

eMemory

Stock Code: 3529

eMemory Technology Inc.
2021 ESG Report



**ESG Report will be available at eMemory's website
and Market Observation Post System**
<http://mops.twse.com.tw/mops/web/index>

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A Word from our Chairman

2021 was still a challenging year with the COVID-19 pandemic. While most of the world was adjusting to the pandemic, an outbreak in Taiwan brought unexpected challenges. In the face of these challenges, eMemory has worked tirelessly towards achieving our most fundamental responsibility: supporting our employees, customers, and partners.

We achieved our goal because of our dedication over the last 20 years to building a strong and resilient company. To do so, we continue fostering an environment of invention and innovation, investing in our employees, maintaining an inclusive workplace full of learning, and advancing sustainability in our business.

Digital technology is transforming the world at an unprecedented pace, presenting some of the world's biggest challenges, particularly climate change and security issues brought on by the growing connectivity of the digital world. Our company's core is innovation, which is why we continually push ourselves to find ways to work in favor of our stakeholders.

Our knowledge and expertise in advanced semiconductor process technologies enable us to provide customers with highly efficient IPs that remove many of the expensive and intricate processes required by other logic-based non-volatile memory solutions on the market. Our IPs thus improve yield and reduces the usage and waste of additional resources necessary to create chips.

Maintaining sustainable business practices, in the long run, is also part of our goal. We remain proactive by continuing to introduce our PUF-based IP solutions to the market and playing a pivotal role in hardware security. We hope that by doing so, we not only protect device users from threats but also extend the chip life cycle and improve the longevity of each device.

I believe in eMemory and the future we can achieve together. Our employees' expertise and passion will have a positive outcome, and this is what inspires my confidence that we can create a safer and secure digital world. With that, I invite you to learn more about how we operate and put our business to work for our stakeholders in this report.

Charles Hsu
Chairman of eMemory Technology Inc.

About this Report

This report aims at disclosing transparent and comprehensive information regarding eMemory's impacts on economic, governance, environmental and social sustainability to our stakeholders. It has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option.

Reporting Period

This is an annual report, covering information from January 1st, 2021 to December 31st, 2021. The previous report which was published in June, 2021 is available in both Chinese and English. It can be downloaded from the [eMemory website](#).

Scope of This Report

The scope of this report includes eMemory's facilities in Jhubei City and Hsinchu City, Taiwan. We integrated the social and environmental data of eMemory Technology Inc., and our subsidiary, PUFsecurity Corporation in the report. The entities included in the consolidated financial statements are eMemory Technology Inc., PUFsecurity Corporation, and PUFsecurity USA.

eMemory Technology Inc.

- Founded: September 2, 2000
- Location: Rm. 305, No. 47, Yuanqu 2nd Rd., Hsinchu Science Park, Hsinchu City 300, Taiwan
- Headquarter: 8F., No.5, Taiyuan 1st St., Jhubei City, Hsinchu County 302, Taiwan
- Public Listing: Taipei Exchange Stock Code 3529
- Industry: Semiconductors
- Capital: NTD 761,271,920
- Products: Logic non-volatile memory (NVM) silicon intellectual properties (IPs)
- Contact Information
 - Address: 8F., No.5, Taiyuan 1st St., Jhubei City, Hsinchu County 302, Taiwan
 - Tel: 886-3-5601168
 - Email: ir@ememory.com.tw

