conditions.

Year	2020	2021	2022	2023	
Recipient Organizations	<ul style="list-style-type: none"> Association for Drug-Free World Taiwan NTU Academic Contribution Fund 	<ul style="list-style-type: none"> Alliance Cultural Foundation NTU Academic Contribution Fund 	<ul style="list-style-type: none"> Dr. Tso-ping Ma Future Innovation Leadership Scholarship 	<ul style="list-style-type: none"> Dr. Tso-ping Ma Future Innovation Leadership Scholarship 	<ul style="list-style-type: none"> University Department of Special Education Student Scholarship
Amount (NT \$)	3,200,000	2,050,000	3,000,000	3,000,000	120,000

2

Response

Identifying Sustainability Impacts

2.1 Identifying Key Stakeholders

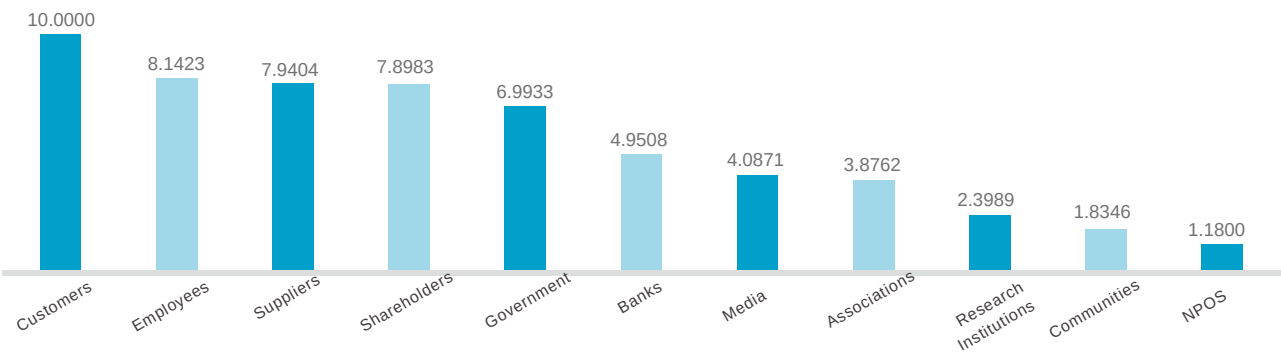
2.2 Materiality Identification and Analysis

2.3 Sustainability Issue Management Policy

2.1 Identifying Key Stakeholders

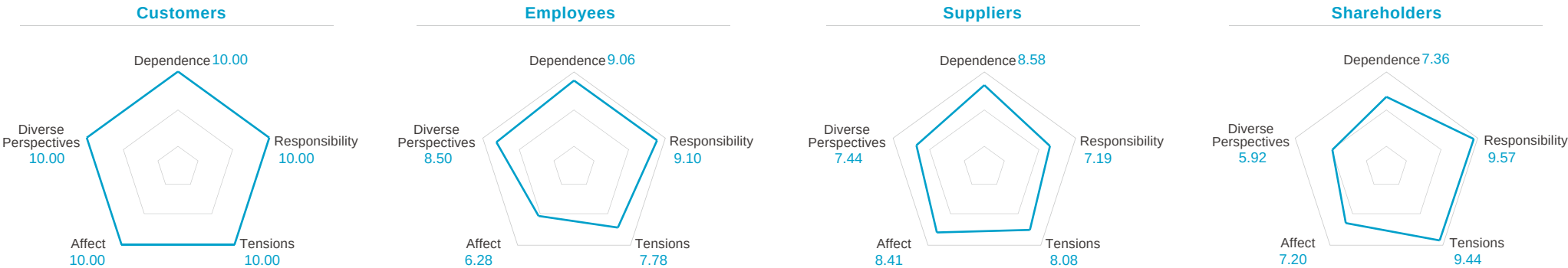
AP Memory references the AA1000 SES stakeholder engagement standards, focusing on the five dimensions of "Responsibility, Influence, Tension, Diverse Perspectives, and Dependence," to identify key stakeholders. In 2023, following the processes from 2021 and 2022, 11 ESG project leaders and members participated in the identification and discussion, confirming the key stakeholder categories as customers, employees, suppliers, and shareholders. The scoring results for the five dimensions were reviewed, and no significant changes were found in the existing stakeholder identification. Therefore, the four key stakeholder categories—customers, employees, suppliers, and shareholders—will continue to be used.

Comprehensive Stakeholder Identification Results



Note: The vertical axis values indicate the relative importance of each stakeholder group, derived from statistical analysis of evaluations by various managers. This summary consolidates the findings from the five dimensions of stakeholder engagement.

Evaluation Results for the Five Dimensions of Key Stakeholders



1 AP Memory	2 Response	3 Governance	4 Pioneering	5 Collaboration	6 Empowerment	7 Coexistence	8 Appendix
Leading Industry Development	Identifying Sustainability Impacts	Upholding Corporate Ethics	Driving Product Innovation	Building Partnerships	Nurturing Human Capital	Maintaining Environmental Balance	

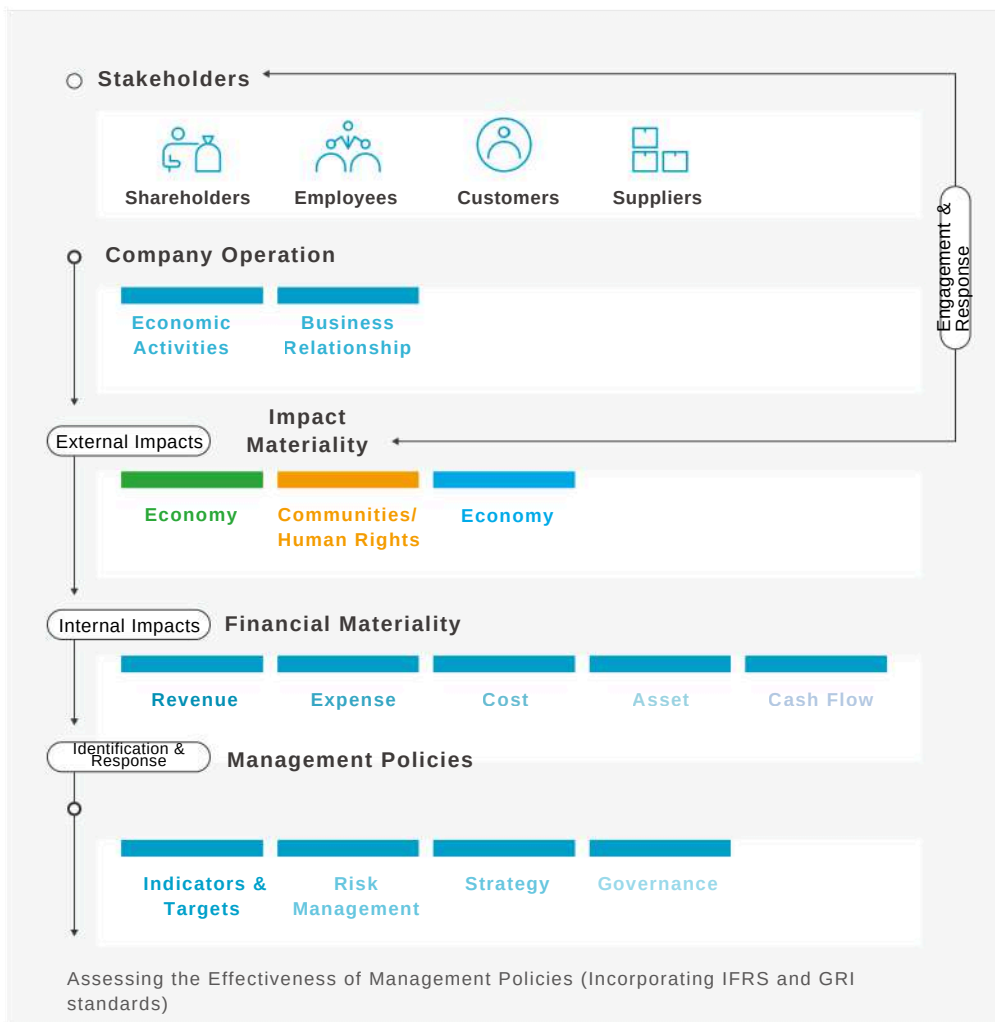
Key Stakeholder Engagement

Stakeholder Types	Customers	Employees	Suppliers	Shareholders
Significance to AP Memory	AP Memory is a leading provider in memory chip design, offering customized memory chips and a comprehensive solution encompassing R&D, design, licensing, and sales services in memory chip technology. The Company aims to innovate and develop competitive products that are unmatched by competitors.	A professional and stable talent pool is crucial for maintaining excellent business operations and enhancing organizational competitiveness. Therefore, offering a diverse range of reward and benefit schemes meets various employee expectations, boosts individual contributions to the team, and helps achieve AP Memory's operational goals.	Supply chain and carbon management are key trends in today's tech industry. As a memory chip design company positioned upstream in the semiconductor supply chain, AP Memory forms long-term partnerships with midstream and downstream manufacturers throughout the chip production process. Being upstream in the industry chain, AP Memory has a crucial role in boosting supply chain resilience. Through collaborative efforts with both upstream and downstream partners, AP Memory aims to implement sustainable practices across environmental, social, and governance dimensions.	Responsible investment is gaining increasing attention, and investors are becoming more focused on AP Memory's sustainability efforts. Enhancing sustainability and ensuring transparency are current priorities for AP Memory. Ongoing communication with shareholders and key investors about AP Memory's sustainability strategies and achievements is essential for driving the Company's future growth.
Responsible Departments	IoT BU AI BU	Administration Center	Operations Center	Corporate Governance Finance & Accounting Center
Engagement Methods/Frequency	<ul style="list-style-type: none"> Email, phone contact / Daily Customer meetings / As needed Customer audits / As needed Customer satisfaction surveys / Annually Quality meetings, complaint responses / As needed 	<ul style="list-style-type: none"> Labor-management meetings / Quarterly All-hands Meetings / Quarterly General company announcements / As needed 	<ul style="list-style-type: none"> Email, phone contact / Daily Meetings / As needed Supplier audits / As needed Quality meetings / As needed 	<ul style="list-style-type: none"> Shareholder meetings / Annually Financial statements / Quarterly Investor conferences / Quarterly Participation in investment forums hosted by domestic and international investment institutions or securities firms / As needed
Engagement Topics	<ul style="list-style-type: none"> Developing products that meet customer needs Ensuring product quality meets customer standards 	<ul style="list-style-type: none"> Offering competitive compensation and benefits to attract and retain talent Creating a friendly work environment with good labor relations and high employee engagement 	<ul style="list-style-type: none"> Establishing supplier management guidelines Tracking and improving product quality 	<ul style="list-style-type: none"> Explaining financial and operational performance Outlining company operational strategies

2.2 Materiality Identification and Analysis

AP Memory conducts an annual assessment of sustainability issues to formulate strategies and action plans for high-impact topics, setting short, medium, and long-term goals for key areas. In 2023, with the formal release of the IFRS Sustainability Disclosure Standards and the European Sustainability Reporting Standards (ESRS), AP Memory has based its approach on "GRI 3: Material Topics 2021." Additionally, it has incorporated guidance from IFRS and ESRS on sustainability impacts, applying the principle of "Double Materiality" to assess both impact materiality and financial materiality. This involves a five-stage identification process to evaluate the external impacts of AP Memory's operations on society, the environment, communities, and human rights, as well as the internal financial impacts resulting from the need to allocate resources for managing these external impacts. The results of this sustainability impact analysis are used to determine the material sustainability issues to prioritize in reporting.

Based on AP Memory's operational activities, business relationships, and stakeholder overview, relevant sustainability issues are collected in reference to global sustainability reporting standards (GRI, SASB, TCFD) and international sustainability assessment indicators. The responsible departments evaluate the extent of each issue's actual or potential impact—whether positive or negative—on the economy, environment, and communities (including human rights) within the Company's operations and business relationships. The departments then quantify the impact of these issues on the Company's operations, further refine the results through discussions, and prioritize them based on their importance. This process identifies material sustainability topics and prioritizes the disclosure of relevant objectives, plans, and management effectiveness.



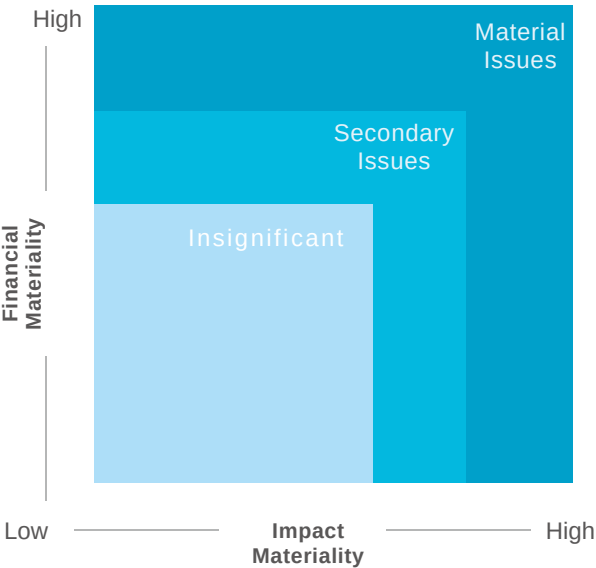
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Sustainability Impact Assessment

1	Understanding the Organizational Context	<ul style="list-style-type: none"> Identify critical concerns and potential impacts for four categories of key stakeholders. Analyze the potential impacts of economic activities and upstream and downstream supply chain relationships in operations. Map potential impacts to 21 sustainability issues.
2	Identifying External Impacts	<ul style="list-style-type: none"> Considering comprehensive information from ongoing engagement with stakeholders, each responsible department assesses the impacts of issues across different dimensions—actual or potential, positive or negative. This process identifies the significance of impacts on upstream and downstream supply chains, environmental, and social aspects (external to the organization) under current management intensity regarding 21 sustainability issues. Impact Materiality Identification Method: <ul style="list-style-type: none"> Negative Impact Materiality: Severity (scale, scope, remediability) x Likelihood Positive Impact Materiality: Benefit Level (scale, scope) x Likelihood
3	Identifying Internal Impacts	<ul style="list-style-type: none"> Financial Materiality: Based on the impact materiality of the 21 sustainability issues, each responsible department further evaluates their short-, medium-, and long-term financial impacts on operational activities (external to internal). The assessment considers the standards for materiality in financial statements, analyzing the relevance of various financial indicators to AP Memory's value. The 2022 revenue serves as the baseline for measuring the degree of financial materiality impact, which includes information related to revenue, costs, expenses, cash flow, and funding/financing. Financial Materiality Identification Method: <ul style="list-style-type: none"> Financial Materiality: Degree of operational impact x Likelihood
4	Proposing Management Policies	<ul style="list-style-type: none"> The results of the impact materiality and financial materiality assessments for various issues are summarized. The issues are ranked by positive and negative impacts based on their materiality. The final materiality evaluation results are confirmed with each responsible department, considering AP Memory's future operational plans. Based on these evaluations, responsible departments develop policies, action plans, and set targets for each issue. Following the double materiality principle from the ESRS disclosure guidelines, the impact materiality and financial materiality of each issue are considered. After discussions with the relevant departments, it was confirmed that a total of seven material issues were included in the sustainability report. AP Memory will establish a Sustainability Development and Risk Management Committee to oversee the implementation of future sustainability impact analyses and present the findings to the Board of Directors for approval.
5	Determining Material Sustainability Issues	<ul style="list-style-type: none"> After discussions with the responsible departments, seven material issues were identified as priorities for disclosure. These issues correspond to six GRI topic standards and two custom topics. They also align with the SASB standards for the Technology and Communications industry, specifically the Semiconductors sector.

Identifying Material Issues Prioritized for Disclosure

Based on the sustainability impact analysis using the double materiality assessment method, seven negative material issues and six positive material issues have been identified. Additionally, four negative secondary issues are categorized as ongoing concerns. Following final confirmation, the management policies and implementation results for the seven material issues are prioritized in this Report. As this is the first year using the double materiality assessment method, which differs from the previous year's material issue analysis, no comparison or explanation of differences between the two years' material issues will be provided.
















































Ranking	Impact Materiality		Financial Materiality		Double Materiality	
	⊕ Positive	⊖ Negative	⊕ Positive	⊖ Negative	⊕ Positive	⊖ Negative
1	Economic Impact	Sustainable Supply Chain	Economic Impact	Sustainable Supply Chain	Economic Impact	Sustainable Supply Chain
2	Human Capital Development	Product Liability	Innovation Management	Quality Management	Innovation Management	Quality Management
3	Innovation Management	Innovation Management	Climate Strategy	Innovation Management	Climate Strategy	Product Liability
4	Climate Strategy	Quality Management	Social Impact	Ethical Management	Human Capital Development	Innovation Management
5	Talent Attraction& Retention	Energy Management	Human Capital Development	Product Liability	Talent Attraction& Retention	Talent Attraction & Retention
6	Social Impact	Talent Attraction & Retention	Talent Attraction& Retention	Talent Attraction & Retention	Social Impact	Energy Management
7		Information Security		Information Security		Information Security
8		Climate Strategy		Economic Impact		Ethical Management
9		Diversity & Inclusion		Waste Management		Waste Management
10		Water Resource Management		Occupational Health & Safety		Climate Strategy
11		Waste Management		Energy Management		Economic Impact
12		Economic Impact		Biodiversity		Diversity & Inclusion
13		Ethical Management		Tax Management		Occupational Health & Safety
14		Air Pollution Management		Climate Strategy		Water Resource Management
15		Biodiversity		Water Resource Management		Biodiversity
16		Occupational Health & Safety		Diversity & Inclusion		Product Safety and Marketing
17		Product Safety & Marketing		Product Safety and Marketing		Air Pollution Management
18		Privacy Protection		Air Pollution Management		Tax Management
19		Tax Management		Privacy Protection		Privacy Protection

Note: Negative impacts were not identified for Human Capital Development and Social Impact.

Aligning Material Sustainability Issues with Standards

Review the 31 GRI Sustainability Reporting Standards and match them with the material issues, selecting six relevant GRI topic standards and two custom topics. Also, align with SASB semiconductor industry indicators to initiate the preparation of this Report.

Material Issues			Impact Dimensions			Value Chain Impact Scope					GRI Topic Standards or SASB Standards Mapping	Corresponding Disclosure Sections	
			Economic	Environment	Communities	Human Right	Upstream Suppliers	Tier 1 Suppliers	AP Memory	Customers			End Customers
Sustainable Supply Chain												GRI 204 Procurement Practices 2016 TC-SC-440a.1 Raw Material Procurement	5-2 Supply Chain Management 5-3 Raw Material Procurement
Quality Management												GRI 416 Customer Health and Safety 2016 TC-SC-410a.1 Product Lifecycle Management	5-4 Product Quality
Product Liability													4-3 Product Lifecycle Management
Innovation Management												Custom Topic: Energy Consumption and Power	4-1 Innovation Management
													
Talent Attraction & Retention												GRI 401 Employment 2016 GRI 405 Diversity and Equal Opportunity 2016 TC-SC-330a.1 Recruitment and Management of Global Talent	6-2 Recruitment and Retention 6-3 Compensation and Benefits
Energy Management												GRI 302 Energy 2016 GRI 305 Emissions 2016 TC-SC-130a.1 Process Energy Management TC-SC-110a.1 、 TC-SC-110a.2 Greenhouse Gas Emissions	7-2 GHG Management 7-3 Energy Management
CyberSecurity												Custom Topic: Information Security Breaches	3-5 Information Security Management

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Impact Time Horizon of Material Sustainability Topics

Material Issues		External Sustainability Impact	Internal Financial Impact	Impact Time Horizon		
				Occurred	Potential Impact	
					1-2 years	3-5years 5+years
Sustainable Supply Chain	① Negative	With increasingly stringent environmental regulations worldwide and customer demands for sustainable supply chain management, it is crucial to actively implement supplier communication and sustainability management. Failure to address and manage these issues proactively could lead to environmental impacts or customer health/safety risks from the products sold due to supplier material quality or chemical regulation issues. This may result in product quality anomalies or health/safety hazards for end users.	If a company fails to actively grasp environmental regulations in various countries and implement sustainable supplier management, it could face risks such as product returns from customers and disruptions in the supply chain. These issues could potentially lead to serious impacts on the Company's finances and operations.	•		
Quality Management	① Negative	Some products do not meet quality standards, leading to occasional customer complaints and returns.	Customer complaints resulting from product quality issues may require compensation to customers and could impact shipping.	•		
Product Liability	① Negative	As customer demand for green products increases and international regulations on substances (such as per- and polyfluoroalkyl substances, PFAS) become stricter, failure to comply with regulatory deadlines may lead to environmental impacts and operational disruptions, including the inability to fulfill customer orders.	If suppliers do not proactively plan for chemical alternatives and fail to meet international regulations or customer requirements, necessitating a change of suppliers, additional costs for development and verification may arise. In severe cases, this could lead to supply disruptions.		•	
Innovation Management	① Negative	If product design specifications and wafer foundry process technology nodes and production capabilities are not promptly upgraded, there is a risk of failing to meet customer requirements for end product development and application.	Delays in new product development and design can reduce competitiveness and order-taking capability, leading to a decline in revenue.	•		
	② Positive	AI Products: Innovative design in low-power 3D heterogeneous packaging memory provides high energy-efficient memory solutions to achieve a balance between performance and power consumption while meeting environmental sustainability requirements. IoT Products: Focuses on designing and developing low-power, high-performance memory solutions. In recent years, there has been continuous development of customized products for 1.2V low-power applications.	Success in developing high-efficiency products (AI Products: high bandwidth, low power; IoT Products: low power, compact size) enhances product sustainability and competitiveness, leading to increased customer orders.	•		

2.3 Sustainability Issue Management Policy

Sustainable Supply Chain

<div>Materials Issue</div> <div></div>	-Policies/Commitments	<ul style="list-style-type: none"> Ensure that outsourced suppliers meet management standards according to the "External Supplier Management Operational Guidelines." Assist customers in investigating and confirming the sources of conflict minerals (tin, tungsten, tantalum, gold) used in products to ensure they do not come from mining regions in the Democratic Republic of Congo and surrounding countries where labor conditions and human rights are compromised. Conduct surveys and manage suppliers (wafer fabs, packaging plants) to ensure that the materials they use come from smelters certified by the Responsible Minerals Initiative (RMI). 	-Responsibility	<ul style="list-style-type: none"> Engineering Center, Operations Center, Quality Assurance Division / President
			-Monitoring & Review	<ul style="list-style-type: none"> Hold irregular internal meetings based on actual production conditions to review supplier management indicators and decide if immediate corrective actions are needed
	-Goals	<ul style="list-style-type: none"> Achieve an average rating of B or higher for all process suppliers 	-Stakeholder Engagement	<div>External</div> <ul style="list-style-type: none"> Regularly communicate with suppliers through established channels to review, audit, and collaboratively address quality issues, and engage in continuous improvement activities.
	-Action Plans	<ul style="list-style-type: none"> Survey new AVL suppliers Conduct annual evaluations and audits of existing qualified suppliers 		
	-Annual Results	<ul style="list-style-type: none"> AVL Survey: No applicable suppliers for 2023, so no relevant survey was conducted. <div>Outsourced Fabs (Packaging, Testing)</div> <ul style="list-style-type: none"> ≥80 Points: A (Excellent): 0 70-79 Points: B (Satisfactory): 5 >70 Points: C (Needs Improvement): 0 	<div>Suppliers (Wafer Manufacturers)</div> <ul style="list-style-type: none"> ≥80 Points: A (Excellent): 2 70-79 Points: B (Satisfactory): 1 70 Points: C (Needs Improvement): 0 	

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Material Issues	External Sustainability Impact		Internal Financial Impact		Impact Time Horizon			
					Occurred	Potential Impact		
						1-2 years	3-5years	5+years
Talent Attraction and Retention	①Negative	The semiconductor industry faces ever-evolving challenges, and the IC design sector, being highly knowledge-intensive and requiring specialized talent, encounters difficulties in recruiting key IC design professionals.	Failure to recruit suitable talent in a timely manner or experiencing excessive loss of high-quality employees within a specific period can impact operational costs and development. Additionally, expanding recruitment channels to attract diverse talent groups incurs extra recruitment costs.					
	②Positive	As the Company's business scale and expansion continue to grow, the demand for R&D personnel remains high. AP Memory is focused on recruiting and retaining key talent by offering competitive compensation and benefits that surpass industry standards. This approach is crucial for attracting top talent and driving the Company's growth.	By establishing systems for talent attraction and retention, the Company aims to reduce employee turnover and associated costs (such as recruitment and work delays).					
Energy Management	①Negative	In 2023, the expansion of office space and staff increased electricity consumption compared to the previous year, indirectly raising GHG emissions. AP Memory continues to advance its energy management efforts to alleviate the impact of energy use. In response to energy efficiency regulations from authorities or requirements from downstream customers, the difficulty and cost of implementing energy-saving measures or purchasing renewable energy (or certificates) are increasing. Outsourced wafer foundries, which are highly energy-intensive, represent a significant area of impact for semiconductor energy management.	As the Company's operational scale expands, increased electricity consumption has led to rising electricity costs. Current renewable energy rates are relatively high, and if electricity usage continues to grow year over year (with a higher percentage of renewable energy use), power costs will increase. In the coming years, rising electricity prices and potential carbon taxes or fees due to GHG emissions may lead to higher energy costs throughout the supply chain, resulting in financial impacts for AP Memory.					
Information Security	①Negative	AP Memory follows the NIST Cybersecurity Framework to continually enhance its existing cybersecurity deployment. However, with the evolving nature of cybersecurity threats, inadequate protection and response could lead to the leakage of confidential customer order information, resulting in customer claims, order cancellations, reputational damage, and operational disruptions. Additionally, employees falling victim to phishing attacks could face substantial ransom demands, causing further losses.	The Company is committed to improving cybersecurity protection and related systems by investing in capital expenditures for equipment and operational expenses for cybersecurity consultancy services. It also addresses the financial risks associated with potential ransomware attacks.					

Product Quality

Materials Issue



-Policies/ Commitments

- Maintain close collaboration with customers, continuously monitoring their needs and quality requirements, and providing timely, effective, and technical support to enhance customer confidence and satisfaction in AP Memory's offerings.
- Commit to a culture of continuous improvement, ensuring high-quality products and services. Strive for excellence to deliver superior, high-quality products that meet customer needs.

-Responsibility

- AI BU, IoT BU, Engineering Center, Operations Center, Quality Assurance Division / President

-Monitoring & Review

- Hold weekly supplier meetings to review the status of various quality KPIs

-Goals

Customer Complaints

- Abnormality Level 1: ≤ 1 per month (Incidents per month / Units shipped per month, in millions)
- Abnormality Level 2: ≤ 3 per month
- Abnormality Level 3: ≤ 2 per month
- Abnormality Level 4: Not allowed

Repeat Incidents

- Abnormality Level 1: ≤ 2 per quarter
- Abnormality Level 2: ≤ 1 per quarter
- Abnormality Level 3 & 4: Not allowed

-Stakeholder Engagement

External

- Customers: Understand customer quality requirements through audits, site visits, and customer satisfaction surveys.
- Suppliers: Utilize regular communication mechanisms with suppliers to review and discuss quality standards. Weekly meetings are held between engineering units and external suppliers, with monthly reports on yield rates and significant deviations from quality targets. If actual values fall below quality goals, suppliers are required to propose improvements. Ongoing collaboration is encouraged to resolve quality issues and support continuous improvement efforts.

-Action Plans

- Continuous Improvement Activities Across Departments
- Regular Review of Supplier Quality
- Quarterly Supplier Quality Assessments
- Annual Supplier Audits

-Annual Results

Customer Complaints

- Abnormality Level 1: ≤ 1 each month throughout the year
- Abnormality Level 2: ≤ 3 each month throughout the year
- Abnormality Level 3: ≤ 2 each month throughout the year
- Abnormality Level 4: No occurrences throughout the year

Repeat Incidents

- Abnormality Level 1: 0 occurrences each quarter throughout the year
- Abnormality Level 2: ≤ 1 occurrence each quarter throughout the year
- Abnormality Levels 3 & 4: 0 occurrences each quarter throughout the year

Innovation Management - AI Products

Materials Issue



-Policies/Commitments	<ul style="list-style-type: none"> Continuously develop memory chips with high bandwidth, low power consumption, and large capacity capabilities. 	-Responsibility	<ul style="list-style-type: none"> Product Development Department / Senior Manager (at department level) R&D Center / Senior Manager: (at department level)
		-Monitoring & Review	<ul style="list-style-type: none"> Successfully completed chip verification for the new product on the customer side
-Goals	<ul style="list-style-type: none"> Achieve an energy efficiency target of 0.5-0.7W/MH for end-system products. 	-Stakeholder Engagement	<div>External</div> <ul style="list-style-type: none"> Hold meetings with customers to review the design specifications for new products, aiming to meet energy-saving and efficiency requirements, and work with customers to verify the accuracy of product specifications based on the verification results.
-Action Plans	<ul style="list-style-type: none"> Modify the array design architecture of our DRAM products, streamlining the circuit design to reduce device power supply requirements and energy consumption. Produce customer-side logic wafers using an advanced low-power process. 		
-Annual Results	<ul style="list-style-type: none"> System performance verification met the target, and we successfully completed the subsequent mass production and delivery according to the customer's specified schedule in the fourth quarter of 2023. 		

Innovation Management - IoTRAM

Materials Issue



-Policies/ Commitments

- Continuously develop memory chips with features such as low power consumption, low electrical consumption, compact size, fewer pins, and high performance, while optimizing the structure.

-Responsibility

- Product Development Department / Senior Manager (at department level)
- R&D Center / Senior Manager: (at department level)

-Monitoring & Review

- confirm that the low-voltage PSRAM used by customers has successfully reduced standby power consumption by at least 20%

-Goals

- Offer products with standby power consumption that is at least 20% lower than existing 1.8V solutions.

-Stakeholder Engagement

External

- Hold discussions with customers during the product design and testing verification phases to ensure the product aligns with customers' design requirements and to synchronize the testing and verification methods.

-Action Plans

- Reduce the power supply circuit of the IoT virtual static random access memory (VsRAM) product from 1.8V to 1.2V while maintaining the existing bandwidth.

-Annual Results

- The verification of the 1.2V IoT VSRAM was completed, demonstrating a standby power reduction of over 20% and a dynamic power reduction of over 30% compared to the 1.8V version.

Talent Attraction and Retention

Materials Issue



-Policies/ Commitments

- Optimize talent recruitment strategies to create a competitive and supportive workplace.

-Responsibility

- Human Resources Division / President

-Monitoring & Review

- Regularly track new hires and turnover rates each quarter and prepare related data analysis reports for internal discussions

-Goals

- Increase the retention rate of new employees within the first three years, aiming for a target of 75%.

-Stakeholder Engagement

Internal

- Employees can provide feedback through various communication channels such as Coffee Q&A and the Speak Up mailbox

External

- We use diverse recruitment channels (104, LinkedIn) and organize campus recruitment events to build our brand and attract top talent.

-Action Plans

- Optimize employee care and retention mechanisms.
- Regularly track new hire rates, turnover rates, and the retention rate of new employees within the first three years.

-Annual Results

- New Hire Rate: 20.99%
- Turnover Rate: 13.2%
- Retention Rate of New Employees within Three Years: 70%

Energy Management

Materials Issue



-Policies/ Commitments

- Continuously promote energy conservation and carbon reduction in the office by managing workplace temperatures and controlling lighting switches by area to reduce power waste.

-Responsibility

- Human Resources Division / President

-Monitoring & Review

- The board of directors tracks GHG management progress and implementation each quarter.

-Goals

- Expand the scope of energy and GHG inventories to include the operation site in Hangzhou, China.

-Stakeholder Engagement

Internal

- Through the GHG inventory project, employees gain fundamental knowledge of GHGs and are guided to implement daily energy-saving practices.

External

- Continuously use communication channels to understand stakeholder concerns regarding climate issues.

-Action Plans

- Regularly track monthly energy consumption.
- Conduct annual GHG inventory projects.

-Annual Results

- Completed the energy consumption survey and GHG inventory for the Hsinchu site in Taiwan and the Hangzhou site in China in 2023.

Information Security

Materials Issue



-Policies/Commitments	<ul style="list-style-type: none"> AP Memory has established information security policies and procedures to protect the security of company, customer, and supplier information. This includes ensuring that relevant personnel receive necessary training, conducting regular risk assessments and vulnerability management, and implementing effective monitoring and reporting mechanisms to promptly identify and address information security risks. AP Memory focuses on the security and reliability of data and information infrastructure while considering environmental, social, and corporate governance factors to safeguard the interests of the Company and its stakeholders. 	-Responsibility <ul style="list-style-type: none"> Information Management Division / Cyber Security Governance Committee
		-Monitoring & Review <ul style="list-style-type: none"> Monthly information security briefings Submit monthly reports on information security management data and the execution results of security plans to the Cyber Security Governance Committee
-Goals	<ul style="list-style-type: none"> Number of network breaches, malware infections, and ransomware incidents: ≤ 0 Number of supply chain security incidents affecting operations: ≤ 0 	-Stakeholder Engagement <div>Internal</div> <ul style="list-style-type: none"> Conduct regular employee information security awareness campaigns and social engineering drills to gauge staff awareness of security risks. <div>External</div> <ul style="list-style-type: none"> Understand customer requirements for AP Memory's security through supplier security audits conducted by customers; use third-party risk management platforms to assess and urge improvement of supplier security risks.
-Action Plans	<ul style="list-style-type: none"> Evaluate internal and external security risks and improvement plans based on security intelligence and emerging trends. Engage in regular information security exchanges with industry peers. Host regular social engineering drills and security awareness campaigns to enhance employee security consciousness. Periodically perform network penetration testing, vulnerability scanning and patching, disaster recovery drills, and monitor endpoint risks and alert systems for anomalies. 	
-Annual Results	<ul style="list-style-type: none"> Number of company security incidents: 0 Average annual score on the third-party security risk management platform: 91.5 No security risk records on the endpoint risk alert system (EDR management platform) Completed disaster recovery drill plans for critical systems 	

3

Governance

Upholding Corporate Ethics

3.1 Corporate Governance

3.2 Tax Governance

3.3 Ethical Management

3.4 Risk Management

3.5 Cybersecurity Management

1 AP Memory	2 Response	3 Governance	4 Pioneering	5 Collaboration	6 Empowerment	7 Coexistence	8 Appendix
Leading Industry Development	Identifying Sustainability Impacts	Upholding Corporate Ethics	Driving Product Innovation	Building Partnerships	Nurturing Human Capital	Maintaining Environmental Balance	

3.1 Coporate Governance

Board Composition and Operation

AP Memory, in accordance with the Company Act, Securities and Exchange Act, and other relevant regulations, has established its corporate governance structure and executed corporate business. The highest governing organizations is the board of directors, which includes the Audit Committee and the Compensation Committee. AP Memory has formulated the "Procedures for Election of Directors" to encourage shareholder participation in the nomination and election of directors based on principles of fairness and impartiality. Pursuant to the Company Act and relevant regulations, the board elections follow a candidate nomination system. In 2023, the board of directors comprises 8 members, including 4 independent directors and 4 directors, with a percentage of the total number of seats is 50%. AP Memory’s official website features a "Corporate Governance" section that includes information on the corporate governance structure, the operations of the board and functional committees, and important regulations, allowing stakeholders to understand the board’s operations.

2023 Board of Directors Sustainability Governance Proposals

- Feb 24, 2023: [Report] Progress on the preparation of the 2022 ESG report and execution of GHG inventory
- July 28, 2023: [Report] Publication of the ESG report and results of the GHG inventory.
- Oct 27, 2023: [Report] ESG planning for the next five years.

Title	Name	Professional Qualifications and Experience	Sustainability Roles
Chairman	Chen, Wen-Liang	Holds a Ph.D. in Applied Physics from Yale University and is currently the CEO and CTO of AP Memory. Previously held key R&D positions at tech giants such as Intel and Cypress, with over 30 years of dedication to the semiconductor industry. Possesses expertise in professional leadership, operational management, and strategic planning.	Leading the drive for sustainability by voluntarily disclosing sustainability reports and GHG inventories ahead of regulatory requirements. Increased the number of independent director seats to elevate corporate governance to a higher level.
Director	Hung, Chih-Hsun	Holds a Ph.D. in Industrial Engineering and Management from National Yang Ming Chiao Tung University and is currently the President of AP Memory. Formerly served as a Senior Product Engineer at a publicly listed company in Taiwan, with extensive practical experience in product development and testing.	As the President of AP Memory, guiding employees towards the sustainability goals set by the board of directors
Director	Shanyi Investment Co., Ltd Representative: Liu, Chin-Hung	Holds a Master's degree in Applied Chemistry from National Yang Ming Chiao Tung University and is currently a Senior Vice President at AP Memory. Previously held senior management positions in Exchanged-listed and OTC-listed companies in Taiwan, with rich experience in industry planning.	Serving as Senior Vice President of the AP Memory AI BU, responsible for product specification development and market expansion.
Director	Li Shun Investment Co. Representative: Hsieh, Ming-Lin	Holds a Master's degree in Business from National Taiwan University. Currently serves as the Vice President of Powerchip and holds board and supervisory roles in multiple Exchanged-listed and OTC-listed, and public companies.	Bringing experience as a director in multiple listed and publicly traded companies, sharing insights on sustainability management practices
Independent Director	Yeh, Jui-Pin	Holds a Master's in Electrical Engineering from National Central University. Former Chairman and Global VP at Synopsys Taiwan, with expertise in corporate operations, marketing, and strategic planning, particularly in the semiconductor industry.	
Independent Director	Liu, Frank	Holds dual Master's degrees in Electrical Engineering and Computer Science from MIT and in Physics from Purdue University. Has held roles as Chairman and President at various companies, with extensive experience in company operations and a strong grasp of industry trends.	
Independent Director	Wang, Hsuan	Holds a Ph.D. in Accounting from NTU, and is a licensed accountant and international internal auditor. Currently an Assistant Professor in the Accounting Department at Yuan Ze University and Chair of the university's Internal Audit Committee, with significant expertise in accounting.	
Independent Director	Sun, Elizabeth	Holds a Ph.D. in Finance from the University of Cincinnati. Formerly an Associate Professor of Finance at San Jose State University, with substantial financial expertise. Also served as Senior Director and Acting Spokesperson in the Corporate Information Division at TSMC, with rich experience in corporate governance.	Acting as an independent director to provide oversight and recommendations, with a focus on issues important to stakeholders.

Board Member Diversity

To implement the "Corporate Governance Best Practice Principles," specifically Article 3, which mandates consideration of diversity in board composition, the current board includes two female directors, representing 25% of the total board members. The board members possess diverse professional backgrounds in both industry and academia, with expertise in areas such as management, leadership, industry knowledge, academia, and financial management.



Title	Name	Gender	Age	Employee	Term of Independent Director			Core Competencies in Diversity							
					< 3 Year	3~9 Year	> 9 Year	Core Competencies in Diversity	Accounting & Financial Analysis	Management Capability	Crisis Management	Industry Knowledge	International Market Perspective	Leadership	Decision-Making
Chairman	Chen, Wen-Liang	Male	A	.				.	.	.	.	.	.	.	.
Director	Hung, Chih-Hsun	Male	A	.				.		.	.	.	.	.	.
Director	Liu, Chin-Hung (Note 1)	Male	A	.				.		.	.	.	.	.	.
Director	Hsieh, Ming-Lin (Note 2)	Male	A					.	.	.	.	.	.	.	.
Independent Direcotr	Yeh, Jui-Pin	Male	A			.		.		.	.	.	.	.	.
Independent Direcotr	Liu, Frank	Male	A		.			.		.	.	.	.	.	.
Independent Direcotr	Wang, Hsuan	Female	B		.			.	.	.	.	.	.	.	.
Independent Direcotr	Sun, Elizabeth	Female	A		.			.	.	.	.	.	.	.	.

•Notes:

1 : Representative of Sanyi Investment Co.

2 : Representative of Lishun Investment Co.

3 : A = 51 years old and older; B = 31-50 years old

4 : Fifth-term board tenure: May 29, 2023 to May 28, 2026

Audit Commitee

The Audit Committee is composed entirely of independent directors and is designed to assist the board in overseeing the quality and integrity of the Company’s accounting, auditing, financial reporting processes, and financial controls. The committee meets regularly each quarter and convened 7 times in 2023. Details on the attendance of each member and other relevant information about the Audit Committee can be found in the AP Memory annual report in the section "Corporate Governance - Audit Committee Operations."

Compensation Committee

The members of the Compensation Committee are appointed by the Board of Directors, and the committee includes independent directors Yeh, Jui-pin (Convener), Liu, Jung-hsi, Wang, Hsuan, and Lan, Ching-yao. This composition meets the regulation that "the number of independent directors on the committee must exceed half of the total number of committee members" as stipulated in the "Regulations Governing the Organization and Management of the Compensation Committee." The Compensation Committee assists the board in fulfilling its responsibilities regarding the Company's compensation and benefits policies, plans, and programs, as well as evaluating the compensation of directors and managers. The committee met four times in 2023.

Key Issue Communication

In addition to regular meetings, AP Memory's management team regularly provides the Board with important reports and information, including:

- Accounting Department: Quarterly financial reports
- Internal Audit Department: Quarterly internal audit reports
- Operations Management Team: Quarterly operational status reports
- Corporate Governance Officer: Information on ESG implementation,
- GHG emissions inventory, and occasional updates on regulatory changes

Board Professional Development

To enhance the professional competencies of its directors, AP Memory arranges for each director to participate in at least 6 hours of training annually. In 2023, the total training hours for the board amounted to 48 hours, averaging 6 hours per director. The training covered a range of topics including economic trends, corporate governance, legal compliance, and various ESG-related courses such as climate change. For more details on the board's training activities in 2023, please refer to the "Corporate Governance - Corporate Governance Operations, Any Deviation from the Corporate Governance Best-Practice Principles for TWSE/TPEX Listed Companies, and the Reason for Any Such Deviation" section in the AP Memory annual report.

Board Performance Evaluation

In accordance with the "Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies," AP Memory has established the "Rules for Performance Evaluation of the Board of Directors." The corporate governance unit assists the board and its functional committees in setting the evaluation procedures and criteria as outlined in the regulations. The performance evaluation is completed by the end of the first quarter of the following year, and the results are reported to the board of directors.

Performance Evaluation of the Board of Directors and Functional Committees for 2023

Evaluation Scope	<ul style="list-style-type: none"> The evaluation covers the performance of the entire board, individual directors, and the functional committees.
Evaluation Methods	<ul style="list-style-type: none"> Board members conduct a self-assessment of the overall board performance. Each director conducts a self-assessment of their performance. Audit Committee members evaluate the overall performance of the committee. Compensation Committee members evaluate the overall performance of the committee.
Evaluation Criteria	<ul style="list-style-type: none"> Board and Individual Directors Performance Evaluation: The evaluation criteria are based on indicators provided by regulatory authorities, adjusted to fit AP Memory's specific context. The assessment covers participation in company operations, enhancement of board decision-making quality, board composition and structure, director election and ongoing development, internal controls, and other relevant aspects. Audit Committee and Compensation Committee Performance Evaluation: The evaluation criteria, derived from regulatory guidelines, assess the committees' participation in company operations, awareness of their responsibilities, decision-making quality, composition, election of members, and internal controls. The results are reported to the board of directors
Evaluation Results	<ul style="list-style-type: none"> The evaluation indicated that all board members, including independent directors, rated the efficiency and functioning of the board and its committees highly. Members of the board and functional committees believe that the operations are effective and fulfill their intended functions.

Executive Compensation Management

AP Memory manages executive compensation, which includes fixed salary, bonuses, and performance assessments. Adjustments in salary and bonuses are based on company performance, individual performance, and contributions. The performance assessment for managers also includes criteria for evaluating ESG achievements. The results of performance evaluations and compensation for managers are reported to the Compensation Committee, while the compensation for the president and CEO requires board approval. To enhance the independence of the Compensation Committee, the board appointed Mr. Lan, Ching-Yao, a part-time lecturer at Soochow University, who does not hold any director or employee position, as a committee member.

In 2023, the total annual compensation of the highest-paid individual was approximately 7.8 times the median total annual compensation of all employees.

The growth percentage of the highest-paid individual's compensation was 0.85 times the median percentage growth in employee compensation.



Internal Audit

AP Memory's internal audit function operates as an independent unit under the Board of Directors, staffed with two dedicated audit personnel. The unit maintains independence, professionalism, and objectivity in conducting internal audit processes, regularly reporting results to the Audit Committee to ensure effective communication with independent directors.

- **Organizational Objectives:** Assist the Board of Directors and managers in checking and reviewing the effectiveness of internal controls, ensuring reasonable achievement of operational, reporting, and compliance objectives.
- **Key Activities:** Develop an annual audit plan and project audit plan based on relevant laws and regulations, risk assessments, and business needs. Conduct audits accordingly, provide timely improvement suggestions and consulting, and continuously monitor the implementation of these improvements. Additionally, administer annual self-assessments of the internal control system to ensure its ongoing effectiveness and serve as a basis for reviewing and revising internal control policies.
- **Communication Between Independent Directors, Internal Audit Supervisor, and Accountants:**
 1. On December 8, 2023, the independent directors and the internal audit supervisor reviewed the status of improvements on deficiencies identified during the year. They discussed the audit plan for the following year based on risk assessment results and proposed optimization suggestions for the distribution format of audit reports to facilitate identification by the independent directors.
 2. On October 25, 2023, the independent directors discussed key audit matters with the auditors. On the same day, they also consulted the auditors on the Audit Quality Indicators (AQI) report to confirm the qualifications and independence of the auditors.
- **Professional Competence of Internal Audit:**
The internal audit supervisor completed a total of 18 hours of professional training in 2023, exceeding the hours required by law. The training focused on key areas of company operations and regulations, including information security and practical operational cycle audits, continuously enhancing expertise in various domains. The internal audit personnel completed the legally required 18-hour orientation training course for new internal auditors in 2023, establishing a solid foundation of professional skills.

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Leading Industry Development	Identifying Sustainability Impacts	Upholding Corporate Ethics	Driving Product Innovation	Building Partnerships	Nurturing Human Capital	Maintaining Environmental Balance	

Conflict of Interest Avoidance

AP Memory adheres to the "Procedures for Ethical Management and Guidelines for Conduct," ensuring that directors strictly avoid conflicts of interest. To prevent and mitigate conflicts of interest, directors are required to abstain from discussions and voting on board meeting matters that could potentially harm the Company's interests due to a conflict with their own interests or those of the entities they represent. For detailed outcomes on recusal, please refer to the "Corporate Governance" section of AP Memory's annual report.

Regulatory Compliance

AP Memory establishes governance structures and implements internal control mechanisms, such as diligent contract review processes, to ensure that all relevant regulations are incorporated into contracts and other documents. Each department regularly monitors changes in domestic and international laws related to the environment, economy, and society to ensure that all personnel and operations comply with applicable regulations. In 2023, AP Memory reported no incidents of non-compliance related to environmental, economic, social, or human rights regulations.

In response to the 2023 amendments to the Personal Data Protection Act, which raised penalties for improper corporate disclosure of personal data, AP Memory has revised its Personal Data Protection Management Procedures. These updates clearly define the processes for collecting, accessing, and handling personal data as part of business operations, as well as the procedures for data subjects to request their rights. The Company has also developed flowcharts and application forms for various scenarios to ensure compliance among employees. Meanwhile, to enhance employee awareness of personal data protection, AP Memory conducted a company-wide meeting on data protection in 2023 and collected signed personal data consent forms from all employees by the end of the year. This measure ensures compliance with regulations and aims to prevent data disputes. For external service providers who need to gather personal data, such as HR management companies, hospitals, travel agencies, employee stock option plan (ESOP) brokers, and law firms, AP Memory requires them to implement data protection measures through outsourcing contracts, notifications, or declarations.



3.2 Tax Governance

To align with international tax governance trends, AP Memory adheres to various tax laws and regulations. The highest decision-making body for tax governance is the Finance and Accounting Center, while the Finance and Accounting Department manages tax-related affairs. This structure ensures regular reporting to senior management and maintains effective tax management mechanisms. AP Memory consults or appoints external professional advisors as needed to ensure compliance with tax regulations and reporting obligations. In 2023, AP Memory's income tax expense was NT\$172 million, accounting for 4.19% of total revenue. The decrease in income tax expenses was primarily due to the Company's application of the investment tax credit under Article 10 of the Statute for Industrial Innovation.

Governance Principles

- Adhere to all tax regulations in operational jurisdictions.
- Conduct intercompany transactions based on standard practices and follow the internationally recognized transfer pricing guidelines published by the Organisation for Economic Co-operation and Development (OECD).
- Ensure financial reporting is transparent and observe relevant tax disclosure regulations and standards.
- Maintain good communication channels with tax authorities.
- Consider tax implications in all major company decisions.
- Do not use tax havens or engage in tax planning for the purpose of tax avoidance.

Tax Payment Information

In NT\$ K

Income Tax Information		2020	2021	2022
Taiwan	Pre-Tax Net Income (A)	875,367	2,513,120	2,450,312
	Tax Expense (B)	63,657	487,663	508,616
	Effective Tax Rate Per Book (B)÷(A)	7.27%	19.41%	20.76%
	Income Tax Paid (D)	160	84,913	580,544
	Effective Cash Tax Rate (D)÷(A)	0.018%	3.38%	23.69%
Income Tax Informaiton		2023		
Taiwan	Pre-Tax Net Income (A)	1,617,427		
	Tax Expense (B)	172,457		
	Effective Tax Rate Per Book (B)÷(A)	10.66%		
	Reasons for Tax Deductions or Exemptions (C)	136,716		
		(R&D Investment Deductions)		
Adjusted Effective Tax Rate Disclosure (C)÷(A)		8.45%		
Income Tax Paid (D)		223,990		
Effective Cash Tax Rate (D)÷(A)		13.85%		
Hong Kong	Pre-Tax Net Income (A)	(10,927)		
	Tax Expense (B)	1,554		
	Effective Tax Rate Per Book (B)÷(A)	14.22%		
	Income Tax Paid (D)	2,698		
	Effective Cash Tax Rate (D)÷(A)	24.69%		

Note: The information disclosed in this table is for individual entities.

3.3 Ethical Management

AP Memory abides by the principles of fairness, honesty, integrity, and transparency in its business activities. The Company proactively prevents unethical behavior, such as bribery, corruption, fraud, intellectual property infringement, insider trading, offering and receiving improper benefits, engaging in illegal activities, or breaching fiduciary duties. On December 22, 2014, the board of directors approved the establishment of the "Ethical Corporate Management Best Practice Principles," "Procedures for Ethical Management and Guidelines for Conduct," and "Corporate Governance Best Practice Principles." AP Memory continuously updates and revises these documents in accordance with laws and company practices.

Ethical Promotion

All documents related to ethical management are published on the Company's internal website for employees to access easily, helping them understand the relevant guidelines for ethical conduct. To reinforce the "Ethical Corporate Management Best Practice Principles," "Procedures for Ethical Management and Guidelines for Conduct," and "Corporate Governance Best Practice Principles," AP Memory plans to initiate ethical promotion and training programs in 2024.