2021 ESG Performance Highlights

GOVERNANCE

33.05% up gross profit

55.3% up EPS

7,000,000+ wafer shipment

Accumulated 5750+ design licenses

ISO9001:2015 Quality Management Systems certification

95.15/100 customer satisfaction

Receives TSMC's IP Partner Award for 12 consecutive years

Ranks Top 5% corporate Governance Evaluation

ENVIRONMENT

2.8% down on GHG emission per capita

14.3% down on water consumption per capita

390 million kWh energy saving on end devices

NT\$ 160 billion wafer production cost saving

990+ worldwide patents issued

614 tape-outs

NT\$ 680 million of R&D fee devoted

0 complaints or penalties on environmental related issues

SOCIAL

NT\$2507 thousand average salary of non-management employees

Total 5000+ hours of training

9.43% turnover rate

100% completion rate on employee health examination

0 complaints or penalties on human right related issues

0 work-related hazards or incidents

Sponsors NGO "Teach for Taiwan" for 8 years

Provides scholarship and supports for NTHU for 9 years

About eMemory



1.1 Corporate Overview

eMemory Technology Inc. is the world’s largest pure-play developer and provider of logic non-volatile memory (Logic NVM) technology. The proprietary technologies include NeoBit, NeoFuse, NeoMTP, NeoEE, and NeoPUF. Products developed with these core technologies have been made into more than 68 billion ICs used in various applications in 5G/4G Mobile Devices, Data Centers, Automotive, Internet of Things (IoT), Digital Consumers, and Home Appliances.

eMemory licenses silicon intellectual properties (SIPs) to semiconductor foundries, integrated device manufacturers (IDMs), and fabless design houses around the world. Our Logic NVM silicon IP platform provides fabless design houses with superior product design flexibility and manufacturing process portability. We provide IDMs process scalability and valuable process engineering know-how that shortens their product development time to market. Furthermore, our foundry partners could gain access to hundreds of potential customers through us for sustainable business development.



1.1.1 eMemory Achievements

Ending on December 31st, 2021, the total number of employees at eMemory and its subsidiary was 297, located majorly at the Jhubei headquarters in Hsinchu County, Taiwan. The gross profit in 2021 was NT\$2,364 million which was 33.0% higher than in 2020. Our earnings per share (EPS) in 2021 was NT\$14.78, which was 55.3% higher than in 2020. With our continuous investment in Research and Development (R&D), which was around NT\$680 million in 2021, equating to 62.3% of total operating expenses, eMemory is able to provide advanced memory technologies as well as high-quality products and services to our customers and partners (See [eMemory 2021 Annual Report](#) for more details). Cumulatively, we have over 2,100 macros verified and over 5,750 design licenses up until 2021, and the numbers are consistently growing. It is our goal to not only maintain the innovation momentum but also bring sustainable success together with our customers.

Global Customers							
	Taiwan	China	Korea	Japan	North America	Europe	Other
Foundry	4	9	4	4	1	2	1
IDM	1	0	0	7	1	1	0
Fabless	324	979	94	75	319	198	83

Achievements until 2021				
Over 41 million wafers shipped until 2021	25 foundry partners world-wide	10 IDMs coverage world-wide	Over 2,100 verified NVM macros	Over 5,750 cumulative design licenses

1.1.2 PUFsecurity Achievements

With the rapid development of technology and the increasing applications of AI and IoT, the awareness and need of preventing security breaches and malicious attacks are soaring higher than ever. More and more companies start to strengthen the security of their products and services. To fulfill such security requirements, our subsidiary, PUFsecurity, provides PUF-based hardware security IP solutions to the customers for various application scenarios. Our robust security solutions can help customers to sustain their development and operations by preventing costs and damages caused by security lapses or hacks.

Based on eMemory’s NeoPUF technology, PUFsecurity developed the PUFrt, the world’s first quantum-tunneling PUF-based root-of-trust IP, and the PUFcc, the high-security PUF-based crypto coprocessor. PUFrt combines essential security functions including unique ID, true random-number generator, and secure key storage in one macro to meet chip designers’ need for a root-of-trust. On top of the functions mentioned, PUFcc also provides essential cryptographic engines, creating a general-purpose integrated security IP module.

In 2021, PUFrt passed the Riscure’s Security Certification; while PUFcc was certified through the Cryptographic Algorithm Validation Program (CAVP) by the National Institute of Standards and Technology (NIST). These serve as the guarantee for chips and systems that use our products. Customers and chip designers could easily develop products that meet the security standards by using our certified security solutions that comply with international safety regulations. It could not only help to minimize security risks, but also save time and resources needed during the product development process.