Whistleblowing and Complaints

In 2022, AP Memory adjusted and reported the "Procedures for Ethical Management and Guidelines for Conduct" based on practical operations to the Board of Directors. The Board of Directors designated the Corporate Governance unit as the responsible department for handling these matters. To make it easier for whistleblowers to find a reporting channel, the board approved a change to the complaint email address to whistleblower@apmemory.com. This update was also published on the Company's official website. The management team was reminded to carefully designate personnel to manage the complaint/whistleblower email and to confirm, probe, and handle cases with confidentiality, ensuring fair and efficient processing of reports. In 2023, there were no complaints or reports of ethical violations, nor were there any proactive investigations or confirmations of corruption incidents.

Internal Complaint and Whistleblowing Mechanism:

- Internal Communication Channels: AP Memory regularly educates all employees on the "Ethical Corporate Management Best Practice Principles" and "Procedures for Ethical Management and Guidelines for Conduct," outlining professional conduct requirements. The most recent company-wide awareness campaign was held on November 4, 2022. This program emphasizes the importance of integrity and the need to avoid actions that could harm the Company's interests for personal gain. Additionally, it informs employees about internal communication channels and the complaint handling process, encouraging them to report any illegal activities to the Company promptly.
- Whistleblower Email: whistleblower@apmemory.com
- There were no internal complaints in 2023.

External Complaint and Whistleblowing Mechanism:

- External Communication Channels: The official website features a dedicated section for ethical management, demonstrating AP Memory's zero tolerance for corruption and any form of fraudulent behavior. Stakeholders who observe suspicious activities or potential violations of ethical conduct by employees or any company representatives can report them through whistleblower@apmemory.com.
- External Complaint Unit: The whistleblower email is managed by a senior executive appointed by the Chairman. The handling process and outcomes of any reported issues are directly communicated to the Chairman and the Board of Directors.
- There were no external complaints in 2023.

Violations of Code of Conduct / Ethical Standards	2023 Reported Cases / Confirmed Cases
Corruption or Bribery	0
Discrimination or Harassment	0
Customer Privacy	0
Conflict of Interest	0
Money Laundering or Insider Trading	0

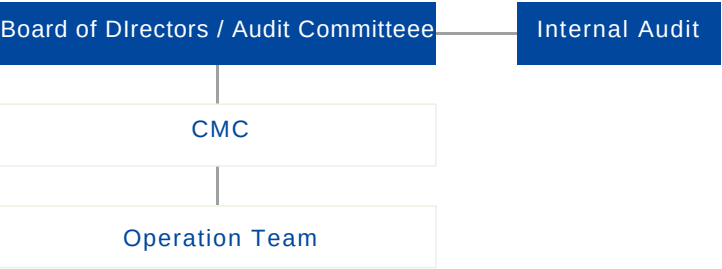
Political Donations

AP Memory does not engage in donations beyond charitable activities, such as political contributions, to maintain political neutrality. The Company encourages employees to fulfill their social responsibilities.

3.4 Risk Management

Risk Management Policy

To strengthen corporate governance and conduct risk management against uncertainties that may threaten business operations for ensuring the rationality of the Company's strategies and the achievement of its objectives, AP Memory has established the "Risk Management Regulations." which has been approved by the Board of Directors in May 2020 and revised in November 2023, These regulations serve as the highest guiding principle for risk management. Before the formal establishment of the "Risk Management Committee," the related responsibilities of risk management are charged by the Audit Committee and the Corporate Management Committee (CMC) composed of senior managers.



Risk Management Mechanism

AP Memory’s risk management mechanism includes regularly identification, analysis, and assessment of risks every year. Operation team identifies potential risk factors, evaluates the likelihood of their occurrence, and measures the potential negative impact. This helps in understanding the risks' influences on the Company and setting priorities and response strategies for risk control, which are submitted to the CMC for review. The CMC is responsible for formulating risk management policies and operational structures, regularly monitoring the implementation of risk management procedures and mechanism, and reporting to the Audit Committee and the Board of Directors.

Risk Identification Process

The risk management report task force identifies potential risks through interviews with department heads and collaborates with the corporate governance unit to complete a risk management report for CMC review. The CMC formulates the response strategies, which are supervised by the Audit Committee, with the risk management results reported to the Board of Directors. Based on the enterprise risk assessment table, the frequency of risk events and their severity of impact on company operations, the risk levels and control priorities of each risk are defined. Risk management strategies are adopted according to the risk levels

Understanding Risk Trends

AP Memory regularly reviews all risks that could impact operational processes, including considerations of various aspects related to strategy, operations, finance, hazardous events, and emerging risks.

Risk Identification Results and Response

In 2023, the CMC identified two high risks: (1) supply chain risk and (2) competitive risk, along with other risks. The CMC communicated the risk management report results to department heads in a meeting, and each department subsequently responded to these risks.

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Risk Categories	Risk Factors	Risk Assessment and Identification Results	Risk Response
Operational Risk	Supply-Chian Risk	Risk of concentrated sourcing	<ul style="list-style-type: none"> Choose globally renowned and excellent semiconductor foundries as the primary source of wafers, and establish long-term partnerships to secure production capacity with company demands, enhancing the stability of wafer supply and lead times. This strategy aims to mitigate the risk associated with concentrated sourcing.
Strategic Risk	Competitive Risk	Competitors narrow the gap in product cost-effectiveness	<ul style="list-style-type: none"> Develop new product specifications with competitive advantages to differentiate from competitors. Continuously deliver customized and superior quality products and services to customers.
Emerging Risk - Geopolitical	U.S.-China Tensions	Impact on the company's revenue from China due to U.S. restrictions on related Chinese chips and technologies	<ul style="list-style-type: none"> Actively expand customers and product applications outside the China market.
Emerging Risk - Technology	Leakage of Business Informatio	Risk of leaking confidential information ,including operational plans, customer needs, and technological developments	<ul style="list-style-type: none"> Establish guidelines for managing confidential information and enhance awareness about the importance of trade secrets and confidentiality. Enforce confidentiality agreements that stipulate breach penalties, reinforcing mechanisms for verifying compliance, including timely destruction or return of confidential materials by the cooperating party. Require additional non-disclosure agreements with participants in confidential projects if needed.
Emerging Risk - Social	Talent Recruitment	Risk of insufficient recruitment speed relative to company growth or failure to promptly supplement lost talent	<ul style="list-style-type: none"> Convene quarterly manpower budget meetings to periodically review and manage risks as per the Enforcement Rules for Manpower Assessment Meetings, and timely establish and maintain a talent reserve through recruitment. Expand recruitment channels and shape employer branding. Review salary competitiveness annually to improve attractiveness for top talent.

Risk Management Training

AP Memory fosters a risk-aware corporate culture through transparent internal communication and educational training programs. In the second half of 2024, the Company plans to launch a risk assessment project. Before the project starts, relevant staff from various departments will receive training on risk assessment awareness, the latest regulations, key points for risk identification, and assessment methods, reinforcing and implementing a risk management culture.

Business Continuity Management

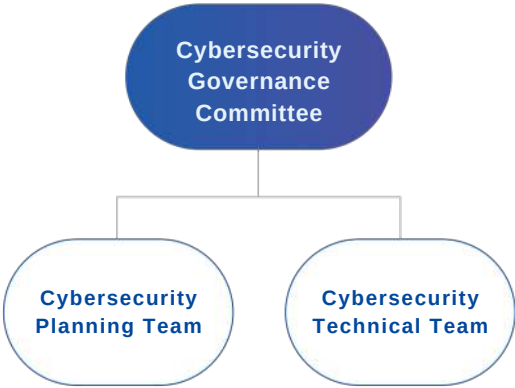
To enhance AP Memory's resilience and ensure sustainable operations, the Company implements Business Continuity Management (BCM). AP Memory develops Business Continuity Plans (BCP) to address various environmental impacts. These plans ensure that critical business functions can be restored in an organized and timely manner during disruptions, minimizing unforeseen impacts and effects. The Company also ensures that customer operations remain unaffected during disasters or crises and conducts post-incident reviews to prevent future losses to customer interests.

3.5 Cybersecurity Management

Cybersecurity Governance Policy and Organization

AP Memory has established an information security management system based on the Financial Supervisory Commission's "Cybersecurity Control Guidelines for TWSE/TPEX Listed Companies." The Company has developed policies including the "Information Security Management Procedures," "Computerized Information Processing Cycle," "Emergency Response Plan," and "Cybersecurity Risk Assessment Report." Recognizing the critical importance of information security in the semiconductor industry, and addressing the increased need for remote work due to recent pandemic conditions, AP Memory has enhanced its "Cybersecurity Inspection Controls" through cloud and network tools to maintain internal operations. Additionally, AP Memory collaborates with external cybersecurity service providers for various projects, including enterprise security assessments, emergency cybersecurity incident handling, major cybersecurity event information sharing, and regular network audits, to reduce internal information security risks. In 2023, AP Memory established the Cybersecurity Governance Committee to oversee the Company's information security management. By delegating responsibilities to the Cybersecurity Governance Committee, the Cybersecurity Planning Team, and the Cybersecurity Technical Team, AP Memory aims to enhance corporate security and strengthen its sustainable competitive advantage.

Organizaiton	Departments	Responsibilities
Cybersecurity Governance Committee ex-officio members	President, Business Unit / Center heads	Approving cybersecurity policies, reviewing the allocation of cybersecurity resources, and overseeing the actual implementation of these policies.
Cybersecurity Technical Team	Currently, representatives from the Manufacturing Management Division, IT Management Division, Legal Affairs Office, Internal Audit, Risk Management Planning Unit, and Quality Assurance Division participate.	Planning cybersecurity policies, preparing the cybersecurity budget, and conducting cybersecurity risk assessments and controls.
Cybersecurity Technical Team	IT Management Division	Executing relevant cybersecurity management tasks as per the decisions made by the Cybersecurity Governance Committee.



Additionally, in response to the Company's internal information security management policies, AP Memory began revising the "Information Security Management Procedures" and introducing new policies in the fourth quarter of 2023. These include the "Information Equipment Disposal and Recycling Management Procedures," "Core Business Continuity Plan," "Outsourced Information Security Management Procedures," "Information Security Incident Reporting and Response Management Procedures," and "Security System Development Life Cycle Procedures." These new procedures are expected to take effect in 2024.

Operational Procedures (Revisions and Additions)	Content
Information Security Management Procedures	<ul style="list-style-type: none"> Users: Including employees, customers, and vendors. Scope: Headquarters, offices, and remote locations. Revised Content: Updates the management framework and specifies guidelines for various aspects to continuously enhance and strengthen cybersecurity. Establishes a secure and reliable electronic data circulation environment to meet the confidentiality, integrity, and availability requirements of information assets, and to prevent improper use, leakage, alteration, or destruction of the Company's information assets.
Information Equipment Disposal and Recycling Management Procedures	<ul style="list-style-type: none"> Regulates information security measures during the disposal of company information equipment to ensure that no data leakage concerns arise, preventing potential losses to the Company.
Core Business Continuity Plan	<ul style="list-style-type: none"> Ensures that backup systems for critical information systems can recover operations within the scheduled time, based on the impact analysis of business disruptions, in the event of disasters or significant anomalies affecting service delivery.
Outsourced Information Security Management Procedures	<ul style="list-style-type: none"> Maintains information security and service delivery measures for outsourced information business processes, ensuring the security and quality of information services.
Information Security Incident Reporting and Response Management Procedures	<ul style="list-style-type: none"> Regulates the handling and reporting processes for cybersecurity incidents, assesses the impact, minimizes losses caused by security incidents, and aims to restore normal operations as quickly as possible.
Security System Development Life Cycle Procedures	<ul style="list-style-type: none"> Governs the security of software development, changes, and maintenance for application systems.

Information Security Governance Framework

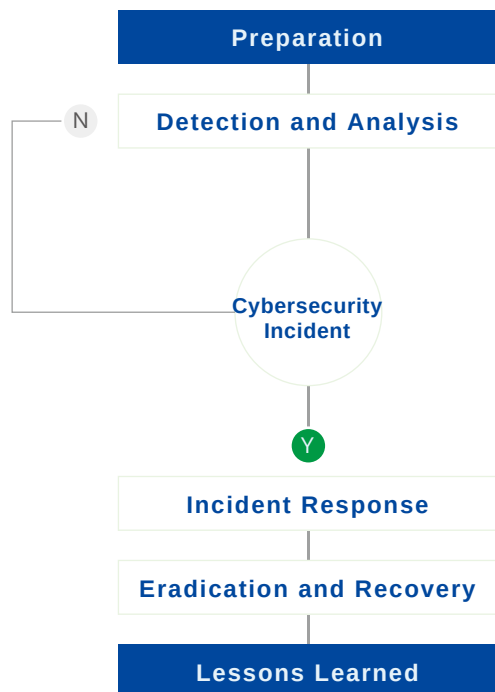
AP Memory's information security management strategy, in addition to adhering to the Financial Supervisory Commission's "Cybersecurity Control Guidelines for TWSE/TPEX Listed Companies," also follows the National Institute of Standards and Technology (NIST) Cybersecurity Framework (CSF). The CSF's five core functions—Identify, Protect, Detect, Respond, and Recover—are integrated into daily operations. This includes developing information security standards, implementing appropriate cybersecurity controls, establishing real-time detection and alert mechanisms for security incidents, and creating data backup plans to ensure network and data security.

n 2024, the focus of information security management will be on enhancing the operational structure and foundational defenses. Efforts will aim to strengthen pre-incident (prevention, monitoring, management), during-incident (notification, response), and post-incident (tracking, auditing) management to improve cybersecurity resilience.



Information Security Reporting and Emergency Response

In the second quarter of 2024, AP Memory plans to establish the "Cybersecurity Incident Reporting and Response Management Procedures." This framework will include procedures for reporting cybersecurity incidents, response protocols, record-keeping and management processes, and cybersecurity drills to ensure prompt reporting and effective handling of security events. Additionally, to stay updated with the latest international cybersecurity trends, network threat landscapes, security incidents and intelligence, AP Memory joined the Taiwan Computer Emergency Response Team/Coordination Center (TWCERT/CC) in early 2023 to enhance the Company's cybersecurity defense and response capabilities.



Information Security Management Initiatives

In addition to routine cybersecurity management tasks, AP Memory focused on several key initiatives in 2023 to enhance network security. These initiatives included strengthening firewall protection (such as ensuring cross-site network security), establishing an endpoint management system, implementing a network activity monitoring system, and auditing data transmission management to establish a data leakage prevention mechanism. These measures aim to improve internal cybersecurity and reduce potential impacts from evolving security threats.

Initiatives	Description
Network Architecture Protection	<ul style="list-style-type: none"> Regularly review firewall policies for accuracy, update firmware, and back up configuration files. Ensure the separation of R&D and OA networks to enhance network transmission security. Except for the official website, all other websites operate on internal networks or are managed using firewall whitelisting. External FTP sites are also managed using firewall whitelisting to control access.
Endpoint Protection	<ul style="list-style-type: none"> The Company's servers and personal computers are equipped with advanced endpoint protection systems (EDR/MDR). Unlike traditional antivirus software, these systems analyze behavior patterns, primarily targeting ransomware. In 2023, AP Memory integrated an endpoint management system to recover administrator privileges and establish comprehensive data leakage prevention policies for endpoints.
USB Control	<ul style="list-style-type: none"> System management tools are used to restrict the use of peripheral devices on company personal computers, enhancing information security and preventing data leakage.
Account Management	<ul style="list-style-type: none"> All system login accounts are secured with two-factor authentication (2FA). Additionally, passwords are regularly forced to change and are subject to complexity rules to prevent unauthorized access. Employees are required to use company-issued devices for remote work, with access to the company's virtual private network (VPN) also protected by 2FA.
Privileged Account Management	<ul style="list-style-type: none"> All systems employ individual management accounts to prevent the misuse or theft of privileged accounts.
Third-Party Cybersecurity Management Platform	<ul style="list-style-type: none"> Internal: Analyze network security risks from outside the Company using a cybersecurity assessment platform. This platform leverages big data analytics and cybersecurity threat intelligence to provide continuous security monitoring. It tracks the flow of information in and out of the company and suggests improvements based on analysis across 10 different dimensions. External: The same cybersecurity assessment platform is used as a tool to evaluate and manage supplier cybersecurity. Currently, the average cybersecurity score for suppliers is above 95 points.
Hardware Protection Mechanisms	<ul style="list-style-type: none"> The UPS system in the data center can maintain operation for up to 1.5 hours. It includes an automatic shutdown mechanism for equipment in the event of a power outage. In 2023, a log server automated hardware notification mechanism was adopted: Setting up an automatic alert system to notify of hardware equipment anomalies or configuring alert thresholds to predict alerts in advance, assisting information management personnel in data center management. Physical servers in the data center are gradually being transitioned to virtual servers (VMs), with critical data being backed up offsite to a public cloud.



Cybersecurity Drills and Training

Item	Penetration Testing	Social Engineering Drill	Training
Status and Achievements	<ul style="list-style-type: none"> Process: Penetration Testing -> Test Results -> Improvement -> Verification Conduct annual penetration testing with a hacker mindset to attempt intrusions into the company's website, identifying vulnerabilities for remediation. 	<ul style="list-style-type: none"> Conduct four drills annually to raise cybersecurity awareness among all employees. 2023 Results: Click rates on emails, links, and attachments decreased by 15%, 4%, and 0.7% respectively compared to 2022, indicating the effectiveness of the drills and company-wide cybersecurity awareness efforts. 	<ul style="list-style-type: none"> Hold two sessions annually for regular cybersecurity education and training, enhancing all employees' understanding of information security concepts and implementing the company's security measures. <div>Internal</div> <p>All employees have completed biannual company-wide cybersecurity awareness sessions, totaling two sessions per year.</p> <div>External</div> <p>External instructors provide information security management courses for department-level supervisors and IT staff. In addition to participating in an annual cybersecurity conference, cybersecurity personnel completed intermediate-level cybersecurity engineer training in 2023.</p>



Pioneering

Driving Product Innovation

4.1 Innovation Management

4.2 Intellectual Property Protection and Competitive Practices

4.3 Product Lifecycle Management

1 AP Memory	2 Response	3 Governance	4 Pioneering	5 Collaboration	6 Empowerment	7 Coexistence	8 Appendix
Leading Industry Development	Identifying Sustainability Impacts	Upholding Corporate Ethics	Driving Product Innovation	Building Partnerships	Nurturing Human Capital	Maintaining Environmental Balance	

4.1 Innovation Management Principles and Direction of Innovation Management

Providing Memory Solutions Tailored to Customer Applications: We innovate products based on factors such as different memory density needs, applicable I/O interfaces, data rates, and packaging types to meet customer-specific requirements.

Developing Differentiated Memory Specifications: We actively invest resources in developing new application areas for existing products, focusing on differentiating memory specifications. This approach aims to seize business opportunities in emerging markets for memory products, striving for comprehensive chip design technology and high-quality execution capabilities, with the goal of becoming a leading global provider of memory solutions.

Supporting the Development of the Global Chiplet Ecosystem: AP Memory has officially joined the Universal Chiplet Interconnect Express (UCIe) industry alliance. This partnership will enhance the application of AP Memory's Very High-Bandwidth Memory (VHMTM) in heterogeneous integration, aiding the development of a global chiplet ecosystem.

☰ (For more details, please scan the QR code.)



Innovation Management Framework

AP Memory encourages innovation and the development of cutting-edge technologies among its employees. Through internal and external collaborations, the Company strengthens innovative technologies, cultivates professional talent, and develops pioneering high-end technologies, continually providing customers with customized and competitive sustainable products.

Innovation Management	Content
Strengthening Intellectual Property and Patent Management	<ul style="list-style-type: none"> Through annual employee training and practical case sharing, AP Memory strengthens its employees' understanding of intellectual property rights. The Company has formed a specialized committee and hired external experts to secure the quality of its patents. AP Memory has engaged external professional firms to manage patent maintenance through electronic systems. Following these management mechanisms to enhance R&D efficiency and quality, the Company has also acquired23 approved patents accumulatively from 2020 to 2023.
Establishing an Innovation Reward System	<ul style="list-style-type: none"> The "Patent Application and Reward Guidelines" offer bonuses for patent applications and approvals, encouraging employees to submit proposals and fostering innovation within the Company
Investing in R&D Funding	<ul style="list-style-type: none"> In 2023, AP Memory's R&D expenses accounted for 14% of its revenue, with a total investment of NT\$583 million. The Company has been steadily increasing its R&D expenditures over the years.

	in NT\$ K			
Infomation	2020	2021	2022	2023
R&D Expenses	313,530	359,104	462,066	583,627
% of Revenue	9%	5%	9%	14%

1 AP Memory	2 Response	3 Governance	4 Pioneering	5 Collaboration	6 Empowerment	7 Coexistence	8 Appendix
Leading Industry Development	Identifying Sustainability Impacts	Upholding Corporate Ethics	Driving Product Innovation	Building Partnerships	Nurturing Human Capital	Maintaining Environmental Balance	

Sustainable Product Design

From the product development stage, AP Memory considers sustainability needs throughout the product lifecycle. This involves using fewer materials, reducing memory size, lowering operational power consumption, and minimizing energy loss and carbon emissions during the production process. The Company adheres to a sustainable design philosophy, continually improving raw materials, production processes, supplier management, and product use.

Dimension	Innovative Approaches	Products	Advantages
Design	Structural Optimization	Reducing Memory Size	<ul style="list-style-type: none"> Through product design and outsourced manufacturing techniques, we have increased the number of layers in IC stacking and reduced the size of circuit boards. This innovation allows us to achieved products with the same specifications and power consumption requirements without needing additional memory chips, thereby reducing material usage. Memory Density: Achieved an increase of 10-100 times.
		Multilayer Stacking Technology	<ul style="list-style-type: none"> By incorporating Through-Silicon Via (TSV) into DRAM design and utilizing Hybrid Bonding technology to stack 1 logic wafer with 4 DRAM wafers, we have increased memory capacity and bandwidth. R&D Achievements: In 2023, we successfully produced a 1+4 (one logic wafer and four DRAM wafers) stacked test chip. This chip's computational power was verified using the ETHASH algorithm, achieving a performance of several tens of MH/s, with ongoing optimization of computational efficiency.
		Reducing Pins	<ul style="list-style-type: none"> In response to the stringent power consumption and chip size requirements of IoT devices and wearable devices, our R&D team is focused on minimizing memory pins. This effort aims to save circuit board space and simplify wiring complexity.
		Customized Products	<ul style="list-style-type: none"> We are developing custom memory solutions using innovative architectures and advanced processes to achieve low power consumption. Silicon Capacitor (SiCap): We have independently developed silicon capacitors to improve system performance and reduce power consumption. R&D Achievements: Custom memory design was completed in 2023, with validation and sample delivery expected in 2024. SiCap Gen3 validation was completed in 2023, with mass production expected in 2024. Gen3 capacitors offer a 15% increase in density compare to Gen 2.
Manufacturing	Efficient Manufacturing	Special Applications, Standard Specifications	<ul style="list-style-type: none"> Reducing Outsourced Production Batches: By providing standard specifications for different customers' specialized applications, we streamline production by eliminating chip probe (CP) testing before 3D stacking, thus reducing production steps
		Minimizing Masks & Fixtures Needed for Production	<ul style="list-style-type: none"> Without pre-3D stacking CP, only one set of probe cards is required for post-3D stacking CP. For different 3D stacking semiconductor manufacturers' Test Element Group (TEG) and mask alignment mark requirements, we implement a single mask change, allowing the other masks to be shared.
		Reducing Inventory & Obsolete Materials	<ul style="list-style-type: none"> We initiate production upon receiving orders, thereby reducing the risk of accumulating inventory.
		Reducing Resources Used in Product Testing	<ul style="list-style-type: none"> No pre-3D stacking CP, reducing testing steps.
		IoT Product	<ul style="list-style-type: none"> We work closely with suppliers to optimize the production process management platform, allowing precise monitoring of production progress and status, enhancing production management and tracking efficiency, and lowering communication costs.

1 AP Memory	2 Response	3 Governance	4 Pioneering	5 Collaboration	6 Empowerment	7 Coexistence	8 Appendix
Leading Industry Development	Identifying Sustainability Impacts	Upholding Corporate Ethics	Driving Product Innovation	Building Partnerships	Nurturing Human Capital	Maintaining Environmental Balance	

Dimension	Innovative Approaches	Products	Advantages
Logistics	Reduced Packaging	IoT Product	<ul style="list-style-type: none"> • Wafer-Level Chip-Scale Packaging (WLCSP): By using WLCSP, we reduce the use of plastic packaging materials and simplify subsequent
		AI Product	<ul style="list-style-type: none"> • We assist suppliers with 100% recycling of front opening shipping boxes (FOSBs) and trays
			<ul style="list-style-type: none"> • For 2.5D packaging, our silicon interposer capacitors decrease the use of IC substrate discrete MLCCs, helping to reduce MLCC packaging materials. • FOSB used for 3D packaging can also be recycled for DRAM wafer supply.
Use / Maintenance /Disposal	High efficiency	AI Product	<ul style="list-style-type: none"> • Power Consumption: Reduced to 1/5 compared to HBM3E. • Bandwidth: Increased 16 times compared to HBM3E. • Power Consumption: Reduced to 1/10 compared to HBM3. • Bandwidth: Increased 24 times compared to HBM3. • Power Consumption: Reduced to 1/15 compared to HBM2E. • Speed: Increased 50 times compared to HBM2E.
		IoT Product	<ul style="list-style-type: none"> • In 2023, our high-performance DRAM products achieved an energy efficiency target of less than 0.5 pJ/bit. • We continue to optimize products, enhance energy efficiency and reduce unnecessary energy waste. Compared to current mass-produced products, AP Memory has lowered the size of smart wearable devices and AIoT products by nearly 10% this year, boosted speed by 25%, and decreased static power consumption by over 30%. We are consistently surpassing our own standards and market expectations. • In 2023, our 1.2V memory product was successfully verified and samples sent to customers. Compared to the 1.8V product, standby power consumption can be reduced by over 20%, and dynamic power consumption by over 30%. We anticipate entering full-scale production in 2024.

4.2 Intellectual Property Protection and Competitive Practices

Disclosure Topic: Intellectual Property Protection and Competitive Practices

Code	Metrics	2020	2021	2022	2023
TC-SC-520a.1	Total monetary losses incurred due to violations of relevant regulations related to anti-competitive behavior (in NT\$ K)	0	0	0	0

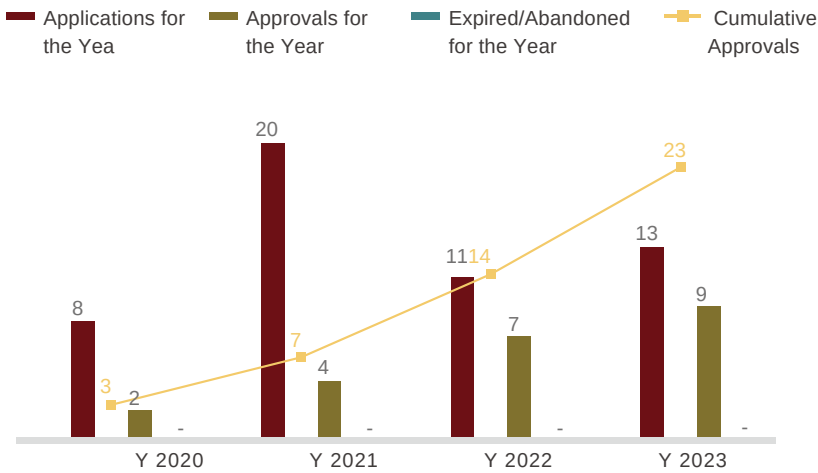
Intellectual Property Management Mechanism

To enhance employee awareness of intellectual property (IP), protect the Company's IP outputs, and encourage R&D innovation, AP Memory has established the "Intellectual Property Management Policy." This IP policy outlines principles for managing IP contributed by or acquired from internal employees or collaborations with external individuals or entities. It covers aspects such as IP ownership, maintenance of IP rights, IP infringement prevention, utilization of IP rights, and IP rewards. Additionally, based on the characteristics of individual IP right and legal requirements, AP Memory has developed supplementary "Patent Application and Reward Guidelines" and "Confidential Information Management Policy." Through annual employee training and regular internal audits, these mechanisms are enforced to safeguard valuable IP assets like trade secrets and patents. As of the publication date of this report, AP Memory has not faced any lawsuits or penalties related to IP infringement or antitrust issues.

Patents

In 2023, AP Memory officially established a Patent Office, hiring senior experts from leading companies in the industry to lead the office. This team is responsible for handling patent applications and deployment, analyzing patent infringements, formulating litigation strategies, and providing staff training. This marks a shift from the previous reliance on external consultants, allowing the in-house team to more accurately analyze AP Memory's R&D focus and serve as a bridge for technical communication with external parties. This approach ensures that patent claims and specifications faithfully reflect the essence of inventions, allowing inventors to concentrate on innovation and significantly enhancing the efficiency and quality of patent applications. Under the initiative of the Patent Office in 2023, the number of patent applications slightly increased, totaling 13 new applications, with 9 granted patents. The total amount of patent bonuses awarded was approximately NT\$230,000, distributed among 11 inventors (calculated according to the revised 2022 guidelines). From 2020 to 2023, AP Memory accumulated 23 granted patents, with no patents expiring, becoming invalid, or being abandoned during this period.

Historical Patent Applications, Approvals, and Active Patents



Note: Cumulative Approvals = Approvals for the Year + Cumulative Approvals from the Previous Year

1 AP Memory	2 Response	3 Governance	4 Pioneering	5 Collaboration	6 Empowerment	7 Coexistence	8 Appendix
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Trade Secrets

To effectively protect and manage the Company's trade secrets and maintain market competitiveness, AP Memory conducts annual training and advocacy on trade secrets and NDA (Non-Disclosure Agreements). The goal is to instill a deep understanding of "confidentiality and anti-espionage" among employees. In 2024, AP Memory made the trade secret protection and management system a mandatory course for all employees, achieving a 100% completion rate. In addition to confidentiality clauses in employment contracts signed upon hiring and departure statements signed upon leaving, which require employees not to disclose company secrets, special projects also necessitate additional non-disclosure agreements to safeguard company secrets and avoid legal risks associated with insider trading.

Starting from the second half of 2022, AP Memory mobilized all departments to inventory confidential information items, storage locations, management permissions, and circulation and recipients. After thoroughly investigating the specifics of the Company's confidential information, AP Memory formulated and announced the "Confidential Information Management Regulations" in the first quarter of 2023. This document systematically regulates the confidentiality measures for all valuable information related to technology, engineering, production, sales, and management. A "Confidential Information Management Team" was established, consisting of audit, IT, legal, and quality personnel and responsible for implementing, drafting, amending, and enforcing the management regulations. They drive and optimize measures for protecting confidential information from the perspectives of auditing, information security, legal compliance, and quality control.

Intellectual Property Protection Training

Course Title	Course Content	Hours	Participants
Essential Patent Concepts for Semiconductor Technology Professionals (Elective for All Staff)	Explore real-world patent strategies and defenses in the IC industry. Learn fundamental patent concepts and how to create high-value patent assets.	2	126
AP Memory Trade Secret Protection and Management System (Mandatory for All Staff)	Understand basic trade secrets concepts and the newly established "Confidential Information Management Policy." Passing a written exam with a perfect score is required to complete this course.	1	171
Things You Must Know About Technology Licensing Agreements (For Sales and Business Staff)	Learn the basics of technology licensing, including critical terms such as the scope of the license, licensing fees, and warranty.	1	16

4.3 Product Lifecycle Management

Disclosure Topic: Product Lifecycle Management					
Code	Metrics	2020	2021	2022	2023
TC-SC-410a.1	Percentage of Sales Revenue for Products Declaring IEC 62474 Substances	0%	0%	0%	0%
AP Memory follows the RoHS and REACH lists of controlled chemicals. During the reporting period, it compared the IEC 62474 standard with these two regulations. The products currently shipped do not contain substances required to be declared under IEC 62474. As of the end of 2023, no customers have requested AP Memory to provide information based on IEC 62474 chemical management standards					
TC-SC-410a.2	Processor Energy Efficiency at the System Level: (1) Servers (2) Desktop Computers (3) Laptops	AP Memory's products are not used in commercial servers or personal computers, so this disclosure indicator is not applicable. AP Memory is committed to developing higher-performance products to boost end-use energy efficiency. For more details, please refer to Section 4-1 on Innovation Management.			

Chemical Management

AP Memory has established a "Green Product Management Procedure," which ensures that all products are shipped in accordance with this procedure. The scope of controlled chemicals primarily follows international standards such as RoHS and REACH, as specified by customer requirements. Products are declared with hazardous substances declaration forms according to customer procurement procedures. Additionally, AP Memory incorporates relevant chemical management lists into supplier management priorities, requiring wafer manufacturers and packaging vendors to provide detailed material lists. This includes declaring restricted substances and regularly updating hazardous substance declarations and test reports. As of the end of 2023, 100% of products met RoHS and REACH standards.

Countries/Associations	Chemical/Restricted Substances Control Requirements
European Union	EU-RoHS, EU-REACH, PFOA/PFOS (Perfluorinated Compounds Restriction Directive)
China	China-RoHS
United States	California RoHS, TSCA
International Electrotechnical Commission	IEC 62474
Countries/Associations	Chemical/Restricted Substances Control Requirements
Customer requirements	SONY-GP (SONY Green Partner Certification)



Collaboration

Building Partnerships

5.1 Customer Relationships

5.2 Supply Chain Management

5.3 Raw Material Procurement

5.4 Product Quality

5.1 Customer Relationships

Customer Service Philosophy



Customer Satisfaction

AP Memory has been administering Customer Satisfaction Surveys (CSS) for nearly a decade. A dedicated "Customer Survey Project Team" leads and executes these surveys. Each year, online questionnaires are distributed to the top ten mass-production customers from the previous year (evaluated by sales and region), as well as key customers from major design-in projects, to assess customer satisfaction.

In 2023, the CSS questionnaire was further optimized. By actively gathering customer feedback on the new survey and analyzing responses, AP Memory gained valuable insights. For the four major customer functions, 96% of the responses rated overall satisfaction with AP Memory as "satisfied" or higher.

CSS Distribution Principles and Results

Items	Content
Target Recipients	<ul style="list-style-type: none"> In 2023, a single integrated questionnaire was submitted to customer contacts across four major functions (Procurement, Project Management, Product Engineering, and Quality Assurance).
Distribution Frequency	<ul style="list-style-type: none"> Annually.
Response Rate	<ul style="list-style-type: none"> A total of 115 questionnaires were distributed by two major divisions to various customer contacts in 2023, with 104 completed responses received, achieving a 90% response rate. The targeted customers represent over 80% of the Company's revenue.
Questionnaire Optimization	<ul style="list-style-type: none"> Questionnaire Refinement: In 2023, the questionnaire was improved by clarifying ambiguous or easily misunderstood questions, simplifying language, and adding error-proofing features to prevent incomplete or incorrect responses.
Survey Results	<ul style="list-style-type: none"> 96% of responses across the four major functions (Procurement, Project Management, Product Engineering, Quality Assurance) in 2023 rated overall satisfaction with AP Memory as "satisfied" or higher. Notably, satisfaction rates were 100% in Project Management and Engineering. Feedback from Project Management and Engineering roles highlighted that customers expect AP Memory's products and technologies to enhance their own product competitiveness. Statistical analysis revealed that over 68% of customers believe AP Memory's products offer better price competitiveness compared to industry peers. Additionally, more than 80% of customers indicated that the proportion of procurement from AP Memory is expected to increase year by year.

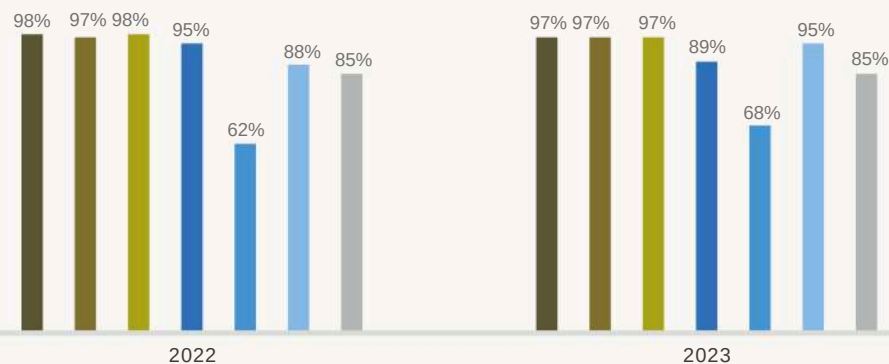
Customer Satisfaction Survey: Detailed Outcomes

AP Memory (APM) demonstrates smooth communication and a good understanding of customer needs. APM offers innovative products. APM understands and develops products that meet customer specifications and requirements.

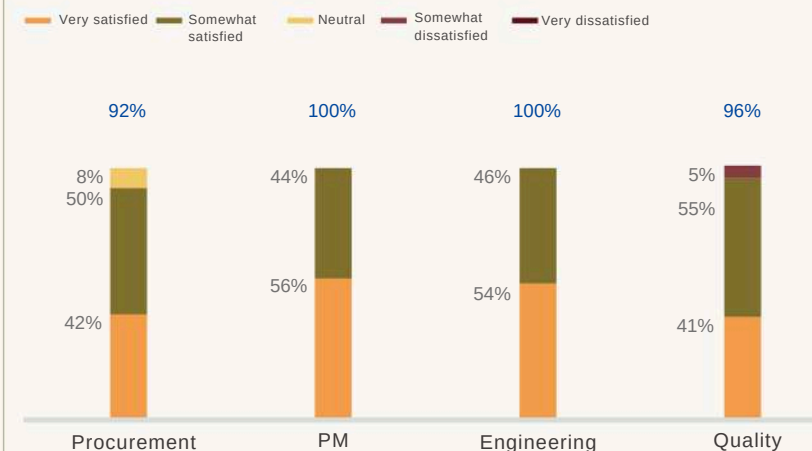
APM's products have competitive specifications compared to peers. APM's products are competitively priced compared to peers.

Using APM's products and technology can help customers gain a competitive edge in the industry.

APM's share of procurement in your company will increase year by year.



Customer satisfaction with AP Memory's overall performance across four key functions in 2023:



2023 Customer Service Excellence and Recognition



★ Achieved A-Grade Supplier Rating from Taiwanese Customers

★ Awarded "Excellent Partner" Recognition: A Chinese smartphone chip customer, facing an unexpected surge in domestic and international orders, urgently requested supplies from AP Memory. The Company's effective production coordination and supply chain management significantly reduced lead times, enabling the customer to meet delivery deadlines successfully.

★ High Customer Satisfaction with New Stacked Silicon Capacitor Products: AP Memory's new generation of stacked silicon capacitors has greatly enhanced product performance and optimized end-product outcomes, particularly in high-end smartphones and high-performance computing chips. These advanced products offer higher capacitance density, smaller form factors, and excellent temperature and voltage stability. Many customers have praised these high-performance custom silicon capacitors for significantly boosting SoC performance and optimizing end-product performance, thereby enhancing their market competitiveness. Customers have expressed strong approval and look forward to the successful mass production of these products, anticipating a win-win outcome.

Customer Complaint Management

When quality issues arise with AP Memory's products, either from the customer or the end market, the Company promptly activates its anomaly handling mechanism according to the "Customer Complaint Procedures" upon receiving a complaint. Customer Complaint Requirements (CCR) are logged into the internal information system to ensure all anomalies are tracked and addressed promptly to improve quality.

- LV 0

Customer accepts the failure not caused by APM.
- LV 1

IC function ok, Visual defect, Packing related defect, Don't need rework, No return.
- LV 2

Reworkable/Resorting/RT, No reliability concern, ppm escape (over spec).
- LV 3

Can't rework, Function fail, Reliability risk issue, Lot mixed, OTD fail(>Commit +1 day).
- LV 4

Customer line shut down, Reliability fail, GP issue.

Anomaly Handling Process

- Step-I (Complaint Occurrence)

- The Quality Assurance (QA) department receives quality complaints from customers, agents, or sales representatives and logs the cases for subsequent tracking.
- Step-II (Status Confirmation)

- The QA department preliminarily identifies the anomaly, gathers detailed information, and classifies the anomaly by severity level.
- Step-III (Anomaly Analysis and Improvement)

- The QA department coordinates with relevant units to analyze the anomaly and complete an analysis and improvement report within the customer's requested timeframe.
- Step-IV (Improvement Tracking)

- The QA department proactively tracks the improvement status, regularly reporting on the progress of complaint handling to relevant units and senior management through weekly, monthly, and quarterly reports.

Key Performance Indicator (KPI) Management

AP Memory places high importance on every customer complaint, striving for zero defects, preventing the recurrence of major anomalies, and providing honest responses to customers about improvement measures. The QA supervisors regularly review the progress of anomaly improvements and proactively understand the subsequent production and usage conditions on the customer side. To manage quality improvement, AP Memory uses two key indicators: "Number of Customer Complaints" and "Quarterly Recurrence Frequency." The Company tracks the number of anomalies each month and the quarterly recurrence frequency, categorized by severity level (Level 0 to 4). These statistics are reported regularly through weekly, monthly, and quarterly reports. The QA supervisors consolidate the actual quality status and report it to the respective department heads and the CMC. This approach ensures that any product quality issues are promptly addressed and that the products shipped meet customer requirements.

Product Return Management

When a product return issue arises, the sales team determines the handling method based on the reason for the return and the customer's needs and reports to the President for approval before proceeding with the subsequent steps. The handling methods are as follows:

- Return, Exchange, Sales Allowances: The sales department applies for return or exchange in the ERP system, which requires approval from the President. The transaction is then documented in the RMA records.
- If the customer has special needs, the Company may, with the President's approval, send dedicated personnel to address the issue on-site.
- AP Memory adheres to the ISO 9001:2015 standards and implements a continuous quality improvement policy. The QA and engineering teams conduct thorough anomaly analysis and propose effective corrective actions for all returns.
- The Company monitors the annual count of customer complaints, ensuring that both the monthly occurrence of issues and the quarterly frequency of recurrence meet established targets.

● Analysis of Significant Improvements in 2023:

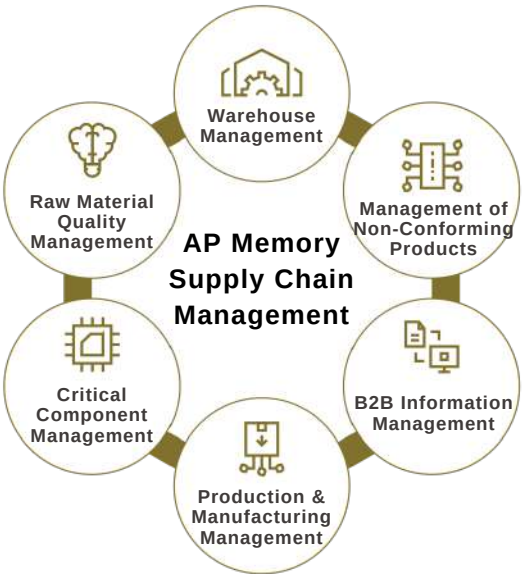
- The primary product of AP Memory is Known Good Die (KGD), and the defect rate of KGD products at end customers is the most critical quality concern.
- The analysis of the number of returns due to electrical anomalies, as shown in the table below, found that significant anomalies occurred without customer complaints in 2023. Additionally, the number of minor defect cases decreased from four in the previous year to one. The main improvement measures included optimizing CP programs, extending improvement strategies to related product series, continuously enhancing pattern coverage in test programs, tightening test conditions, gaining a better understanding of end customer requirements, and increasing the frequency of reliability monitoring to prevent recurrence of similar issues.

Electrical Failure Cases	2021	2022	2023
dppm>300 (Significant)	2	1	0
dppm<300 (Minor)	9	4	1



5.2 Supply Chain Management

AP Memory categorizes its suppliers into five main types: wafer production, wafer testing, packaging, other production-related, and miscellaneous services. As a fabless chip design company without factories or production lines, AP Memory's primary product is wafers, with the most critical raw material being silicon wafers. To meet customer requirements, the Company also offers packaging products, which require key materials such as epoxy resin, Au or Cu wire bonding, polyimide, and solder bumps.



Supplier Code of Conduct Management

AP Memory has established a Supplier Code of Conduct based on the Responsible Business Alliance (RBA) Code of Conduct. This code requires suppliers to adhere to standards in areas such as labor, health and safety, environmental practices, business ethics, and management systems. Suppliers must fully comply with the laws and regulations of the countries and regions in which they operate. Compliance with the Supplier Code of Conduct is verified during initial transactions and annual audits, and it is a key consideration in AP Memory's supplier evaluation and procurement decisions.

Definition of Critical Suppliers

- Suppliers providing more than 50% of a single product type's total procurement volume or accounting for over 5% of the total procurement transaction value.
- Suppliers offering critical technologies and materials.
- Irreplaceable suppliers.
- Strategic partners.
- In 2023, 13 new critical suppliers were added in AP Memory.

Supply Chain Management Mechanism

AP Memory has established six key aspects of supply chain management. In addition to regularly collecting quality data, conducting supplier evaluations, and performing annual audits, suppliers are also required to implement supply chain quality controls and continuous improvement activities with their own raw material suppliers.

New Supplier Management

AP Memory has a new supplier management process comprising five steps: document review, requirement assessment, pilot production, supplier evaluation, and final audit. The audit results are categorized as Acceptable, Conditional Acceptance, or Fail. If a supplier is rated as Fail, they are required to make improvements within a specified timeframe and undergo a re-audit within six months. If the re-audit result is still Fail, the supplier is not allowed to undergo the evaluation process again within the same year.

Execution Process

Units Involved

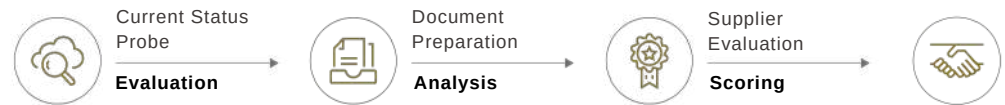
1	Gather Supplier Information	Production Operations Unit
	Including a company profile and contact details.	
2	Sign Non-Disclosure Agreement	Production Operations Unit & Legal Unit
	Sign an NDA with the supplier to minimize the risk of leaking sensitive business information.	
3	Requirement Assessment and Pilot Production	Engineering Unit
	Conduct a preliminary assessment and pilot production based on product and process requirements.	
4	Supplier Review	Quality Unit
	Initiate the 'supplier review process' once a new supplier meets necessary requirements.	
5	Become a Qualified Supplier	Quality Unit & Business Center Supervisors
	After completing the documentation review and on-site audit, and if all requirements are met, the new supplier is officially recognized as a qualified supplier and reported to the production operations unit.	

New Supplier Evaluation Method

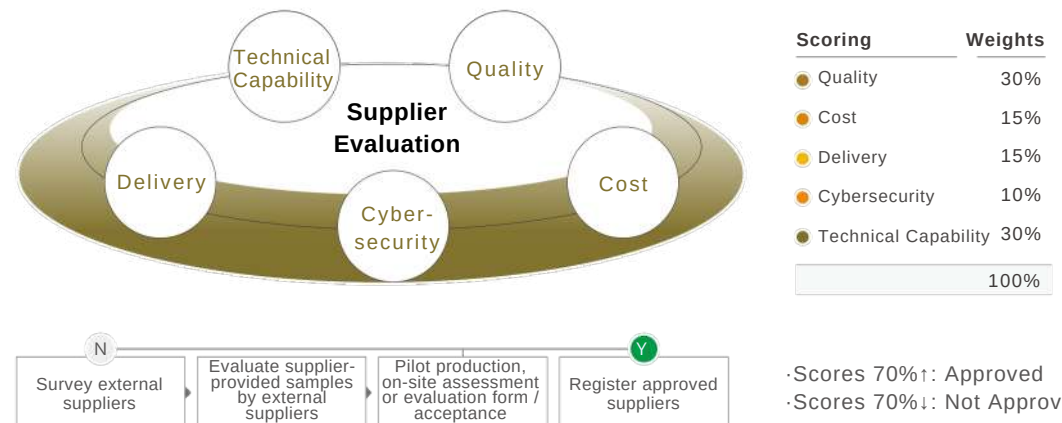
AP Memory's supplier management team has developed an Approved Vendor List (AVL) questionnaire to assess new suppliers. This evaluation process is divided into five key areas: Quality (Q), Cost (C), Delivery (D), Security (S), and Technical Capability (T). This method helps accurately assess the actual situation of new suppliers and enhances the efficiency and cost-effectiveness of supplier management.

The entire supplier management team participates in the evaluation process for new suppliers. They review whether all review issues have been assessed and improved before mass production, ensuring that new suppliers address internal control, production processes, quality risks, and other concerns in advance, and implement improvements before mass production begins.

Supplier Evaluation Process



Supplier Scoring Dimensions



• Scores 70%+: Approved
• Scores 70%+: Not Approved

Existing Supplier Management

AP Memory manages existing suppliers through both written and on-site audits. Audits are conducted using audit questionnaires to assess the current status of suppliers (quality, process capabilities, and production plans). Audit results are categorized based on scoring into Acceptable, Conditional Acceptance, or Fail. In cases of non-compliance, suppliers must make improvements within a specified timeframe and undergo re-audit within six months. In 2023, a total of four suppliers were evaluated with no failures. The supplier management team holds regular quality weekly meetings with key suppliers, discussing key quality indicators established to monitor quality trends, Statistical Process Control (SPC) charts, Process Capability Index (Cpk), and Continuous Improvement Projects (CIP) and other quality management activities.

Reviewing the quality performance of suppliers for 2023, it is confirmed that all suppliers met the quality objectives. The actual quality of products shipped to end customers met their requirements, with no customer complaints. AP Memory will continue to adhere to standardized operations, manage the quality of all suppliers, and integrate regular quarterly assessment mechanisms to improve supplier quality levels.

Additionally, in response to international energy-saving and carbon reduction initiatives, AP Memory assessed suppliers' carbon management in 2023. This included investigating suppliers' energy-saving measures, electricity reduction, GHG management goals, and the use of renewable energy. It has been confirmed that by 2025, four suppliers are expected to achieve the target of using 10% renewable energy.

Supplier Communication

Regular Intensive Meetings: AP Memory conducts weekly and monthly review meetings with suppliers to collect and analyze key performance indicators. The results are reviewed in writing to ensure they fulfill quality requirements.

Immediate Issue Response: Upon receiving product issues reported by customers, suppliers are required to promptly analyze and pinpoint the root cause of nonconformances, implement corrective actions, and provide timely updates on the progress of improvements to resolve issues and prevent recurrence.

Conflict Minerals Management

Conflict Minerals Policy

- Commitment to sourcing all 3TG and cobalt materials from Responsible Minerals Initiative (RMI) compliant smelters.
- Commitment to conducting due diligence on the supply chain to meet conflict minerals requirements.
- Commitment to not sourcing conflict minerals used to directly or indirectly finance non-state armed groups.
- AP Memory suppliers are required to mandate the same conflict minerals management requirements from their upstream suppliers.

Conflict minerals are those extracted under conditions of armed conflict and human rights abuses, particularly referring to precious metals such as gold (Au), tin (Sn), tantalum (Ta), tungsten (W), and cobalt (Co) mined from the Democratic Republic of the Congo and its neighboring countries. AP Memory does not directly purchase raw ore or refined 3TG materials. Instead, all external suppliers using 3TG must comply with AP Memory's "Green Product Management Procedure." We require external suppliers to complete a Conflict Minerals Reporting Template (Cobalt Reporting, EMRT) and conduct supply chain investigations to ensure their mineral sources are not from conflict regions.