1.1.3 Corporate Values

eMemory believes in innovation and continual progress. Since eMemory was founded in 2000, innovation has always been one of the core values that we possess. From our first NVM solution, NeoBit, to our latest PUF-based IP solutions, we continue to provide full-service solutions integrating our innovative technology from the initial design stage to our customers. Following our breakthrough with NeoBit, NeoFuse, NeoMTP, NeoEE, and NeoPUF have all seen great success. By offering customized macros which meet product specification requirements, eMemory helps customers save time-to-market and development costs that further pursues sustainable success in the industry. These are all reasons that explain why there are so many companies choosing eMemory as their sole NVM partner.

Our Core Values



1.1.4 Brand Communication

By continually striving to improve our competitiveness, we have established a great brand image domestically and internationally. Due to the pandemic, working from home and participating in virtual events have become the new norm of life. eMemory and our subsidiary, PUFsecurity, have adopted such a norm and keep on delivering our brand and innovations to the world by actively participating in domestic and foreign virtual forums and seminars and hosting technical webinars for the past year.

In 2021, we participated 12 virtual forums hosted by foundries and a couple of international technical seminars to actively promote our brand image and reputation. In addition, we hosted five technical webinars, sharing how our IP solutions are used in various applications such as AI Chip, Autoronics, and Secure Supply Chains.

Events Participated in 2021		
Foundry-hosted Forum	International Technical Seminar	Self-hosted Webinar
12	2	5

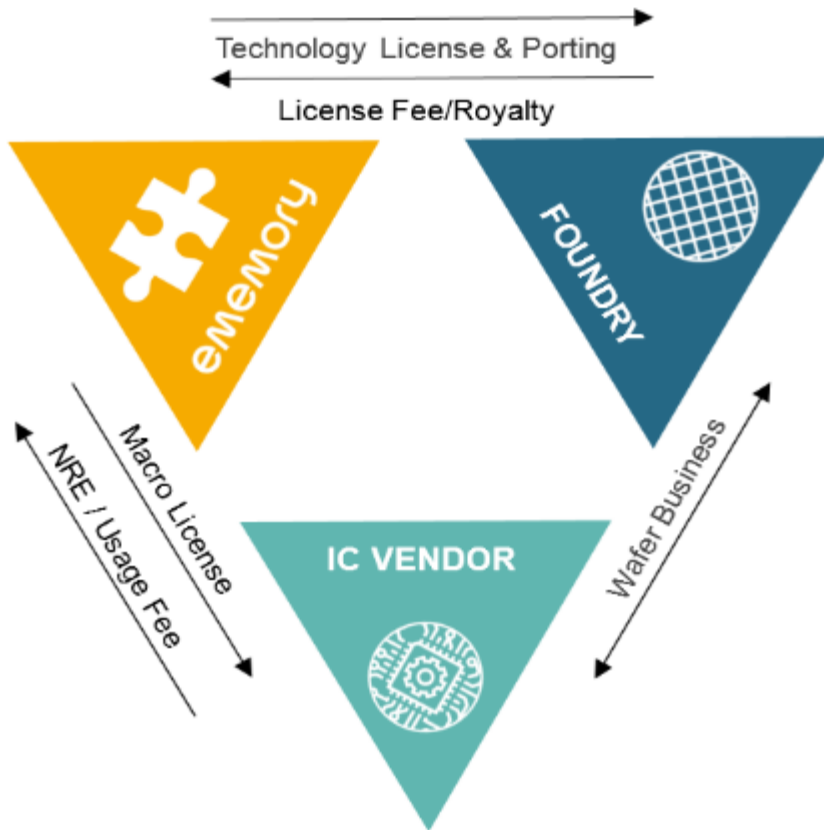
1.1.5 Membership of Associations

eMemory prioritizes playing an active role in the development of product and application trends with local and international associations in the industry. Our involvement is not only beneficial in maintaining positive cooperation with other industry leaders but also in fostering technological innovations across the community. We participate in annual events contributing to panel sessions, providing keynote speeches, and offering our expertise to help resolve the challenges encountered in our industry.