In 2023, AP Memory, based on the latest conflict minerals requirements, mandated suppliers to remove or exclude non-compliant or non-conforming smelters. Currently, AP Memory uses minerals sourced 100% from qualified smelters, totaling 51 smelters, and continuously monitors compliance with regulations and customer requirements.

Local Sourcing

AP Memory prioritizes reducing transportation carbon mileage and supporting the local economy. As an upstream IC design company in the semiconductor industry chain, AP Memory completes product design and then relies on professional wafer foundries for wafer fabrication. The semi-finished wafers are subsequently tested by testing facilities and then fabricated by packaging vendors. All outsourced production is handled by 100% local Taiwanese suppliers. Additionally, 95% of the procurement for fixtures and production equipment is sourced from Taiwanese suppliers.

5.3 Raw Material Procurement

Raw Material Risk Management

Disclosure Topic: Raw Material Procurement

Code	Metrics	Description
TC-SC-440a.1	Description of the management of risks associated with the use of critical materials	<p>AP Memory's primary raw material, wafers, are 100% outsourced to wafer foundries for manufacturing. Rare earth metals are critical raw materials for these foundries. The stability and timeliness of wafer foundry supply are key procurement risk issues for AP Memory, which is continuously monitored through regular supplier evaluations to manage these risks effectively.</p> <p>AP Memory regularly requires suppliers to update the Green Product (GP) inspection reports for their materials, with updates generally mandated at least once per year. Additionally, during the annual quality audit, the materials list and inspection records used are reviewed on-site.</p>



5.4 Product Quality

Quality Policy

AP Memory is committed to closely collaborating with customers, consistently focusing on their needs and product quality requirements. By leveraging a global presence, the Company offers timely, effective, and technical support to enhance customer confidence and satisfaction.



Quality Philosophy and Commitment

AP Memory is dedicated to advancing comprehensive chip design technology and executing high-quality solutions. Customer-oriented, the Company aims to become the world's leading memory solution provider. AP Memory is committed to delivering the highest quality products that meet customer needs. Since achieving ISO 9001 quality certification in 2017, the Company has focused on full employee involvement, rigorous process management, and timely customer satisfaction, striving for zero defects and surpassing customer expectations.

As an IC design company specializing in memory research, design services, and sales, AP Memory relies on qualified external suppliers for manufacturing. The Company ensures product quality through regular monitoring and management of external suppliers, promotes continuous quality improvement activities, and optimizes process management. This approach aims to minimize operational risks and environmental impact, supporting the Company's goal of sustainable operations.

Quality Management Process

To ensure that product quality meets design specifications and customer requirements, AP Memory implements a comprehensive quality management approach throughout the product lifecycle, encompassing "new product development verification," "risk-based trial production," and "long-term reliability monitoring post-mass production."

1 AP Memory	2 Response	3 Governance	4 Pioneering	5 Collaboration	6 Empowerment	7 Coexistence	8 Appendices
Leading Industry Development	Identifying Sustainability Impacts	Upholding Corporate Ethics	Driving Product Innovation	Building Partnerships	Nurturing Human Capital	Maintaining Environmental Balance	

AP Memory integrates management systems processes from new product verification, production quality management, to after-sales service.



Quality Management Projects

To achieve the Company's quality goals, the quality department collaborates with relevant departments to conduct regular daily, weekly, monthly, and quarterly review meetings. The aim is to promptly identify performance deviations, review and address them immediately to reduce quality issues, thereby improving operational efficiency, minimizing waste, and creating potential profit opportunities.

In 2023, the focus remained on wafer process quality monitoring, enhancing wafer test coverage, and implementing new product verification and reliability monitoring. The department employed 5-whys root cause analysis and CLCA (Close Loop Corrective Action) methods to achieve continuous quality improvement. Additionally, after completing analysis for nonconformance, the quality department promptly initiated the CLCA monitoring mechanism. Monthly CLCA review meetings were held to ensure all customer complaints and nonconformances were addressed according to the analysis reports, with preventive measures implemented and evidence submitted to meet quality requirements and prevent recurrence. Key quality management projects for 2023 included:

ISO Internal Audit

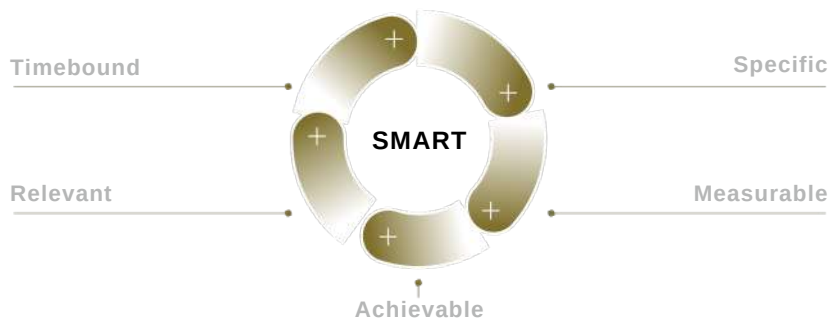
Through the participation of all employees in quality review activities, an internal audit is conducted annually in March, spanning one month for review and improvement. The results are then reported to department heads and the President at the annual management review meeting held in early May.

KPI Monitoring and Continuous Improvement Activities

The Company collaboratively discusses and develops meaningful key indicators using the SMART principles. This approach presents quantifiable performance standards over time in a data-driven manner, effectively managing team performance and allowing timely adjustments to internal control methods based on actual performance conditions to achieve continuous improvement.

The quality department regularly monitors and reviews the achievement of key performance indicators and links the most critical customer complaint requests (CCR) with employee performance. This ensures company-wide engagement and strengthens governance activities.

In 2023, AP Memory focused on the key indicator causing CCRs, the "CP(Chip Probing) escape rate." Efforts were made to enhance test pattern coverage, tighten test conditions, better understand end customer requirements, and increase reliability monitoring frequency. As a result, the CP electrical false alarm rate in 2023 was reduced by 75% compared to the previous year, demonstrating significant quality improvement.



CCR Cases	Level	Level 1	Level 2	Level 3	Level 4	Total
	0					
2022	29	21	5	0	0	55
2023	31	15	2	0	0	48

	Low ppm (< 300ppm)	Higher ppm (>= 300ppm)
CP Escape Issue	4	1
2022	1	0
2023	75%	100%

2023 Improvement Effectiveness

Internal Electronic Signature Process Optimization

To boost operational efficiency, avoid human errors, and ensure data integrity, AP Memory in 2023 implemented improvements to the internal electronic signature process and introduced new electronic countersignature workflows for key procedures and internal control requirements. This includes the digitization of the New Product Definition & Plan Review Form, Risk Run Release Form, and Risk Run Evaluation Form, aiming to boost management efficiency and minimize the risk of errors due to manual processing. Additionally, in 2023, all suppliers were required to perform a comprehensive process review to ensure that any process or procedure irregularities are not caused by human errors.

Reflecting on 2023, the Company has incorporated system auto-detection mechanisms at all critical process points, achieving "zero" human errors and zero internal control risk in quality performance throughout the year.

Quality Education and Training

In 2023, AP Memory continued to promote company-wide educational training programs. The quality department specifically arranged the following courses, incorporating case studies and brainstorming sessions. These initiatives aimed not only to strengthen the team's awareness of quality and sharpen professional skills but also to indirectly improve supplier quality management capabilities and provide more professional and timely services to customers.

- Failure Modes and Effects Analysis (FMEA)
- Customer Return Failure Analysis (FA Flow & Methodology)
- Wire Bonding Process Overview and Failure Analysis
- Product Quality and Reliability Verification Process



Empowerment

Nurturing Human Capital

6.1 Human Rights Management

6.2 Recruitment and Retention

6.3 Compensation and Benefits

6.4 Talent Development

6.5 Employee Health and Safety

6.6 Employee Relations

6.1 Human Rights Management

Human Rights Management Strategy

To protect the fundamental rights of all employees, AP Memory explicitly declares its commitment to safeguarding employee rights, adhering to international human rights standards such as the United Nations Universal Declaration of Human Rights. The Company ensures that employees are not discriminated against based on race, religion, color, nationality, gender, or other factors. These guidelines are outlined in the "Personnel Management Regulations," encouraging diversity in hiring practices across departments. Additionally, training courses are planned for hiring managers, instructing them not to inquire about personal information unrelated to the job or have discriminatory treatment. Externally, AP Memory has established diverse and open communication channels to ensure that stakeholders from various fields can effectively express their thoughts and opinions.

AP Memory is committed to providing a safe working environment where employees are respected and the Company is dedicated to sustainable and ethical practices. The Company places great importance on the freedom of employment for all employees, creating a compliant and supportive workplace. No operational activities involve forced or compulsory labor, and all labor conditions observe the labor laws applicable at each operational location, such as the "Labor Standards Act." In accordance with the United Nations International Labour Organization standards, the Company strictly prohibits the employment of child labor below the legal minimum age. To ensure compliance, all recruited and hired employees must provide identification for verification, abiding by all relevant regulations and legal requirements.

Human Rights Indicator Implementation

Employment of Persons with Disabilities <ul style="list-style-type: none"> AP Memory promotes a diverse and inclusive workplace, encouraging the hiring of individuals with disabilities. In 2023, the Company fully met its employment quota for persons with disabilities. 	Non-Discrimination <ul style="list-style-type: none"> There were no reported incidents of discrimination in 2023. 	Sexual Harassment <ul style="list-style-type: none"> There were no reported cases of sexual harassment in 2023.
Freedom of Association <ul style="list-style-type: none"> Employees have the legal right to establish, participate in, or refuse to join associations and engage in collective bargaining. 	No Child Labor <ul style="list-style-type: none"> The Company strictly observes regulations prohibiting the employment of individuals below the legal minimum age. 	No Forced Labor <ul style="list-style-type: none"> AP Memory ensures that all working hours comply with the standard 40-hour workweek, with at least one rest day every seven days. There were no labor disputes reported in 2023.

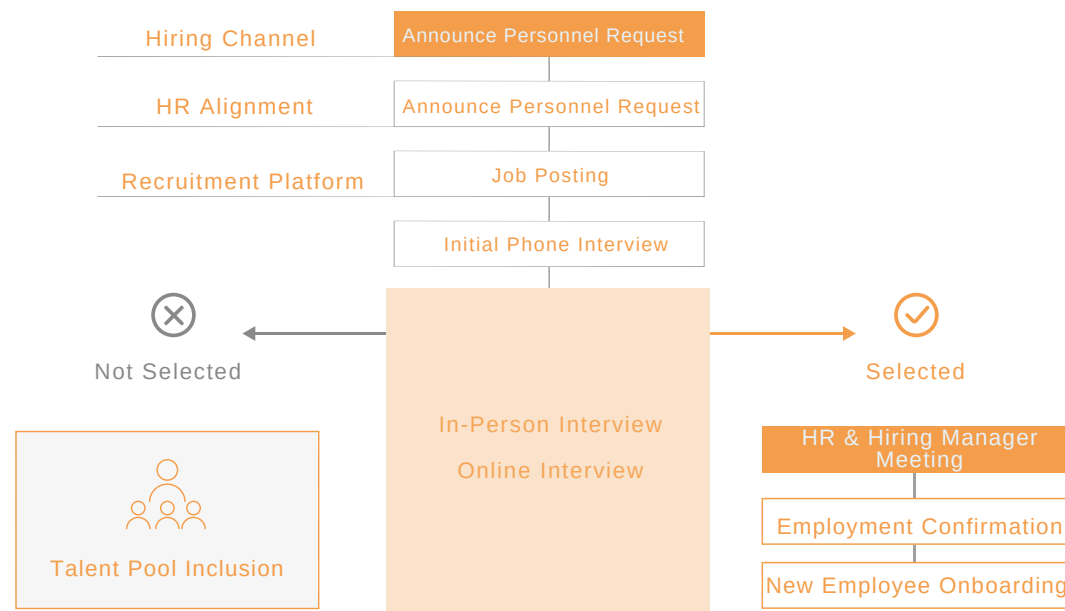
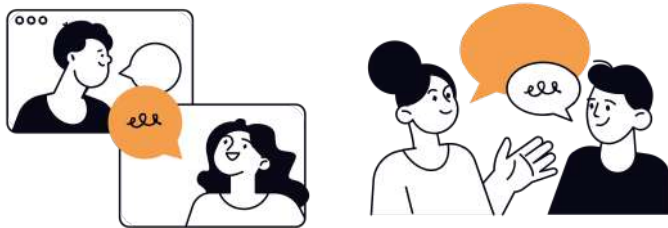


6.2 Recruitment and Retention

Talent Recruitment

AP Memory values diversity and inclusivity, making it a key part of its corporate culture. The Company prioritizes finding suitable and qualified talent without regard to gender, race, religion, age, or disability. AP Memory promotes diversity and equality and fosters a friendly and inclusive organizational culture. Besides regular job postings through the 104 Job Bank, the Company collaborates with renowned recruitment agencies to source talent for specific roles, such as senior executives and R&D personnel. Internal referrals from current employees are also encouraged.

Since 2022, AP Memory has launched campus recruitment campaigns through job fairs and company presentations to engage with recent graduates and students, creating potential opportunities for future employment. The Company is also active on social media and uses video interviews to overcome geographical and time constraints, enabling direct and immediate interaction with job seekers.



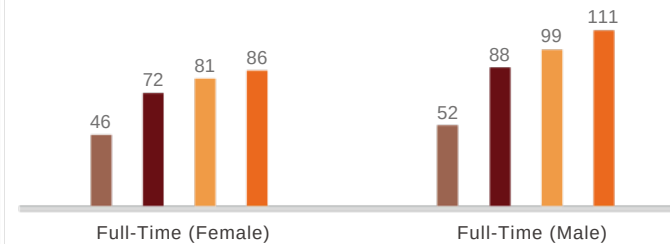
Workforce Overview

AP Memory is headquartered in Hsinchu, Taiwan, with additional R&D and sales locations in Hangzhou, China, and Portland, USA, totaling three global operational sites. As of the end of 2023, the Company employed approximately 197 full-time, permanent staff members (excluding temporary, dispatched, and non-guaranteed hour employees). The Hsinchu office had 156 employees, Hangzhou 35, and Portland six. The gender distribution was 56.35% male and 43.65% female. Age-wise, 23.35% of employees were under 30, 67.51% were between 31-50, and 9.14% were over 50. There were 46 employees in managerial positions, including 15 female managers (32.61%), with two women in middle and senior management, making up 9.5% of the middle and senior management team (21 individuals). Additionally, in 2023, all senior managers hired in Taiwan were of local nationality, and in Hangzhou and Portland, all senior managers were local residents, with a 100% local resident rate for senior management positions. AP Memory abides by the "People with Disabilities Rights Protection Act," Article 38, Paragraph 2, by providing employment opportunities for people with disabilities. As of the end of 2023, the Company employed one person with a disability.

Employee Classification by Employment Type

Number of Employees by Employment Type Over the Years

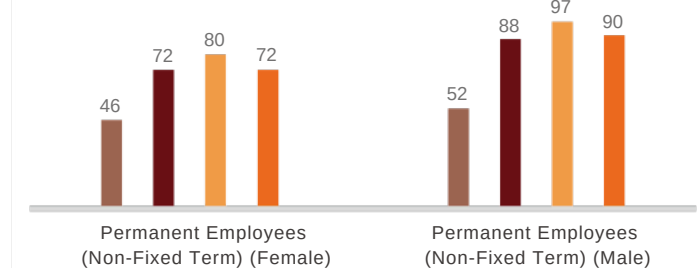
■ 2020 ■ 2021 ■ 2022 ■ 2023



Employee Classification by Employment Contract

Number of Employees by Employment Contract Over the Years

■ 2020 ■ 2021 ■ 2022 ■ 2023

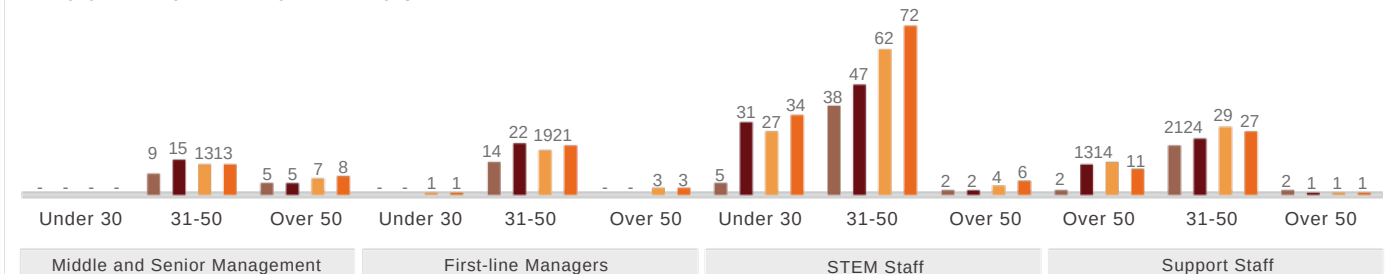


•Note: The calculations in the above chart focus primarily on Taiwan and the US. In China, permanent employment includes both fixed-term and non-fixed-term contracts. However, according to GRI definitions, fixed-term contracts are considered temporary employees; therefore, employees in China are not included in the relevant classifications.

Classification by Age and Job Level

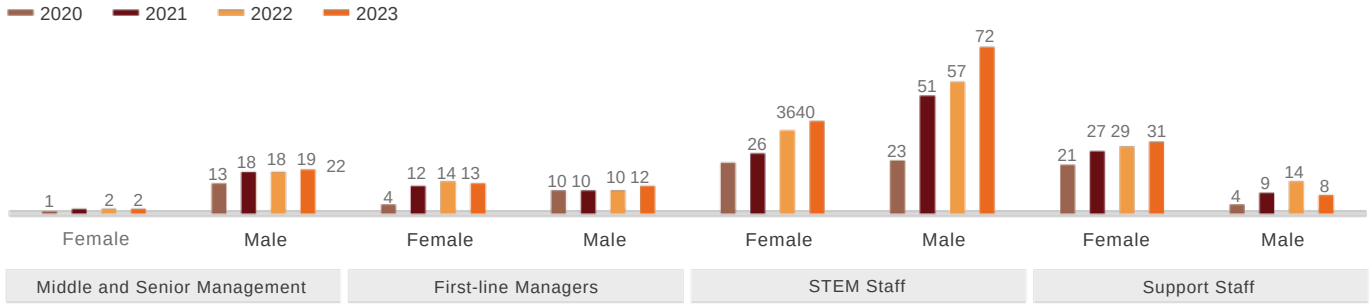
Total Number of Employees by Age Group Over the Years

■ 2020 ■ 2021 ■ 2022 ■ 2023



Classification by Gender and Job Level

Total Number of Employees by Gender and Job Level Over the Years



•Notes: 1. Middle and Senior Management includes managers at the division level and above. First-line Managers refer to department-level managers. STEM Staff are those involved in research, development, and engineering-related roles. Support Staff includes roles in sales, administration, finance and accounting, and legal support.
2.Employee counts are based on the statistics as of December 31, 2023.

Gender Diversity Overview

		2020	2021	2022	2023
All Managers	Female	5	14	16	15
	Male	23	28	28	31
	Total	28	42	44	46
	Female	17.86%	33.33%	36.36%	32.61%
	Male	82.14%	66.67%	63.64%	67.39%
STEM	Female	22	26	36	40
	Male	23	51	57	72
	Total	45	77	93	112
	Female	48.89%	33.77%	38.71%	35.71%
	Male	51.11%	66.23%	61.29%	64.29%

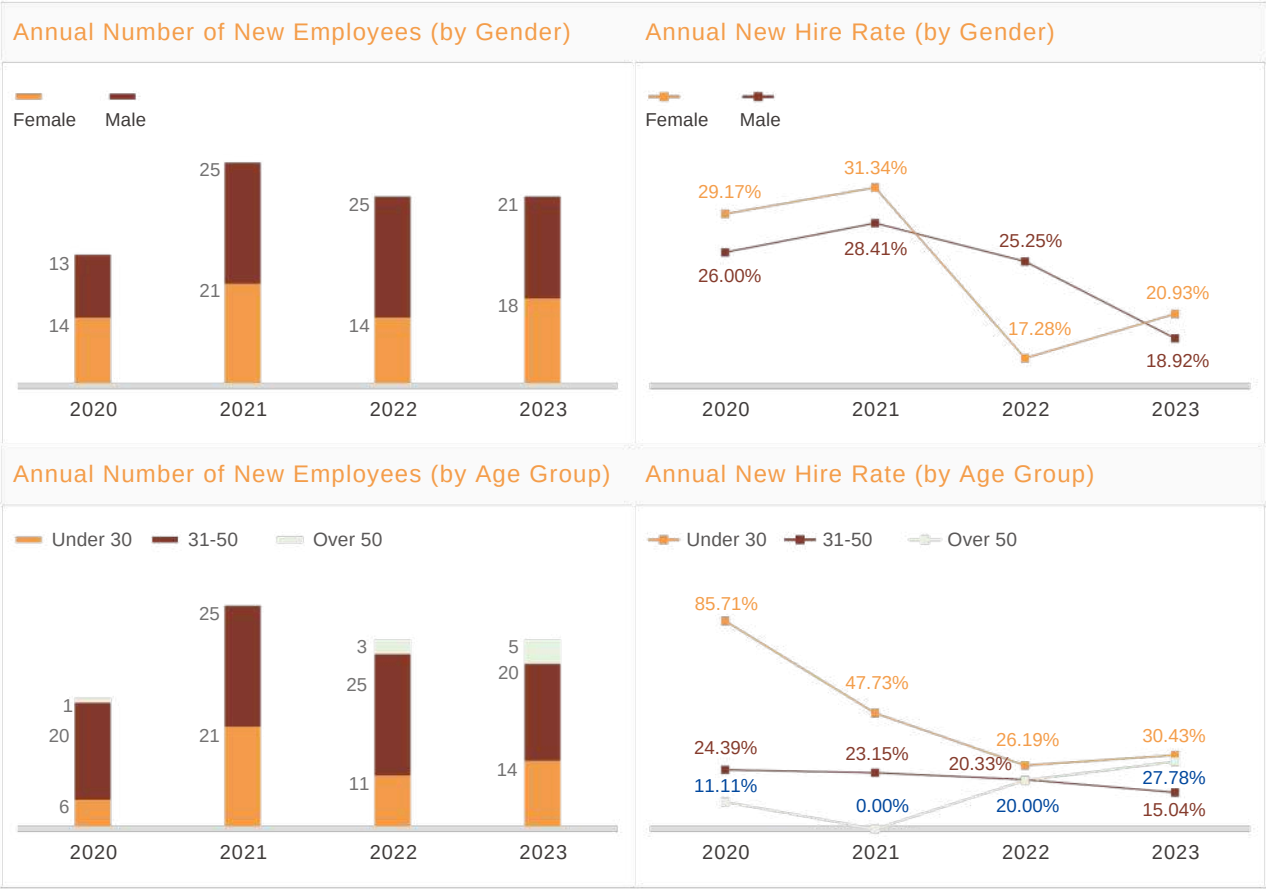
Disclosure Topic: Recruiting & Managing a Global & Skilled Workforce

Code	Metrics	2020	2021	2022	2023
TC-SC-330a.1	Percentage of employees that require a work visa	3%	2%	1%	0.5%

Employee Mobility

In terms of new hires and retention, the total number of new employees in 2023 was 39, with an overall new hire rate of 19.80%. Among these, 21 were male (new hire rate of 18.92%) and 18 were female (new hire rate of 20.93%), with the female new hire rate slightly higher than that of males. By age group, the new hire rate was 30.43% for employees under 30 years old, 15.04% for those aged 31-50, and 27.78% for those over 50 years old.

In 2023, the total number of departures was 26, all of which were voluntary, resulting in a turnover rate of 13.20%. This rate was lower than the industry average (according to the 2023 Human Resources FBI Report published by 104 Job Bank, the overall turnover rate for companies with 50-199 employees was 19.1%, and the electronics and information industry turnover rate was 18.4%). Of the departing employees, 13 were male (turnover rate of 11.71%) and 13 were female (turnover rate of 15.12%), with a lower turnover rate for males compared to females. By age group, the turnover rate was 8.7% for employees under 30 years old, 14.29% for those aged 31-50, and 16.67% for those over 50 years old, indicating that employees under 30 are relatively more stable.



Annual Number of New Employees (by Age Group)

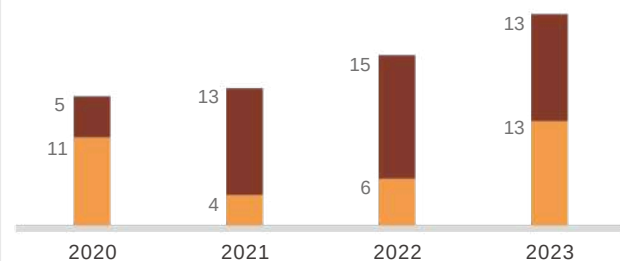
Year	Under 30	31-50	Over 50
2020	6	20	1
2021	21	25	0
2022	11	25	3
2023	14	20	5

Annual New Hire Rate (by Age Group)

Year	Under 30	31-50	Over 50
2020	85.71%	24.39%	11.11%
2021	47.73%	23.15%	0.00%
2022	26.19%	20.33%	20.00%
2023	30.43%	27.78%	15.04%

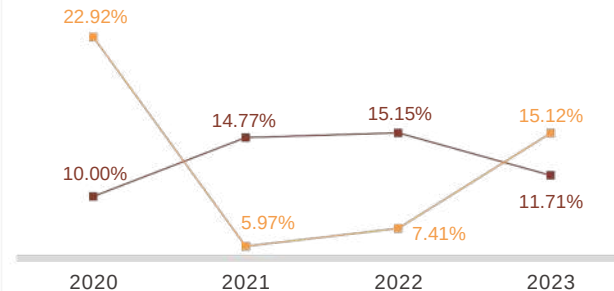
Annual Number of Departing Employees (by Gender)

Female Male



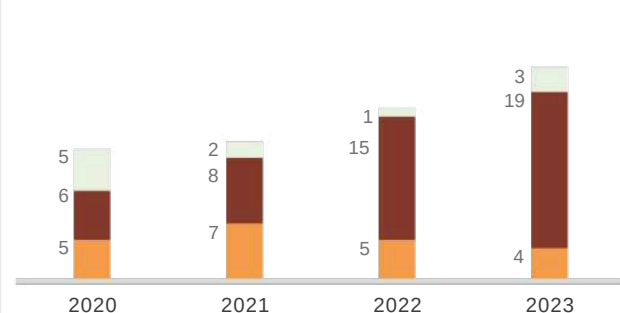
Annual Employee Departure Rate (by Gender)

Female Male



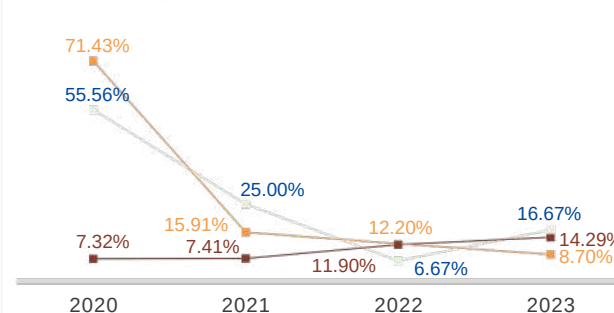
Annual Number of Departing Employees (by Age Group)

Under 30 31-50 Over 50



Annual Employee Departure Rate (by Age Group)

Under 30 31-50 Over 50



Turnover Rate Management

At AP Memory, we focus on hiring individuals who are a good fit for both the company culture and the specific job role to minimize turnover from the outset. When employees submit a resignation, both the relevant departments and the Human Resources (HR) division conduct in-depth exit interviews to understand the reasons behind their departure. The goal is to address and resolve any issues employees might be facing to encourage retention. HR also records and analyzes exit reasons to generate reports for continuous improvement.

Human Resource Strategy Planning

Talent is a crucial asset for AP Memory. The Company considers a robust human resource structure and strategic talent placement as key drivers for technological research and development. To expand operational scale and enhance R&D capabilities, AP Memory focuses not only on growth in headcount but also on the structure and quality of its workforce. To achieve this, AP Memory aligns its human resource planning with operational strategy goals, assesses talent needs and capabilities, and continuously develops diverse and effective recruitment channels. The Company also offers competitive salaries and benefits to attract top talent and improve employee engagement and retention rates.

6.3 Compensation and Benefits

Competitive Compensation



To attract and retain professional talent and to incentivize exceptional performance, AP Memory has established a compensation policy that determines salaries based on employees' professional skills, job roles, and responsibilities, without gender-based disparities. The Company is committed to fostering a fair pay environment and implementing gender equality in the workplace.

AP Memory values the contribution and worth of each employee, encouraging them to collaborate with the Company to achieve operational excellence. The Company believes in sharing business success with employees, aligning individual work goals with corporate objectives and shareholder interests. This integration fosters a win-win-win situation where individual, company, and shareholder interests are harmonized, ensuring sustainable and stable business operations.

Compensation and Bonus Tools	Description
Annual Salary Adjustment	The purpose of annual salary adjustments is to reflect employee performance over the past year, aiming to incentivize better performance. The annual salary adjustment is conducted by considering operational performance, employee performance, and salary levels within the industry or local job market.
Festival Bonus	To align with cultural traditions, all employees receive a month's salary as a Lunar New Year bonus, and half a month's salary each as Dragon Boat Festival and Mid-Autumn Festival bonuses. Plans are in place to increase the bonuses for Lunar New Year and the other traditional festivals in 2024.
Quarterly Performance Bonus	To align employee compensation with company operational performance, quarterly bonuses are distributed during the financial quarter report months. These bonuses are based on company profitability, performance achievement rates, business unit performance, and individual work performance.
Annual Performance Bonus	Annual performance bonuses are distributed in May and November. The budget for these bonuses is equal to the total budget for the previous year's quarterly performance bonuses. Employees with outstanding performance may receive a share of the high-performance bonus pool.
Management Team/ Quarterly Operations Bonus	To align management team compensation with company operational performance, quarterly bonuses are distributed during the financial quarter report months, based on the multiple of company operational performance achieved.
Stock Trust *	To continuously attract and retain employees, AP Memory allocates 5% of each employee's monthly salary each quarter to purchase company stocks, which are then deposited into a trust account. After a two-year trust period, the stocks are transferred to the employees' accounts, enabling them to become shareholders and benefit from the Company's growth and corresponding stock price appreciation. As of the end of 2023, the participation rate in the employee stock trust program was 100%.
Stock Options	To foster organizational commitment and strengthen employee loyalty while creating value for both the Company and its shareholders, AP Memory annually grants stock options to all employees to motivate them and enhance their cohesion.

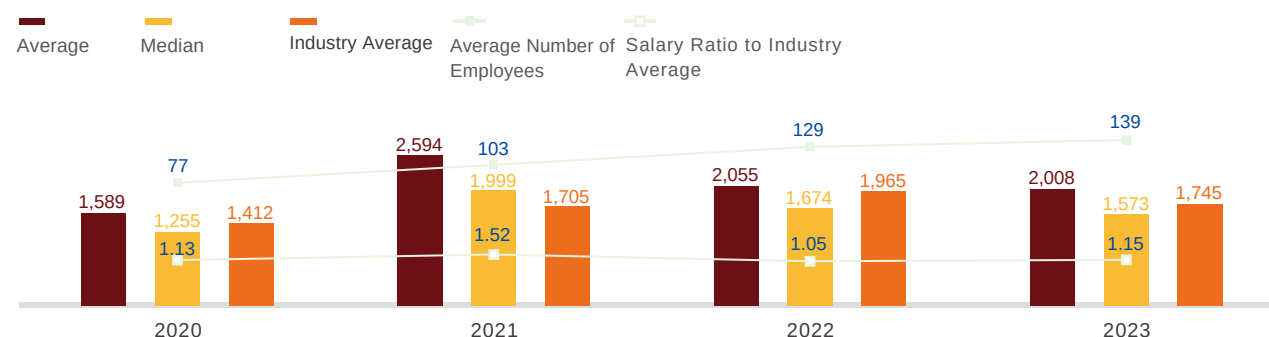
•Note: *Applicable only in AP Memory Taiwan

AP Memory offers competitive compensation packages. According to the Taiwan Stock Exchange's 2023 report, the average employee salary in the semiconductor industry was NT\$1,938 K, a slight decrease of 15% from 2022. In contrast, AP Memory's average salary for 2023 was NT\$2,507 K, reflecting a 13% increase from the previous year. Furthermore, when comparing the average and median salaries of "non-managerial full-time employees" within the same industry (as shown in the right-hand graph), it is evident that AP Memory provides a highly competitive salary level.

The Company upholds salary fairness and equality between genders. Upon analyzing the current employee structure, the number of male employees is approximately 1.2 times that of female employees. Additionally, a job classification analysis reveals that male employees are predominantly engaged in engineering or R&D positions, which generally offer higher salaries, while female employees are more commonly found in operational support roles. This difference in job classifications is the main reason for the gender pay gap at AP Memory.

In 2023, the starting salary for the most entry-level employees at the Hsinchu site was NT\$36,500, which was 1.38 times the minimum wage of NT\$26,400 set by Taiwan's Labor Standards Act for 2023.

Non-Managerial Full-Time Employee Salary Statistics (In NT\$ K)



Item	2020		2021		2022		2023			
	Taiwan		Taiwan		Taiwan		Taiwan		Hangzhou	
	M	F	M	F	M	F	M	F	M	F
Mangers (Department-level and above)	1	0.71	1	0.72	1	0.82	1	0.80	1	-
Base Monthly Salary	STEM Staff (Non-managerial employees)		1	0.93	1	0.92	1	0.88	1	0.86
	Support Staff (Non-managerial employees)		1	0.69	1	0.77	1	1.07	1	0.57
	Average Monthly Salary for Full-Time Employees		1	0.73	1	0.77	1	0.77	1	0.66
	Median Monthly Salary for Full-Time Employees		1	0.70	1	0.76	1	0.74	1	0.77
Base Monthly Salary + Annual Bonuses	Average Annual Salary for Managers (Department-level and above, including bonuses)		1	0.59	1	0.65	1	0.64	1	-
	Average Annual Salary for STEM Staff (Non-managerial employees, including bonuses)		1	0.81	1	0.91	1	0.89	1	0.77
	Average Annual Salary for Support Staff (Non-managerial employees, including bonuses)		1	0.64	1	0.87	1	1.04	1	0.68
	Average Annual Salary for Full-Time Employees		1	0.61	1	0.77	1	0.66	1	0.61
	Median Annual Salary for Full-Time Employees		1	0.68	1	0.68	1	0.74	1	0.66

• Note: The salary ratio uses male employees as the baseline, with a value of 1. There are no female managers in Hangzhou.

1 AP Memory	2 Response	3 Governance	4 Pioneering	5 Collaboration	6 Empowerment	7 Coexistence	8 Appendices
Leading Industry Development	Identifying Sustainability Impacts	Upholding Corporate Ethics	Driving Product Innovation	Building Partnerships	Nurturing Human Capital	Maintaining Environmental Balance	

Comprehensive Benefits

In addition to offering competitive and premium salaries, AP Memory provides a well-rounded benefits system. The Company values the treatment and welfare of its employees, guided by a spirit of "sharing." AP Memory has designed and offers a comprehensive benefits system that surpasses legal requirements and focuses on sharing the Company's success, ensuring that every key partner within the Company is well cared for.

Types of Benefits	Item	Description
Leave Category	Flexible Leave	At the Hsinchu site in Taiwan, AP Memory maintains a flexible leave system for holidays and memorial days as defined under the pre-2015 provisions of Article 37 of the Labor Standards Act and Article 23 of its Enforcement Rules. This system allows employees to arrange their holidays flexibly based on personal needs.
	Company Leave	New employees at the Hsinchu site receive additional company leave, supplementing the statutory leave they may lack due to resetting their seniority upon job transition. This additional leave is provided from the first year of employment up to the fifth year. At the Hangzhou site in China, employees are awarded additional company leave after two years of service as a reward for long-term employment.
	Paid Sick Leave	AP Memory provides six days of paid sick leave, ensuring employees can take time off for short-term illness without losing pay.
	Marriage Leave	Beyond the legally mandated leave, the Company offers additional marriage leave days exceeding the legal requirements based on employee seniority.
	Maternity Leave	For female employees over 35 years old with at least two years of service at the Taiwan site, the Company grants an extra two weeks of maternity leave post-delivery, exceeding the legal requirements. This extended leave is provided to support late-stage pregnancies and allow for adequate child care and recovery.
Gifts/Cash Gifts Category	Birthday Cash Gift	At the Hsinchu site in Taiwan, AP Memory prepares a birthday gift and cake for employees, allowing them to relive the joy of childhood and share the moment with family and friends while saying "Happy Birthday!" In the Hangzhou site in China, electronic gift vouchers are distributed to wish employees a happy birthday.
	Holiday Gifts	During the traditional three major festivals—Lunar New Year, Dragon Boat Festival, and Mid-Autumn Festival—the Taiwan's Employee Welfare Committee selects unique holiday gift boxes for employees each year, in addition to the holiday bonuses. These gifts are filled with blessings, allowing employees to enjoy delicious treats with their families.
	Labor Day Cash Gifts	Acknowledging the hard work employees put into balancing work and family life, the Hsinchu site also provides Labor Day bonuses (in the form of electronic gift vouchers) on May 1st, allowing employees to treat themselves during the holiday.
	Wedding Cash Gift	As employees experience various life milestones, AP Memory supports them through significant events, from weddings to the arrival of children, as well as their children's educational milestones. The Hsinchu site in Taiwan also offers a scholarship program for the children of employees, from elementary school to postgraduate studies, supporting employees and their families throughout the long journey of child-rearing.
	Newborn Cash Gift	
	Condolence Cash Gift	
Care and Health Category	Children's Scholarships	
	Annual Health Check	AP Memory provides annual health check-ups for employees that exceed the statutory requirements, available to all employees regardless of age or position, provided they join before the fourth quarter.
Insurance Category	Doctor Consultations and Health Promotion	After the health check-up, the Company offers follow-up consultations with doctors, tracks any abnormalities, and designs health promotion activities tailored to the needs of different groups.
	Labor Insurance and National Health Insurance	The Company complies with local laws at each operational site to contribute to social insurance and pension funds, ensuring adequate protection for all employees. Additionally, upon employment, AP Memory provides group insurance (including occupational accident insurance) and travel accident insurance, offering comprehensive protection and peace of mind, whether employees are at work or participating in company trips and team-building activities.
	Group Insurance	
	Travel Accident Insurance	Employees in Hangzhou, China, benefit from the "five insurances and one fund" system, providing extensive coverage.

*Note: The benefits outlined are applicable to the Hsinchu and Hangzhou sites. Benefits for employees in the United States are provided in accordance with local regulations.

Retirement System

In accordance with Taiwan's "Labor Pension Act," AP Memory has established a defined contribution plan. The Company contributes every month a retirement pension to each employee's individual account at the Bureau of Labor Insurance, amounting to no less than 6% of the employee's monthly salary. In 2023, the total retirement pension expenses recognized under this defined contribution plan amounted to NT\$9,918K. Additionally, AP Memory also provides retirement contributions for employees in the United States and China, in accordance with local regulations.

Parental Leave

AP Memory is committed to promoting a work-life balance for its employees, actively implementing gender-equal maternity and paternity leave as per statutory leave rights. The Company also offers a comprehensive leave management system, allowing employees to flexibly use leave for family care. In cases of severe disease/injury or other serious circumstances requiring extended leave, employees can apply for unpaid leave, ensuring that personal and family care needs are met, and employees can work with peace of mind. Due to the small number of employees at AP Memory, only one employee qualified for unpaid parental leave in 2023, and there were no applications for parental leave that year.

Performance Evaluation

AP Memory's performance evaluation system operates under a transparent review process, encouraging open communication between employees and supervisors. The annual performance review is conducted from November to January of the following year. Employees undertake self-evaluations and reviews based on the annual work objectives set after the previous year's evaluation. These objectives include both planned and ad-hoc tasks, allowing employees to present their achievements and feedback through quantitative indicators and self-description. During the supervisor evaluation phase, feedback is not only provided by the direct supervisor but also includes assessments from supervisors within similar work groups, providing a comprehensive evaluation and valuable insights for talent management.

In addition to outcome-based evaluations, AP Memory introduced core competencies and managerial competencies behavioral evaluations in 2023. This allows employees to self-assess their demonstration of these competencies and receive feedback from supervisors, fostering two-way communication. The goal is to foster employee behavior that aligns with core and managerial competencies, thereby shaping a strong organizational culture and enhancing overall performance.

All performance records are used as a basis for subsequent training and development, with the ultimate goal of maximizing employees' strengths, continuously improving the overall organizational capability, and jointly achieving better business performance. In 2023, 100% of employees completed the performance evaluation, excluding those who joined the Company within the last three months.

Employee Performance Evaluation Process



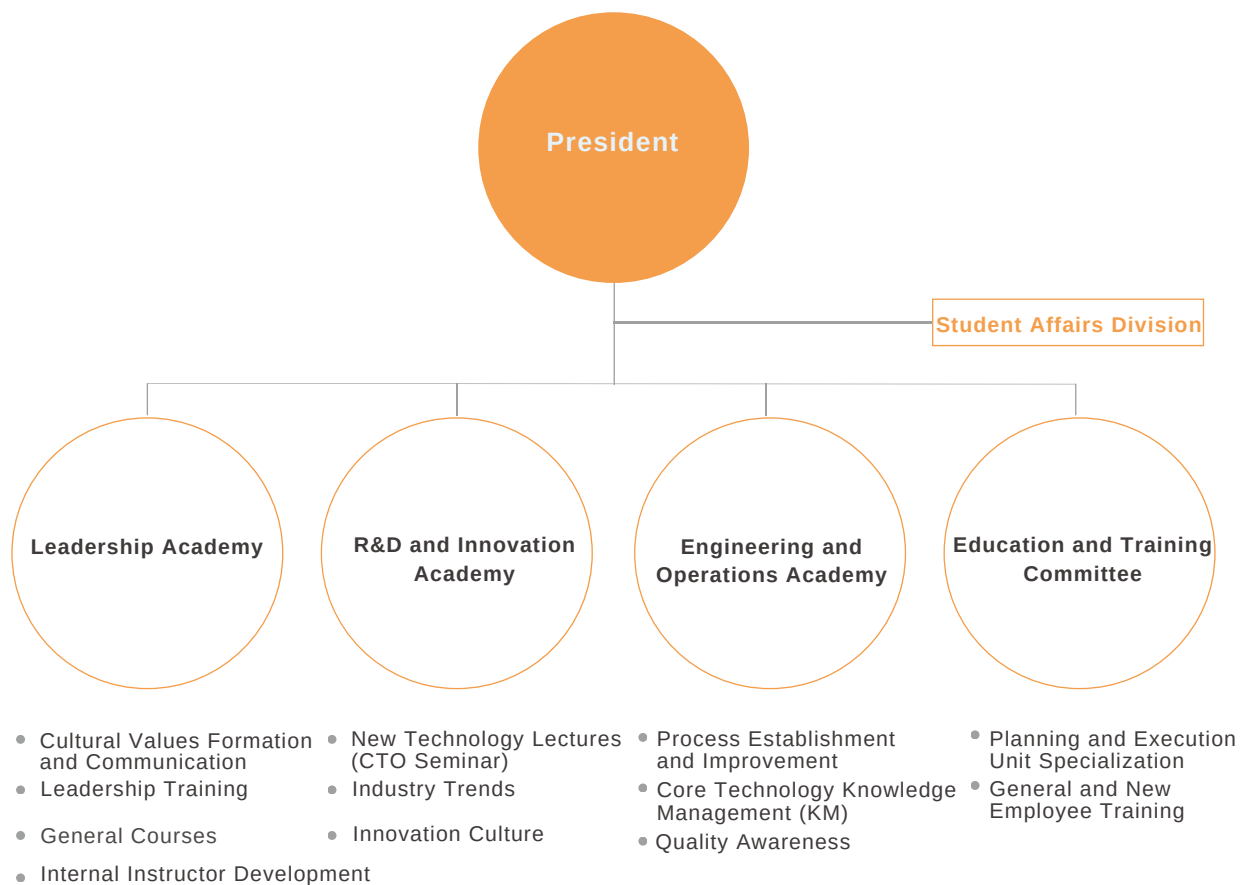
6.4 Talent Development

AP Memory College

To align learning with strategy and provide employees with a comprehensive training program and continuous learning environment, AP Memory established the "AP Memory College" in 2023. The College is designed to map out the talent development blueprint and professional training. It is led by the President (CEO), who oversees and plans the Company's talent strategy for sustainable growth. The College comprises three academies and an Education and Training Committee, with each academy headed by a senior professional and supported by designated executive officers. Additionally, the HR department under the Student Affairs Division is responsible for assisting with communication and operations within the College. The purpose of the academies is to focus on industry trends and introduce external knowledge and learning resources to help employees stay updated with current skills. The Education and Training Committee's mission is knowledge management and transmission, ensuring the effective dissemination and flow of organizational knowledge through professional training within departments.

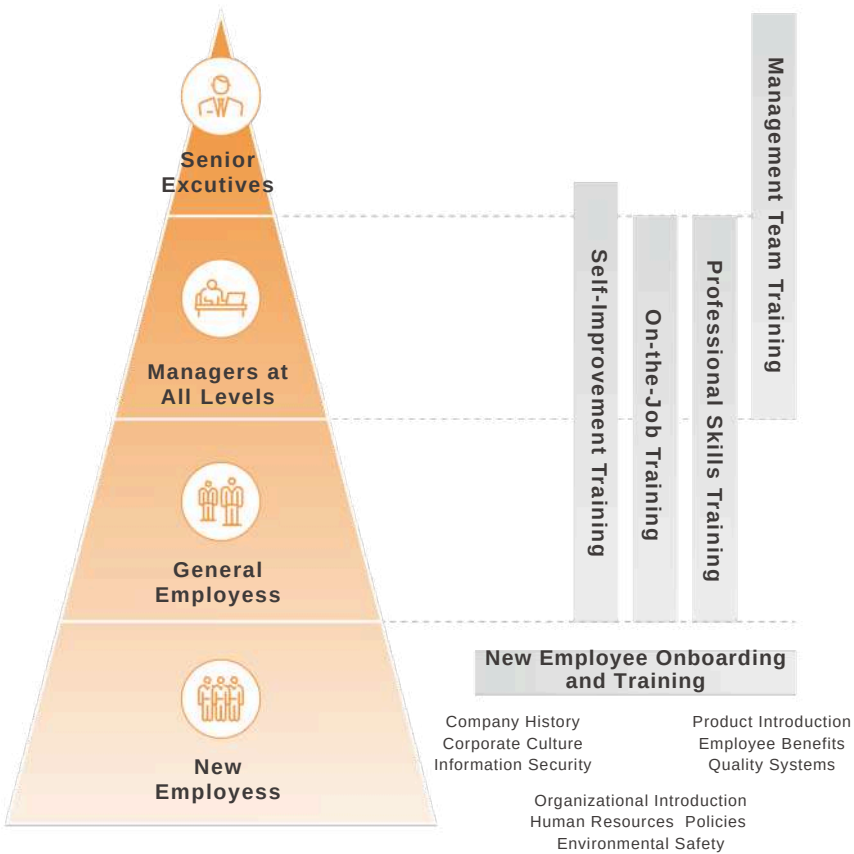


AP Memory College Organizational Chart



Training Structure

AP Memory enhances employees' professional skills and growth through a systematic, goal-oriented, and comprehensive development approach, building intellectual capital and establishing career development maps. By aligning with the Company's vision, we offer diverse learning channels and training resources, focusing on continuous employee development and encouraging them to enjoy their work and grow with the Company.



Course Training Overview

Target Audience	Types	Content	Training Methods			
			On-line	in-Person	Internal	external
New Employees	Onboarding and Training for New Employees	<ul style="list-style-type: none"> Company history, organizational introduction, product introduction, corporate culture, HR policies, employee benefits, information security, environmental safety, quality systems 		V	V	
Senior Executives	Management Skills	<ul style="list-style-type: none"> NTU Executive Management Course 		V		V
Managers at All Levels	Management Skills	<ul style="list-style-type: none"> Daily performance coaching and communication Recruitment interview techniques 				
		<ul style="list-style-type: none"> Performance reviews and feedback Essential knowledge for managers 1. Labor laws and regulations 2. Performance management and evaluation 	V	V	V	
General Employees (Various Departments)	Professional Skills	<ul style="list-style-type: none"> Compliance training, functional enhancement for departments Specialized topic training 	V	V	V	V
	Self-Development	<ul style="list-style-type: none"> Self-improvement training 	V	V		V

Training Evaluation Model

Talent is the core competitive advantage of a company. AP Memory is dedicated to nurturing talent, believing that employees are valuable assets and that continuous learning and development are the foundation for creating value. To ensure the effectiveness of human resource development training, AP Memory employs the Kirkpatrick Model, which includes four levels of evaluation: Reaction (Level 1), Learning (Level 2), Behavior (Level 3), and Results (Level 4). In 2024, AP Memory will set goals for each level of evaluation to continuously enhance the effectiveness of training assessments, with the aim of further linking them to business performance outcomes in the future.