Membership in 2021	
Domestic	International
<ul style="list-style-type: none"> AI on Chip Taiwan Alliance (AITA) RISC-V Taiwan Alliance (RVTA) Taiwan Advanced Automotive Technology Development Association (TADA) Taipei Computer Association (TCA) Taiwan Semiconductor Industry Association (TSIA) Taiwan IoT Technology and Industry Association (TwIoTA) 	<ul style="list-style-type: none"> Asia Silicon Development Agency (ASVDA) Global Semiconductor Alliance (GSA)

1.2 eMemory's Business Model

eMemory's business model is different from the typical business model of our peers. It is based on a triangular relationship between design houses, the foundries, and ourselves.



When eMemory licenses its technology to a foundry, the foundry partner then pays a license fee for the technical setup and license grant. For design houses, either a usage fee or NRE fee is collected when a complete design is licensed. Technology license fees, usage fees, and NRE fees are all categorized as upfront fees by eMemory. Later when a product is taped-out or mass-produced, eMemory receives running royalties from our foundry partners, based on the contractually agreed royalty rate.

This business model creates a much closer and sustainable collaboration among all three parties and allows eMemory to take an active role in supporting product development to completion. On the foundry side, we are a memory technology provider; with the design houses, we license our macro block design, and for both, we offer technical support. With our technologies and macro designs, our partners can further design energy-efficient and cost-efficient chips to be utilized across a broad range of markets.

1.3 Our Responses to COVID-19

In May of 2021, Taiwan raised the COVID-19 alert to Level 3 to control the pandemic outbreak. Policies such as prohibiting unnecessary gatherings, remaining within social distance, wearing masks, and shutting down all venues for entertainment were strictly executed. eMemory has also implemented comprehensive epidemic prevention practices to protect the health of our employees and their family and to maintain daily operations.

Starting from mid-May 2021, all employees were required to work from home except for essential workers. Anyone who needed to come to the office was instructed to wear masks and gloves properly and to leave the office immediately once the tasks were finished. To prevent any cross-infection, we arranged weekly disinfection of the office and the labs.

For remote working practices, essential equipment, communication tools, virtual design platform, and virtual private networks were provided and frequently updated to sustain daily operations and ensure information security. Moreover, an internal reporting system was built for the employees to report any concerns about their health conditions. We also provided our employees with pandemic reimbursement for work-from-home expenses.

Not only did we put the health of our employees at top priority, but we also wanted to help society and fight the pandemic together. eMemory donated 1 million NT dollars to the National Taiwan University Hospital Hsin-Chu Branch to support anti-epidemic related research and health promotion programs. We will continue taking cautious approaches to pandemic prevention and protecting the health of our employees, their family, and society.



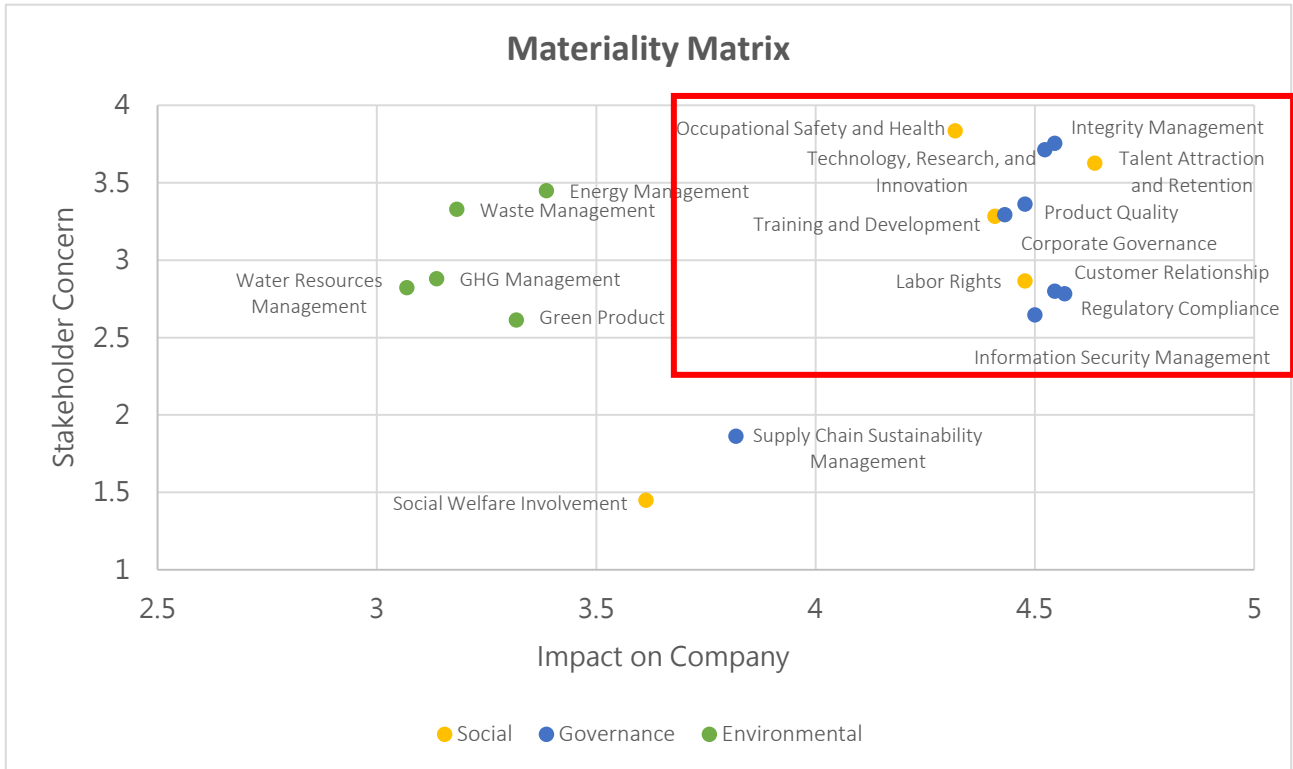
1.4 Our Approach to Materiality

eMemory conducts the materiality survey each year to identify the major material issues that our stakeholders value the most. We continued to use the same 18 material issues established last year. The issues are selected based on information from peers in the industry and international sustainability assessment institutes, such as Sustainalytics.

Category	Issues
Environment Aspect	<ul style="list-style-type: none"> • Water resources management • GHG management • Energy management • Waste management • Green product
Society Aspect	<ul style="list-style-type: none"> • Occupational safety and health • Talent attraction and retention • Training and development • Labor rights • Social welfare involvement
Governance Aspect	<ul style="list-style-type: none"> • Corporate governance • Integrity management • Customer relationship management • Technology, research, and innovation • Product quality • Supply chain management • Regulatory compliance • Information security management

A questionnaire containing the 18 issues was distributed to our stakeholders, including employees, investors, customers, suppliers, and government agencies. Stakeholders were asked to rank the issues from the most important to the least important by category. There were 76 questionnaires distributed and 68 effective responses received, which equated to an 89.5% response rate.

For business impact analysis, there were 44 managers, department-leveled managers and above, taking part in the survey. The managers rated the issues in terms of the likelihood of potential interruptions to business operations. These inputs from our managers reflected material issues that are critical to our daily operations and future corporate development.



Integrating and standardizing the data received, we finalized the materiality matrix and identified 11 prioritized material issues that appear to be the most important to eMemory and our stakeholders. These prioritized material issues were the same as the ones chosen last year, with seven in the governance aspect and four in the social aspect.

Following these material issues that are crucial to us and our stakeholders, eMemory adopts the sustainability approaches to daily operations. Carefully managing and preventing the potential risks related to these material issues, we hope to bring satisfaction to our stakeholders, as well as increase our positive impacts on sustainability for our value chain and the society.