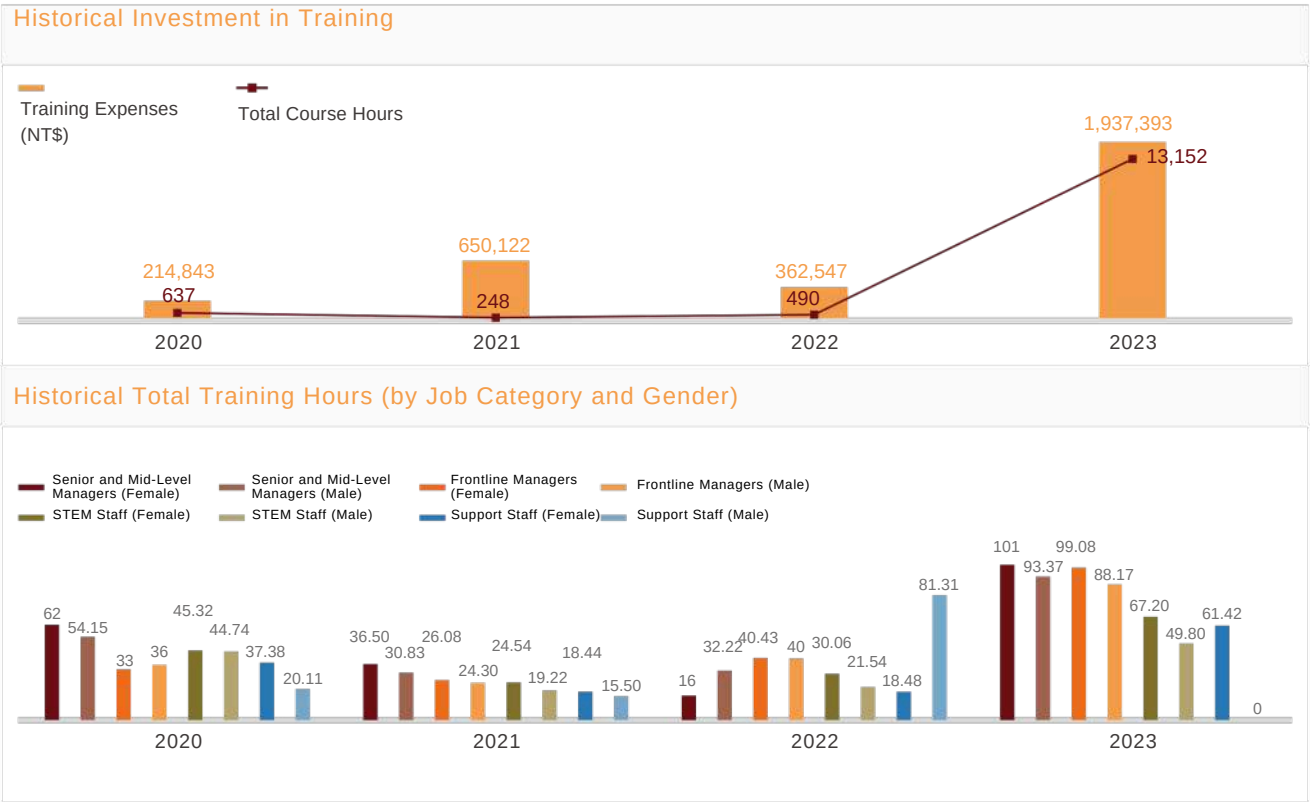
1 AP Memory	2 Response	3 Governance	4 Pioneering	5 Collaboration	6 Empowerment	7 Coexistence	8 Appendices
Leading Industry Development	Identifying Sustainability Impacts	Upholding Corporate Ethics	Driving Product Innovation	Building Partnerships	Nurturing Human Capital	Maintaining Environmental Balance	

Training Effectiveness Evaluation	Description	2023 Implementation Status	2024 Goals
Level 1 Reaction	Conduct post-training satisfaction surveys where participants provide feedback on course content, practicality, and instructor performance.	Overall training course execution rate: 96%; Satisfaction survey response rate for training courses: 95%	Achieve 100% completion rate for post-training surveys for all courses.
Level 2 Learning	Have participants complete effectiveness assessments after training, including tests, reflection reports, and post-training action plans.	All compliance courses: 100% completion of post-training tests	Achieve 100% completion of tests for compliance and advocacy courses.
Level 3 Behavior	Observe and record changes in participants' work behavior after training, evaluating the application of training outcomes.	-	Include two manager training courses in the plan and assess participants' application of training before and after the courses.

Training Promotion Results

In 2023, AP Memory launched 101 course sessions, totaling approximately 212 courses. Training expenses amounted to NT\$1.937 million, with a total of 13,152 training hours. The average training hours per employee were 66.76 hours, showing a significant improvement compared to 2022. This surge was largely attributed to the establishment of the "AP Memory College" in 2023, which organized courses by functional themes and adopted various teaching methods. Course recordings were categorized and stored for future use. Average training hours for all job categories in 2023 increased by over twice compared to 2022.

In 2023, emphasis was placed on manager training, offering five key courses related to management functions, including recruitment interviewing, performance management and evaluation, and labor laws. These courses incorporated theoretical frameworks, practical exercises, and post-course tools to help managers apply the knowledge effectively, internalizing it into management thinking and behavior to bolster departmental performance.



6.5 Workforce Health and Safety

Disclosure Topic: Workforce Health & Safety

Code	Metrics	2020	2021	2022	2023
TC-SC-320a.1	Description of efforts to assess, monitor, and reduce exposure of workforce to human health hazards.	Annual execution of four major labor health protection projects. Annual provision of employee health checks beyond legal requirements.			
TC-SC-320a.2	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations.	0	0	0	0
		No recent violations of employee health and safety regulations.			

Safety Management Mechanism

AP Memory has established an "Occupational Safety and Health Code." In accordance with the Occupational Safety and Health Management Act, the Company employs two dedicated occupational safety and health personnel who regularly review and update safety and health work guidelines and related matters to provide a "safe, healthy, and comfortable" workplace by implementing relevant safety protection measures. In recent years, there have been no incidents related to employee health and safety, and the Company has not faced any penalties from regulatory authorities for violations. AP Memory continues to pursue the goal of "zero workplace injuries." To further enhance labor health protection and improve the working environment, AP Memory plans to introduce on-site health services in 2024. Professional medical staff will be engaged to assist employees in avoiding health hazards at work and promoting overall employee health.

In addition, AP Memory undertakes regular fire safety training every six months through occupational safety and health education and emergency response drills, as well as firefighting team escape drills to strengthen employees' emergency response capabilities. New employees receive safety and health education training upon hiring, which covers topics such as occupational safety and health concepts, safety work guidelines, emergency response and handling, and basic fire safety and first aid knowledge. This training aims to promote awareness of work safety and lower the likelihood of workplace hazards.

Four Labor Health Protection Programs

Items	Content
Ergonomics	<ul style="list-style-type: none"> AP Memory operates in an office environment with no special repetitive tasks.
Excessive Workload	<ul style="list-style-type: none"> Employees are provided with superior annual health check-ups beyond legal requirements, with follow-up on abnormal health data. After health checks, doctors are hired to provide health consultation services at the office. In 2023, there were no high-risk groups (employees who worked more than 45 hours of overtime per month for six consecutive months).
Workplace Harassment	<ul style="list-style-type: none"> As per the Gender Equality in Employment Act, anti-sexual harassment measures, grievance procedures, and disciplinary rules are established and posted on the Company's bulletin board. Employees can file complaints with the Human Resources Department if they encounter sexual harassment at the workplace. In 2023, there were no incidents of workplace harassment.
Maternal Health Protection	<ul style="list-style-type: none"> Relevant maternal health protection measures for female employees are set out in the "Personnel Management Regulations" and "Work Rules." A breastfeeding room is provided, equipped with facilities such as a refrigerator and sofa, to offer female employees a convenient and comfortable space.

Health Promotion

AP Memory offers annual health check-ups for employees that exceed legal requirements. All employees hired before the fourth quarter, regardless of age, receive annual health check subsidies. Prior to launching the annual health management program, the Company collaborates with the health management center to plan the focus areas for the year's health check-ups, based on the results of the previous checks. In 2023, the participation rate for health check-ups was 95.24%. Based on the results, AP Memory tracks and manages any abnormalities, arranging for physician consultations and follow-up monitoring as needed. The Company also designs health promotion activities tailored to the needs of different employee groups.

To support employees in navigating conflicts and managing stress from the fast-paced, high-pressure environment and the demands of multiple roles—including work, family, marriage, parenting, and peer relationships—AP Memory introduced an Employee Assistance Program (EAP) in 2022. Through this program, employees can access systematic professional services, programs, and resources, including consultations with professional counselors on life, health, and work-related issues, either via phone or in-person meetings.

Disabling Injuries

For the past four years, there have been no incidents of disabling injuries, work-related fatalities, high-consequence work-related injuries, or recordable work-related injuries. The Lost-Time Injuries Frequency Rate (LTIFR) has also been zero. AP Memory will continue to upgrade the office environment to provide a safe and healthy workplace for all employees.



6.6 Employee Relations

Employee Communication

AP Memory has established diverse communication mechanisms and channels, including all-hands meetings, labor-management meetings, Coffee Q&A sessions with the CEO and President, and extended staff meetings. These initiatives actively foster a corporate environment that respects, cares for, and protects human rights, promoting a healthy and positive labor-management relationship.

Item	Frequency	Content	2023 Results
All-hands meetings	Quarterly	<ul style="list-style-type: none"> The CEO and department heads present the Company's operational status from the previous quarter and future development prospects to all employees. This transparency helps employees better understand the Company's strategies and goals, aiming to align individual and organizational objectives both horizontally and vertically. These meetings also provide an opportunity to express gratitude to outstanding employees and teams across different locations. Additionally, during the Q&A session, employees can voice their concerns directly to the management. AP Memory encourages all employees to actively share their thoughts and opinions, promoting a two-way flow of information to achieve the vision encapsulated in Sun Tzu's saying, "Victory goes to those who are united from top to bottom against adversaries." 	A total of 4 all-hands meetings were held, with an average attendance rate of over 90%.
Labor-management meetings	Quarterly	<ul style="list-style-type: none"> Employees are encouraged to participate in corporate management through regular communication, gathering their thoughts on employee activities, benefits, and company policies. Feedback on areas for improvement is promptly addressed and monitored. 	Four labor-management meetings were organized, achieving a 100% attendance rate from both management and employee representatives.
Coffee Q&A sessions with CEO and President	Quarterly	<ul style="list-style-type: none"> A regular lunch meeting is organized where employees dine with the CEO, President, and department representatives. This informal setting enables the CEO and President to address employee questions, share perspectives, and provide insights. These discussions in 2023 covered future company outlooks for the next 5 to 10 years, product line strategies, company culture and core values, company policies, and employee benefits. The direct Q&A sessions promote transparent communication. 	The CEO, President, and department representatives attended all four "Coffee Q&A" sessions, achieving a 100% attendance rate.
Extended Staff Meeting	Monthly	<ul style="list-style-type: none"> Extended staff meetings are regularly held where high-level executives provide updates on the business status of each division, adapt operational strategies to market trends, and inform frontline managers of the current operational direction and achievements. This information helps set the next developmental goals for each department. 	Eight extended staff meetings were conducted, with an average attendance rate of over 90% among managers.

Employee Activities

Year-End Banquet

In December 2023, AP Memory hosted its annual year-end party, featuring fun table competitions and a highly anticipated raffle draw. The event was lively, with managers and employees reflecting on the year's achievements and looking forward to the future.



Year-End Banquet

AP Memory provides annual subsidies for departmental dinners, allowing employees to organize group meals. This initiative helps staff relax, bond, and fosters teamwork and motivation. In 2023, a total of 160 employees took part in these gatherings.



Various Clubs

AP Memory believes that happy and healthy employees are key to a productive business. With a commitment to valuing and caring for its employees, the Company promotes the formation of employee clubs. These clubs offer a way for employees to unwind after work, socialize with colleagues from different departments, and enjoy activities that promote mental and physical well-being.



Music Appreciation Club



Camping Club

1 AP Memory	2 Response	3 Governance	4 Pioneering	5 Collaboration	6 Empowerment	7 Coexistence	8 Appendices
Leading Industry Development	Identifying Sustainability Impacts	Upholding Corporate Ethics	Driving Product Innovation	Building Partnerships	Nurturing Human Capital	Maintaining Environmental Balance	

The Company currently has seven clubs: the Music Appreciation Club, Camping Club, Mountain and Wilderness Club, Tennis Club, Badminton Club, Mind Games Club, and Wellness Club. In 2023, these clubs organized activities for a total of 80 participants. The Badminton Club's tournament alone attracted 57 participants that year.



Tennis Club



Badminton Club



Mind Games Club



Team Activities

AP Memory organizes team-building activities for employees annually, such as hiking, paintball, and bowling. These activities foster teamwork, challenge employees to push their limits, invigorate departmental dynamics, enhance physical health, and alleviate stress. In 2023, two team challenge events were held, with a total of 239 participants.



2023 First Half: Company-wide Consensus Camp



2023 Second Half: Hiking Team-Building Event

Employee Travel

The Company also arranges annual employee trips, offering fun, engaging, and meaningful experiences. These trips not only strengthen bonds among colleagues from different departments but also include family members, showing care for both employees and their families. In 2023, three employee travel events were held, with a total of 258 participants.



2023 First Half: Company-wide Consensus Camp



2023 Second Half: Hiking Team-Building Event

Coexistence

Maintaining Environmental Balance

7.1 Environmental Management

7.2 Climate Governance

7.3 Greenhouse Gas Management

7.4 Energy Management

7.5 Water Management

7.6 Waste Management

7.1 Environmental Management

As a global leader in non-standard memory IC design, AP Memory recognizes the risks and impacts of global climate change on the environment and understands the importance of environmental protection for sustainable corporate development.

AP Memory has established the "Green Product Management Procedure" and formed a Green Management Team. Led by the President, this team involves relevant departments in regulating and managing hazardous substances to observe international regulations and customer requirements. The goal is to minimize environmental impact from product production processes and related activities, thereby achieving sustainable business operations.



**Compliance with
international
environmental
regulations**



**Promotion of green
production**



**Comprehensive
pollution
prevention**



**Creation of a
sustainable living
environment**



7.2 Climate Governance

Governance Structure

The governance level of AP Memory understands the potential impacts of climate change on operations and long-term development. To address the risks and opportunities that climate change may bring, the Company implements a climate change management mechanism starting in 2024. This initiative is led by the Risk Management Team, which oversees related tasks, with the Board of Directors supervising the management of climate-related risks and opportunities

Climate Strategy

Identification of Climate Risks and Opportunities

In 2024, AP Memory assessed climate-related risks and opportunities, referencing the risk and opportunity factors recommended by the TCFD. The Risk Management Team discussed and selected climate risk factors most relevant to the Company. Subsequently, 12 departments evaluated these factors, identifying nine potential risk factors and five potential opportunities across short-term (1-3 years), medium-term (3-5 years), and long-term (more than 5 years) time horizons. Through internal and external discussions and confirmation with the Risk Management Team, three significant risks and three types of potential opportunities were identified.

	Significant Risks	Time Horizon	Impact Areas	Potential Financial Impacts	Description
Physical Risks	Short-term Physical Risks: Increased severity and frequency of extreme weather events	● Short-term (1-3 years)	● Direct operations, upstream/downstream suppliers	● Decreased Production Capacity Leading to Reduced Revenue	If extreme weather events lead to water and electricity rationing at operational sites, the working environment will be affected. This can also impact transportation, causing delays in delivery schedules. Additionally, outsourced manufacturing facilities may experience flooding due to heavy rain, resulting in financial losses or disruptions that affect the Company's supply chain.
Physical Risks	Short-term Physical Risks: Drought and water scarcity	● Short-term (1-3 years)	● Direct operations, downstream customers	● Reduced Demand for Products and Services Leading to Reduced Revenue	Drought and water scarcity can affect the production capabilities of downstream customers, which in turn may decrease the demand for the Company's products.
Transition Risks	Policy and Regulation: Mandatory use of renewable energy	● Short-term (1-3 years)	● Direct operations, upstream suppliers	● Increased Direct and Indirect Costs	To meet national carbon reduction targets, companies may be required to purchase renewable energy or certificates, and set up renewable energy generation and storage equipment. This will increase operational costs and capital expenditures, and could also affect procurement costs.

Board Oversight

The Board of Directors is the supreme body for risk management within the Company and will oversee matters related to climate change risks and opportunities in the future.



1 AP Memory	2 Response	3 Governance	4 Pioneering	5 Collaboration	6 Empowerment	7 Coexistence	8 Appendices
Leading Industry Development	Identifying Sustainability Impacts	Upholding Corporate Ethics	Driving Product Innovation	Building Partnerships	Nurturing Human Capital	Maintaining Environmental Balance	

Transformation Opportunities	Potential Financial Impacts	Description
Products and Services: Develop and/or increase low-carbon products and services.	Higher demand for products and services leading to increased revenue.	Short-Term: Promote the Company's capabilities in customized, low-carbon production and link these capabilities with climate change needs. Medium-Term: Continuously improve production technology for low-carbon products, reduce raw material requirements, and lower production costs. Long-Term: Continuously develop new applications.
Resource Efficiency: Reduce water consumption and boost energy and resource efficiency.	Reduced Indirect Costs	Short-Term: Evaluate and plan updates to management systems, consider switching to electric vehicles to reduce overall operational carbon emissions.
Energy Sources: Utilize incentive policies.	Reduced Indirect Costs	Medium to Long-Term: Continue to explore feasible options, including sustainability-linked loans and other relevant policies.

Climate Scenarios

AP Memory assesses its value chain, including its own operations, upstream suppliers, and downstream customers. Although AP Memory is not in a high carbon-emission industry, climate change may impact its key stakeholders. Therefore, AP Memory conducts scenario analysis to identify climate-related risks and opportunities. The assessment results are verified by the risk management team and incorporated by relevant units into daily operational adjustments and reference guidelines. Additionally, regular progress and results reports are submitted to the management team.

In this context, for physical risks, AP Memory has selected the SSP5-8.5 scenario, while for transition risks, it has chosen the national target scenario. This includes consideration of external factors such as policy regulations, physical environment, and technology, which serve as the basis for the annual climate change risk assessment.

Risk Management

In 2024, AP Memory initiates its climate-related management for the first time and will incorporate it into the Company's risk management mechanism. It will be regularly reported and discussed in management team meetings as a reference for high-level governance decisions.

Climate Risk Management Process:

Risk Inventory	Reference TCFD recommendations, relevant regulations, industry benchmarks, and external stakeholder expectations to identify risks and opportunities most relevant to the Company. Include these in the assessment list.
Key Risk Analysis	Execution Method: <ol style="list-style-type: none"> The Risk Management Team coordinates, inviting relevant units to assess and discuss the risks and opportunities listed on the assessment list. The Risk Management Team analyzes the assessment results. The Risk Management Team and relevant units discuss and confirm key risk and opportunity factors. Relevant units plan responses to key risk and opportunity factors. Assessment Dimensions: Timeframe for risk occurrence (short-term 1-3 years, medium-term 3-5 years, long-term over 5 years), likelihood of risk occurrence, location of risk occurrence (direct operations, upstream supply chain, downstream customers), impact level of the risk Results are quantified and ranked, with the top three risks and opportunities identified as key risks.
Financial Impact Assessment of Risks and Opportunities	Discuss and evaluate the potential financial impact types and extent of identified key risks and opportunities. Quantitative information is for internal reference only.
Response Planning and Reporting	Relevant departments plan response measures, which are confirmed by the management team and incorporated into daily operational processes. Climate risk and opportunity assessment results are reported according to internal management processes and disclosed regularly in relevant reports.

Metrics and Targets

Since 2023, AP Memory has initiated voluntary GHG assessment. Future plans include annual GHG assessments to comprehensively monitor emission status. Based on actual operational conditions, AP Memory will plan future carbon reduction pathways, methods, and set corresponding metrics and targets.

7.3 Greenhouse Gas Management

Disclosure Topic: Greenhouse Gas Emissions

Code	Metrics	2022	2023
TC-SC-110a.1	(1) Gross global Scope 1 emissions (Unit: metric tons of CO ₂ e)	13.0395	14.6725
	(2) amount of total emissions from perfluorinated compound (Unit: metric tons of CO ₂ e)	<ul style="list-style-type: none"> AP Memory does not engage in semiconductor processes such as wafer manufacturing, packaging, or testing, and thus has no PFC emissions. 	
TC-SC-110a.2	Discussion on Scope 1 Emission Short-, Medium-, and Long-Term Management Strategy or Plans, Reduction Targets, and Performance Analysis	<ul style="list-style-type: none"> In 2023, AP Memory conducted its first GHG inventory for the year 2022, gaining a comprehensive understanding of emission sources and volumes. The main Scope 1 emission sources were from refrigerants used in laboratory equipment and air conditioning systems, accounting for less than 5% of total emissions, with low potential for reduction benefits. In the future, the Company will evaluate the adoption of more environmentally friendly refrigerants when replacing equipment. 	

•Note:

One thousand cubic meters (1,000 m³) equals one million liters (ML). In Hangzhou, water resources are only accounted for from the employee dormitories, as the office water usage is included in the lease agreement.



AP Memory engages in the research, design, and sales of customized memory chips, operating as a fabless IC design company specializing in memory solutions. All operational activities occur within office buildings. In 2023, for the first time, AP Memory conducted a GHG emission inventory for 2022 in accordance with ISO 14064-1:2018. To expand the scope of the inventory, the 2023 assessment included the AP Memory Hangzhou operational site, providing a more comprehensive GHG inventory.

For the entire year of 2023, the total GHG emissions amounted to 375.0212 metric tons CO₂e. Of this total, Scope 1 direct GHG emissions (Category 1) were 14.6725 metric tons CO₂e, primarily from employee dormitory gas, laboratory equipment refrigerants, and septic tank emissions. Indirect GHG emissions were 360.3487 metric tons CO₂e, representing a 41% increase compared to 2022. The increase was mainly due to the expansion of the inventory scope and the leasing of an additional office floor at the Hsinchu headquarters starting in February 2023, which led to increased electricity consumption due to expanded space and additional staffing. The main source of emissions for AP Memory was Scope 2 (Category 2) purchased electricity, accounting for 96.09% of the emissions, followed by Scope 1 fixed combustion and fugitive emissions at 3.90%.

In alignment with national net-zero carbon policies, AP Memory will have completed the 2023 GHG inventory for all operational sites by 2024 and will further assess baseline year settings to more accurately reflect future operational scale and emission levels. Moving forward, we will continue to conduct annual GHG inventories to comprehensively monitor emission status and further plan future carbon reduction pathways and methods.

Scope 1 Direct Emissions (By GHG Category)

Category 1 Direct Emissions (By GHG Category) (Unit: tonnes CO ₂ e)									
Category	CO ₂		N ₂ O		CH ₄		HFCs		Total
Operation Site	Hsinchu	Hangzhou	Hangzhou		Hangzhou		Hsinchu	Hangzhou	Hsinchu Hangzhou
2022	0.4427	-	12.0380	-	0.0002	-	0.5586	-	13.0395 -
2023	0.3243	0.2969	0.0002	0.0001	12.6480	0.0001	0.5586	0.8443	13.5311 1.1414
	CO ₂		N ₂ O		CH ₄		HFCs		Total
2022	0.4427		12.0380		0.0002		0.5586		13.0395
2023	0.6212		0.0003		12.6481		1.4029		14.6725

GHG Emissions (By Category) (Unit: tonnes CO₂e)

Scope	Category 1		Category 2		GHG Emissions (Category 1 + 2)	
Category	Direct GHG Emissions		Purchased Electricity			
Operation Site	Hsinchu	Hangzhou	Hsinchu	Hangzhou	Hsinchu	Hangzhou
2022	13.0395	-	255.1400	-	268.1795	-
2023	13.5311	1.1414	307.5076	52.8411	321.0387	53.9825
	Category 1		Category 2		Total	
2022	13.0395		255.1400		268.1795	
2023	14.6725		360.3487		375.0212	

•Note: The emission factors are derived from the following sources: Category 1: Original factors from IPCC 2006 multiplied by local announced calorific values; Category 2: (Hsinchu) 2023 power emission factors announced by the Energy Administration in 2024; (Hangzhou) 2022 national grid average carbon emission factors.

GHG Emission "Category 1 + Category 2" Intensity

	GHG Emissions (tonnes CO ₂ e)		Floor Area (m ²)	GHG Emission Intensity (tonnes CO ₂ e/ m ²)		GHG Emission Intensity (tonnes CO ₂ e / million NT\$ revenue)
2022	268.1795		2,497.1	0.1074		0.0539
2023	375.0212		4,172.4	0.0899		0.0887

7.4 Energy Management

Disclosure Topic: Energy Management

Code	Metrics	2020	2021	2022	2023
TC-SC-130a.1	(1) Total energy consumed(incl. fuel and electricity) (GJ)	1,248.76	1,606.07	1,850.66	2,586.931
	(2) percentage grid electricity	100%	100%	99.5%	99.5%
	(3) percentage renewable	0%	0%	0%	0%

•Note: Unit Conversion: 1 cubic meter of liquefied natural gas (m³) = 9,000 Kcal, 1 Kcal = 4,186.798 Joules, thus 1 m³ = 3.7×10^-2 GJ. Unit Conversion: 1 kWh = 860 Kcal, 1 Kcal = 4,186.798 Joules, thus 1 kWh = 3.6×10^-3 GJ.

AP Memory primarily uses energy for office lighting, air conditioning, and laboratory equipment, with electricity supplied by Taiwan Power Company. AP Memory does not have any company vehicles nor its own emergency power generation equipment. To achieve efficient energy use and environmental protection, AP Memory has implemented various power-saving measures in recent years. These include scheduled shutdowns for office equipment like water dispensers and coffee machines, reminders to employees to turn off power in their personal areas before holidays, and promoting energy-saving and carbon reduction practices. In 2023, the Company assessed plans to gradually replace T5 lighting tubes with LED lights.

In line with the principle of "conserving electricity," AP Memory's total electricity consumption for 2023 was 715,140.07 kWh, with the Hsinchu office consuming 622,485 kWh, representing a 21.6% increase from 2022. The energy intensity for 2023 was 0.64 GJ per square meter of floor area, up 0.1% from 2022, primarily due to the addition of the 12th-floor office space in the Tai Yuen Hi-Tech Industrial Park starting in February 2023. The Company continued its efforts to reduce office energy consumption by managing office temperatures, controlling lighting by area, cutting energy waste, and purchasing energy-efficient equipment, demonstrating a commitment to sustainable development.

	2020	2021	2022	2023	
Energy Consumption (Original Usage)	Hsinchu	Hsinchu	Hsinchu	Hsinchu	Hangzhou
LNG (m³)	-	-	235.65	172.61	158.00
Non-renewable Electricity (kWh)*	346,881	446,136	511,611	622,485	92,655
Energy Consumption (GJ)	Hsinchu	Hsinchu	Hsinchu	Hsinchu	Hangzhou
LNG	-	-	8.88	6.50	5.95
Non-renewable Electricity	1,248.76	1,606.07	1,841.78	2,240.92	333.55
Total Energy Consumption	1,248.76	1,606.07	1,850.66	2,247.42	339.49
Unit Energy Consumption (GJ / Floor Area m²)	0.63	0.65	0.63	0.64	0.48

*Note: The electricity data for 2021-2022 includes the Hangzhou site and is not separately listed.

7.5 Water Management

Disclosure Topic: Water Management

Code	Metrics	Operation Site	2020	2021	2022	2023
TC-SC-140a.1	(1) Water withdrawal(in thousand cubic meters): percentage of total water withdrawal from high or extremely high-water stress areas	Hsinchu	1.47	1.48	2.25	2.669
		Hangzhou	-	-	-	0.034
		According to the WRI water stress assessment map, Hsinchu is classified as Low-Medium, and Hangzhou is classified as Low, both of which are not considered high or very high-risk areas. Therefore, the percentage of water withdrawn from water-stressed areas is 0%.				
	(2) Water consumption(in thousand cubic meters): percentage of total water consumption from high or extremely high-water stress areas	Hsinchu	1.47	1.48	2.25	2.669
		Hangzhou	-	-	-	0.034
		In Hsinchu, all water usage within the building, except for the water consumed by the chiller units, is for domestic purposes. Such wastewater is discharged through the building's plumbing into the public sewage system. Furthermore, there is no water consumption sourced from water-stressed areas.				

•Note: One thousand cubic meters (1,000 m³) equals one million liters (ML). In Hangzhou, water resources are only accounted for from the employee dormitories, as the office water usage is included in the lease agreement.

AP Memory utilizes the WRI Aqueduct tool to confirm that its operational sites in Hsinchu, Taiwan, and Hangzhou, China, are not located in areas of high or very high-water stress. The water supply is directly provided by local water companies, classified as third-party sourced freshwater under GRI, with no extraction from other water bodies. The water facilities in the rented office spaces are managed by the building management. Given the nature of the semiconductor IC design industry, which primarily relies on human resources, the water usage is solely for domestic purposes, with no water used for large machines or production equipment. The Company's wastewater is mainly domestic sewage, discharged into the public sewer system and treated by government wastewater treatment plants before being released into natural water bodies, thereby not impacting the local environment.

In 2023, the total water withdrawal was approximately 2.7 million liters, with the Hsinchu headquarters accounting for 2.67 million liters, up 18.66% from 2022. The water withdrawal intensity per employee was 0.17 ML/employee, up 8.9% from 2022, due to the expansion of the workforce in 2023.

To improve efficiency and reduce water waste, AP Memory continued its water resource improvement initiatives in 2023, including installing water-saving fixtures on faucets and promoting awareness of water conservation and environmental stewardship among employees through posters and educational campaigns.

Historical Water Resource Usage Overview				
Year	2020	2021	2022	2023
Number of Employees	98	129	144	156
Water Withdrawal (Million Liters)	1.47	1.48	2.25	2.669
Water Withdrawal Intensity (Million Liters / Number of Employees)	0.0150	0.0115	0.0156	0.017

•Note: The denominator for the intensity calculation only includes the number of employees at AP Memory's Hsinchu operational site, as the water usage at Hangzhou is solely for employee dormitories, and thus the number of employees at Hangzhou is not included.

7.6 Waste Management



Waste Management Strategy

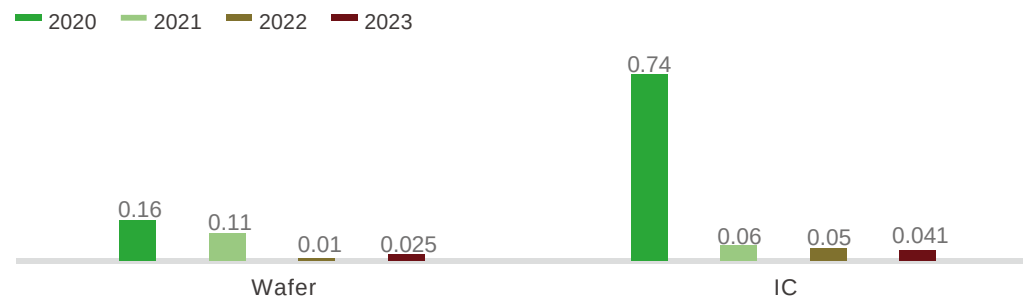
Start with Reduce ☐ Move towards Reuse ☐ Progress to Recycle ☐

Given the nature of AP Memory's operations, the primary type of waste generated is general household waste, followed by a smaller quantity of discarded wafers and ICs. The general household waste is managed centrally by the office management committee at the Tai Yuen Hi-Tech Industrial Park and is not included in the waste generation statistics. To promote resource recycling, AP Memory implements waste segregation into four major categories: "Recyclable Materials," "Paper," "General Waste," and "Food Waste." This preliminary sorting reduces the labor required for subsequent waste processing. Additionally, a small amount of industrial waste, including discarded wafers and ICs, is produced annually. As hazardous waste, these are regularly handled by certified external suppliers, ensuring careful disposal. The suppliers must provide a disposal operation report upon completing the process to confirm the accurate quantity and compliance with legal and regulatory standards.

In 2023, a total of 0.066 tonnes of discarded wafers and ICs were disposed of externally under the category "Direct Disposal - Other Disposal Operations." Due to the inclusion of the Hangzhou site in the waste statistics for 2023, the comparison base differs from the previous year, so differences between the two years are not explained or compared. The significant reduction in product scrap rate is mainly attributed to the following three aspects:

- Stable Shipping: Reducing issues with obsolete inventory.
- Yield Improvement: Minimizing scrapping due to low yield issues, which prevent products from meeting shipment standards.
- Low RMA (Return Merchandise Authorization): Ensuring consistent product reliability, thereby reducing scrap caused by sales returns that cannot be reworked.

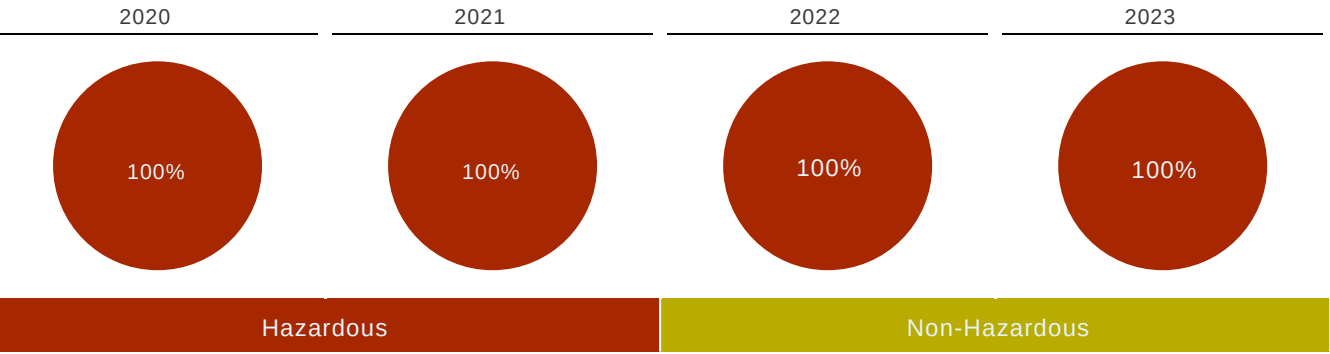
Historical Waste Generation (Unit: Tonnes)



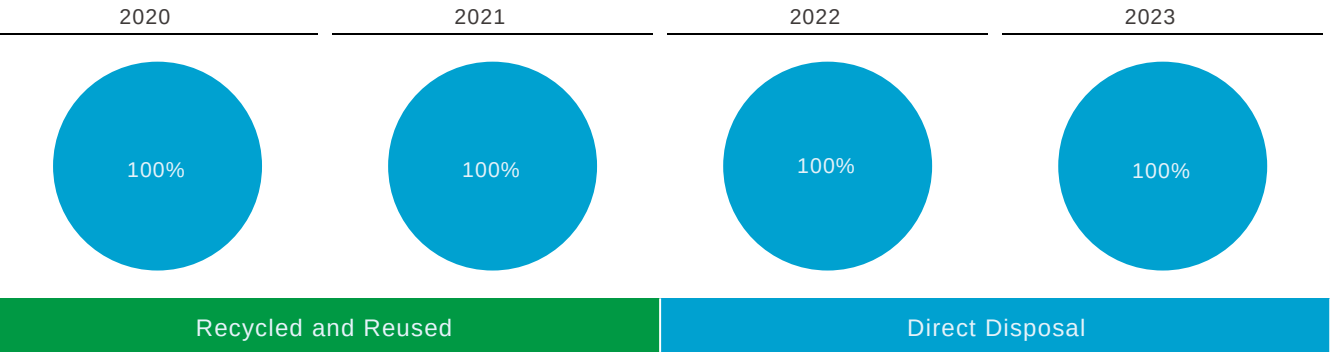
AP Memory is actively strengthening its waste management measures, focusing on reducing waste at the source. In 2023, the Company continued its "Plastic Reduction Action," encouraging employees to minimize the use of plastic products such as single-use plastic utensils, disposable beverage cups, and bottled water. To promote the use of environmentally friendly practices, AP Memory advocates for employees to bring their own reusable cutlery and containers for meals and drinks. The Company also provides communal cups and cutlery in the break room, encouraging green actions to start in daily life



Proportion of Historical Waste Generation (Hazardous/Non-Hazardous)



Proportion of Historical Waste Generation (Recycling/Direct Disposal)



8

Appendices

8.1 GRI Index

8.2 SASB Standards

8.3 Semiconductor Industry Sustainability
Disclosure Indicators

8.4 Greenhouse Gas Inventory and Assurance

8.5 TCFD Disclosure Index

8.6 Data Disclosure Scope

8.1 GRI Index

GRI Statement

Usage Statement

Usage Statement AP Memory has reported content for the period from January 1, 2023 to December 31, 2023, following GRI standards.

GRI 1

GRI 1 : Foundation 2021

Applicable GRI Sector Standards

None

GRI 2 : General Disclosures 2021

Indicators	Disclosure Items	Corresponding Report Sections	Page	Explanation/Reason for Omission
GRI 2: General Disclosures 2021				
The organization and its reporting practices				
2-1	Organizational details	About Report	4	
2-2	Entities included in the organization's sustainability reporting	About Report	4	
2-3	Reporting period, frequency and contact point	About Report	4	
2-4	Restatements of information	7-4 Energy Management	93	Including operational site in Hangzhou; environmental data updated from previous years
		7-5 Water Management	94	
		7-6 Waste Management	95	
2-5	External assurance		4	AP Memory's 2023 report has not been externally verified/assured
Activities and workers				
2-6	Activities, value chain and other business relationships	1-3 Operation Overview	13	
2-7	Employees	6-2 Recruitment and Retention		
2-8	Workers who are not employees	6-2 Recruitment and Retention	68	AP Memory's workforce consists entirely of employees, with no non-employee workers.
Governance				
2-9	Governance structure and composition	3-1 Corporate Governance	34	The Company plans to establish a Sustainability and Risk Management Committee in the future. Currently, there is no dedicated sustainability committee.

Indicators	Disclosure Items	Corresponding Report Sections	Page	Explanation/Reason for Omission
2-10	Nomination and selection of the highest governance body	3-1 Corporate Governance	34	
2-11	Chair of the highest governance body	3-1 Corporate Governance	34	
2-12	Role of the highest governance body in overseeing the management of impacts	3-1 Corporate Governance	34	Clarify the responsibilities of the highest governance body after establishing the Sustainability and Risk Management Committee
2-13	Delegation of responsibility for managing impacts	2-3 Sustainability Issue Management Policy	26	
2-14	Role of the highest governance body in sustainability reporting	3-1 Corporate Governance	34	
2-15	Conflicts of interest	3-1 Corporate Governance	34	
2-16	Communication of critical concerns	3-1 Corporate Governance	34	
2-17	Collective knowledge of the highest governance body	3-1 Corporate Governance	34	
2-18	Evaluation of the performance of the highest governance body	3-1 Corporate Governance	34	
2-19	Remuneration policies	3-1 Corporate Governance	34	
2-20	Process to determine remuneration	3-1 Corporate Governance	34	
2-21	Annual total compensation ratio	3-1 Corporate Governance	34	
Strategy, Policies, and Practices				
2-22	Statement on sustainable development strategy	- Message From the Top Management	1	
2-23	Policy commitments	- Message From the Top Management	1	Once the Sustainability and Risk Management Committee is established, AP Memory plans to formulate sustainability management policies.
		2-3 Sustainability Issue Management Policy	26	
		3-1 Corporate Governance	34	
		3-3 Ethical Management	40	
		6-1 Human Rights Management	67	
2-24	Policy Commitments Incorporation	- Message From the Top Management	1	
		2-3 Sustainability Issue Management Policy	26	
		3-1 Corporate Governance	34	
		3-3 Ethical Management	40	
		6-1 Human Rights Management	67	

Indicators	Disclosure Items	Corresponding Report Sections	Page	Explanation/Reason for Omission
2-25	Processes to remediate negative impacts	2-3 Sustainability Issue Management Policy	26	
		3-1 Corporate Governance	34	
		3-3 Ethical Management	40	
		6-1 Human Rights Management	67	
2-26	Mechanisms for seeking advice and raising concerns	3-3 Ethical Management	40	
2-27	Compliance with laws and regulations	3-3 Ethical Management	40	
2-28	Membership associations	1-1 Company Profile	6	
Stakeholder Engagement				
2-29	Approach to stakeholder engagement	2-1 Identifying Key Stakeholders	18	
2-30	Collective bargaining agreements	- -	-	No Collective Agreements

GRI 3: Material Topics 2021

Indicators	Disclosure Items	Corresponding Report Sections	Page	Explanation/Reason for Omission
GRI 3: Material Topics 2021				
3-1	Process to determine material topics	2-2 Materiality Identification and Analysis	20	
3-2	List of material topics	2-2 Materiality Identification and Analysis	20	
Material Topic 1: Sustainable Supply Chain				
3-3	Management of material topics	2-3 Sustainability Issue Management Policy	26	
204-1	Proportion of spending on local suppliers	5-3 Raw Material Sourcing	62	
Material Topic 2: Product Quality				
3-3	Management of material topics	2-3 Sustainability Issue Management Policy	26	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	5-4 Product Quality	63	No related incidents

Indicators	Disclosure Items	Corresponding Report Sections	Page	Explanation/Reason for Omission
Material Topic 3: Product Liability				
3-3	Management of material topics	2-3 Sustainability Issue Management Policy	26	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	5-4 Product Quality	63	No related incidents
Material Topic 4: Innovation Management (Custom Topic)				
3-3	Management of material topics	2-3 Sustainability Issue Management Policy	26	
-	Custom Indicator: Energy Consumption and Power Efficiency	4-1 Innovation Management	48	
Material Topic 5: Talent Attraction and Retention				
3-3	Management of material topics	2-3 Sustainability Issue Management Policy	26	
401-1	New employee hires and employee turnover	6-2 Recruitment and Retention	68	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	6-3 Compensation and Benefits	73	
401-3	Parental leave	6-3 Compensation and Benefits	73	
405-1	Diversity of governance bodies and employees	3-1 Corporate Governance	34	
		6-2 Recruitment and Retention	68	
405-2	Ratio of basic salary and remuneration of women to men	6-3 Compensation and Benefits	73	
Material Topic 6: Energy Management				
3-3	Management of material topics	2-3 Sustainability Issue Management Policy	26	
302-1	Energy consumption within the organization	7-4 Energy Management	93	
302-2	Energy consumption outside of the organization	- -	-	Not yet quantified
302-3	Energy intensity	7-4 Energy Management	93	
302-4	Reduction of energy consumption	- -	-	Not yet implemented
302-5	Reductions in energy requirements of products and services	- -	-	Not end products; N/A
305-1	Direct (Scope 1) GHG emissions	7-3 GHG Emissions	91	
305-2	Energy indirect (Scope 2) GHG emissions	7-3 GHG Emissions	91	

Indicators	Disclosure Items	Corresponding Report Sections	Page	Explanation/Reason for Omission
305-3	Other indirect (Scope 3) GHG emissions	- -	-	Not yet quantified
305-4	GHG emissions intensity	7-3 GHG Emissions	91	
305-5	Reduction of GHG emissions	- -	-	Not yet implemented
305-6	Emissions of ozone-depleting substances (ODS)	- -	-	No production or output of ODS operations; N/A
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	- -	-	Not a Material Issue; N/A

Material Topic 7: Information Security (Custom Topic)

3-3	Management of material topics	2-3 Sustainability Issue Management Policy	26	
-	Custom Indicator: Information Security Breaches	3-5 Information Security Management	43	

Voluntary Disclosure of GRI Topics and Indicators

Standards	Disclosure Items	Corresponding Report Sections	Page	Explanation/Reason for Omission
GRI 200: Economic Topics				
GRI 201: Economic Performance 2016				
201-1	Direct economic value generated and distributed	1-3 Operational Overview	13	
GRI 202: Market Presence 2016				
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	6-3 Compensation and Benefits	73	
202-2	Proportion of senior management hired from the local community	6-2 Recruitment and Retention	68	
GRI 207: Tax 2019				
207-1	Approach to tax	3-2 Tax Governance	39	

Standards	Disclosure Items	Corresponding Report Sections		Page	Explanation/Reason for Omission
GRI 300: Environmental Topics					
GRI 303: Water and Effluents 2018					
303-3	Water Withdrawal	7-5	Water Management	94	
GRI 306: Waste 2020					
306-3	Waste Generated	7-6	Waste Management	95	
306-4	Waste diverted from disposal	7-6	Waste Management	95	
306-5	Waste directed to disposal	7-6	Waste Management	95	
GRI 400: Social Topics					
GRI 402: Labor/Management Relations 2016					
402-1	Minimum notice periods regarding operational changes	-	-	-	AP Memory adheres to local laws for notice and notification of significant operational changes
GRI 404: Training and Education 2016					
404-1	Average hours of training per year per employee	6-4	Talent Development	77	
404-3	Percentage of employees receiving regular performance and career development reviews	6-3	Compensation and Benefits	73	
GRI 406: Non-discrimination 2016					
406-1	Incidents of discrimination and corrective actions taken	6-1	Human Rights Management	67	

8.2 SASB Standards

Semiconductors Sustainability Accounting Standard

Disclosure Topics	Metrics	Code	Corresponding Sections
Greenhouse Gas Emissions	Greenhouse Gas Emissions Disclosure: (1) Gross global Scope 1 emissions and (2) amount of total emissions from perfluorinated compounds	TC-SC-110a.1	7-3 Greenhouse Gas Management
	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	TC-SC-110a.2	
Energy Management in Manufacturing	Energy Consumption Disclosure: (1) Total energy consumed (2) percentage grid electricity and (3) percentage renewable	TC-SC-130a.1	7-4 Energy Management
Water Management	Water Resource Utilization Disclosure: Water withdrawal: percentage of total water withdrawal from high or extremely high-water stress areas Water consumption: percentage of total water consumption from high or extremely high-water stress areas	TC-SC-140a.1	7-5 Water Stewardship
Waste Management	(1) Amount of hazardous waste from manufacturing, (2) percentage recycled	TC-SC-150a.1	7-6 Waste Management
Workforce Health & Safety	Description of efforts to assess, monitor, and reduce exposure of workforce to human health hazards	TC-SC-320a.1	6-5 Employee Health and Safety
	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations	TC-SC-320a.2	
Recruiting & Managing a Global & Skilled Workforce	Percentage of employees that require a work visa	TC-SC-330a.1	6-2 Recruitment and Retention
	Percentage of products by revenue that contain IEC 62474 declarable substances	TC-SC-410a.1	
Product Lifecycle Management	Processor energy efficiency at a system level for: (1) servers, (2) desktops and (3) laptops	TC-SC-410a.2	4-3 Product Lifecycle Management
Materials Sourcing	Description of the management of risks associated with the use of critical materials	TC-SC-440a.1	5-3 Raw Material Procurement
Intellectual Property Protection & Competitive Behaviour	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behaviour regulations	TC-SC-520a.1	4-2 Intellectual Property Protection and Competitive Behavior
Activity Metrics		Code	Corresponding Sections
Total production Percentage of production from owned facilities		TC-SC-000.A	1-2 Product Overview
		TC-SC-000.B	

8.3 Semiconductor Industry Sustainability Disclosure Indicators

No.	Indicator	Indicator Type	Annual Disclosure
1	Total energy consumption(Gigajoules, GJ) percentage of purchased electricity, utilization rate(renewable energy)	Quantitative	<ul style="list-style-type: none"> Total Energy Consumption: 2,586.931 GJ Percentage of Purchased Electricity: 99.5% Percentage of Renewable Energy Usage: 0%
2	Total water withdrawn, total water consumptionThousand cubic meters	Quantitative	<ul style="list-style-type: none"> Total Water Withdrawal: 2.7 thousand cubic meters Total Water Consumption: 2.7 thousand cubic meters
3	Total hazardous waste generated(tonnes) and percentage recycled(%)	Quantitative	<ul style="list-style-type: none"> Weight of Hazardous Waste: 0.066 tonnes Percentage of Hazardous Waste Recycled: 0%. A small amount of industrial waste is produced annually, including discarded wafers and ICs. As hazardous waste, these are regularly processed by qualified external suppliers.
4	Types of, number of employees in and rate of occupational accidents	Quantitative	<ul style="list-style-type: none"> No incidents of violations of employee health and safety regulations in 2023.
5	Product Lifecycle Management Disclosure: including weights of scraps and electronic waste(tonns) and percentage recycled(%)	Quantitative	<ul style="list-style-type: none"> Weight of electronic waste generated during the product development phase: 0.066 tonnes, mainly consisting of discarded wafers and ICs. No other electronic waste was produced, nor was any recycling conducted, as all processes are outsourced.
6	Description of the management of risks associated with the use of critical materials	Quantitative	<ul style="list-style-type: none"> Wafers, a key raw material, are 100% outsourced to wafer foundries. Rare earth metals are critical raw materials for the foundries. AP Memory continuously monitors and manages procurement risks, focusing on the stability of supply and timeliness of delivery from the wafer foundries through regular supplier evaluations.
7	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations (reported currency)	Quantitative	<ul style="list-style-type: none"> No incidents of violations of anti-competitive behavior regulations in 2023.
8	Production by product category	Quantitative	<ul style="list-style-type: none"> 727,039 K units

8.4 Greenhouse Gas Inventory and Assurance

AP Memory is classified as a company with a capital amount between NT\$5 billion and NT\$10 billion. According to the sustainability development roadmap for Exchange-listed and OTC-listed companies, AP Memory's GHG emissions disclosure is currently voluntary. The GHG emissions information in this report has been inventoried in accordance with ISO 14064-1:2018, covering Scope 1 and Scope 2 emissions. For detailed information on the organizational boundary and assurance scope, please refer to the "Organizational Boundary Description" table.

Greenhouse Gas Emissions (Scope 1 and Scope 2)

Category	Total Emissions (tonne CO ₂ e)	Intensity (tonnes CO ₂ e / million NTD)
Scope 1	14.6725	0.0035
Scope 2	360.3484	0.0853
Total	375.0212	0.0887

Operational Sites	Description	Inventory	Assurance	Exclusion
Taiwan	AP Memory Technology Corporation (Parent Company), VIVR Corporation CascadeTeq Inc.	V		V
China	AP Memory Technology (Hangzhou) Co., Ltd.	V		
USA	AP Memory Corp, USA			V
Others	APware Technology and AP Memory Technology (Hong Kong) Co., Ltd.			V

Exclusion Scope	Description
CascadeTeq Inc. Memory Corp, USA	Since the electricity and water usage in the office are included in the rent, these emissions fall under Scope 3. Additionally, offices with fewer than six employees, with excluded emissions < 5%.

• Notes:

1. Intensity = Scope 1 or 2 emissions ÷ consolidated financial report operating revenue.

2. Others refers to investment holding companies or entities with no physical locations as of December 31, 2023.

8.5 TCFD Disclosure Index

Framework	Recommended Disclosure Items	Corresponding Sections		Page
Governance	Describe the board's oversight of climate-related risks and opportunities.	7-2	Climate Governance	89
	Describe management's role in assessing and managing climate-related risks and opportunities.	7-2	Climate Governance	89
Strategy		4-1	Innovation Management	48
	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	7-2	Climate Governance	89
	Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	7-2	Climate Governance	89
	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	7-2	Climate Governance	89
Risk Management	Describe the organization's processes for identifying and assessing climate-related risks.	7-2	Climate Governance	89
	Describe the organization's processes for managing climate-related risks.	7-2	Climate Governance	89
	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	7-2	Climate Governance	89
Metrics & Targets	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	7-2	Climate Governance	89
	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 (if applicable) greenhouse gas (GHG) emissions, and the related risks.	7-3	GHG Management	91
	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	7-2	Climate Governance	89

8.6 Data Disclosure Scope

AP Memory and Subsidiaries ¹	Key Operating Sites		
	Taiwan	Hangzhou, China	Portland, USA
AP Memory Technology Corporation			
AP Memory Technology (Hangzhou) Co., Ltd.		•	
AP Memory Corp, USA			•
VIVR Corporation	•		
CascadeTeq Inc.	•		
APware Technology and AP Memory Technology (Hong Kong) Co., Ltd. ²	-	-	-
Governance			
Financial Performance	•	•	•
Ethical Management and Training	•	•	-
Environment			
Environmental Management	•	•	-
GHG Emissions ⁵	•	•	-
Energy Management ⁵	•	•	-
Water Management ⁵	•	•	-
Air Pollution Management	3	3	3
Waste Management	•	•	-
Social			
Number of Employees	•	•	•
Training	•	•	-
Compensation and Benefits	•	•	•
Occupational Health and Safety	•	•	-

• Notes:

1. 100% owned subsidiaries

2. Investment holding company with no actual operating sites.

3. No air pollution emissions.

4. From 2019 to 2022, data disclosure covered AP Memory in Hsinchu, Taiwan. In 2023, data disclosure expanded to include Hangzhou, China, and Portland, USA. However, due to landlord responsibilities for water and electricity costs under lease agreements in Taiwan (CascadeTeq) and Portland, environmental data collection was not feasible. Employee numbers do not include VIVR and CascadeTeq.

5. Environmental data includes the Hsinchu headquarters (including the Nanchang office) and Hangzhou, China.



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