Material Issues and eMemory’s Value Chain

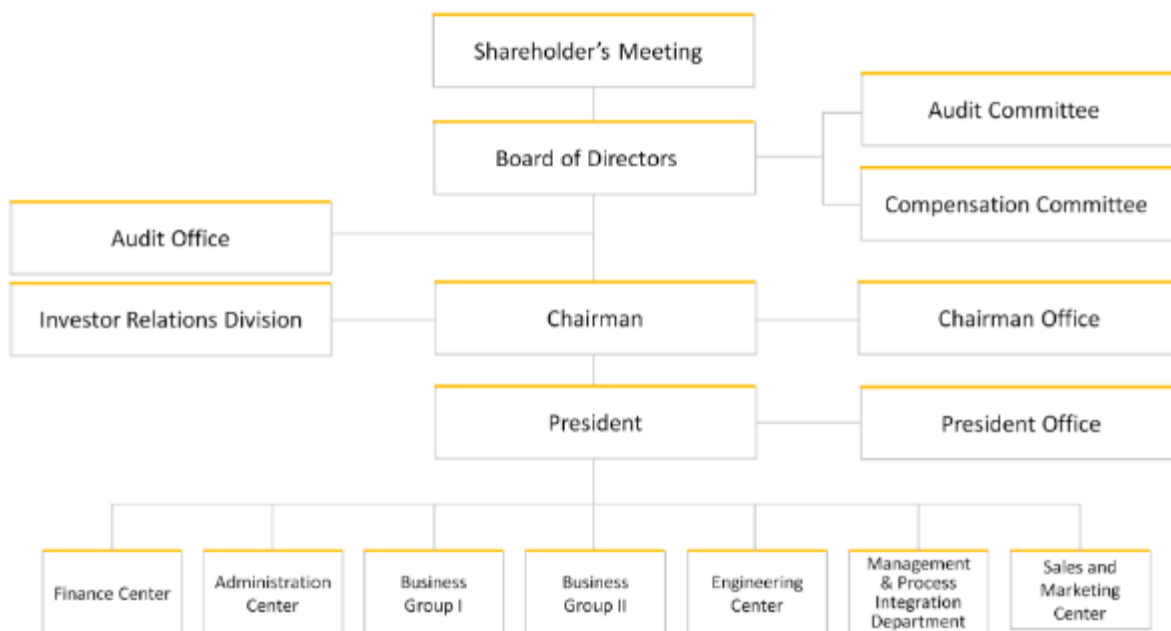
Material Issues	GRI Material Topics	Chapter	Scope of impact on Value Chain				
			Customer	eMemory	Supplier	Shareholder	Employee
Occupational Safety and Health	GRI 403: Occupational Health and Safety	Ch. 4 People		✓		✓	✓
Talent Attraction and Retention	GRI 202: Market Presence GRI 401: Employment GRI 405: Diversity and Equal Opportunity	Ch. 4 People		✓		✓	✓
Training and Development	GRI 404: Training and Education	Ch. 4 People		✓		✓	✓
Labor Rights	GRI 402: Labor Management Relations GRI 406: Non-Discrimination GRI 412: Human Rights Assessment	Ch. 4 People		✓		✓	✓
Corporate Governance	GRI 102: General Disclosures	Ch. 2 Corporate Governance		✓		✓	
Integrity Management	GRI 205: Anti-Corruption GRI 206: Anti- Competitive Behavior	Ch. 2 Corporate Governance Ch. 3 Environmental Sustainability		✓	✓	✓	
Customer Relationship Management	GRI 418: Customer Privacy	Ch. 2 Corporate Governance	✓	✓		✓	
Technology, Research, and Innovation	Non-GRI Material Issue	Ch. 1 About eMemory Ch. 3 Environmental Sustainability	✓	✓		✓	
Product Quality	GRI 416: Customer Health and Safety	Ch. 3 Environmental Sustainability	✓	✓			
Regulatory Compliance	GRI 307: Environmental Compliance GRI 419: Socioeconomic Compliance	Ch. 3 Environmental Sustainability		✓			✓
Information Security Management	GRI:418 Customer Privacy	Ch. 3 Environmental Sustainability	✓	✓	✓	✓	✓

Corporate Governance

2.1 Board Governance

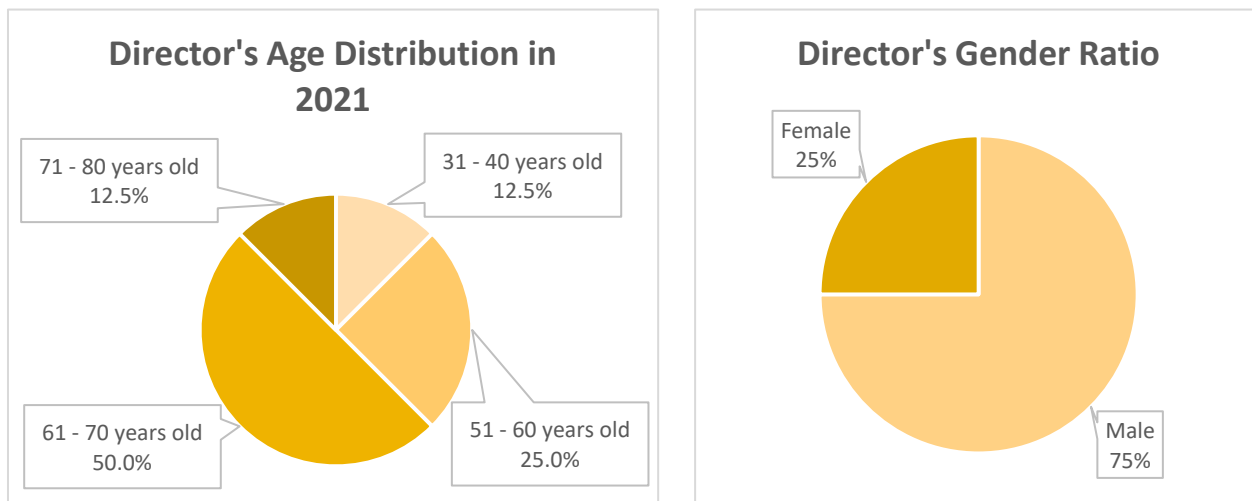
2.1.1 Organizational Structure

eMemory’s corporate governance-related affairs are handled by different divisions which make up the complete organizational structure. The Finance Center is responsible for the operation of the Board of Directors, Audit Committee, and Shareholders' Meeting. The Human Resources Department, which is under the Administration Center, is responsible for the operation of the Remuneration Committee. The President Office is responsible for the integrity management and corporate social responsibility of the Company.



2.1.2 Board of Directors

By the end of 2021, eMemory convened 8 Board Meetings with a 98.6% attendance rate among all the Directors. We had eight directors on the Board. The members of the Board are with professional backgrounds and expertise in academia, management, leadership, strategic decision-making, industrial knowledge, and finance(See [eMemory 2021 Annual Report](#) for more details). The proportion of Directors with employee status is 12.5%. There are 3 Independent Directors with 6, 7, and 13 years of service respectively on the Board, accounting for 37.5% of the Board. In addition, there are two female Directors, accounting for 25% of the Board, which exceeds the goal of having at least one female Director.



The "Corporate Governance Practice Principles" of eMemory regulate the diversity of the Board of Directors and formulates appropriate diversification policies based on the company's operation, operation type, and development needs. The policies include but are not limited to two major aspects: basic conditions and values (such as gender, age, nationality, culture, etc.) and professional knowledge and skills (such as law, accounting, industry, finance, marketing, or technology). The Board of Directors must also possess the knowledge, skills, and competencies to perform their duties.

2.1.3 Audit Committee

The main purpose of the Audit Committee is to assist the Board in performing the supervision of the quality and faith of execution regarding accounting, auditing, financial reporting, and the overall financial control of eMemory. The Audit Committee consists of 3 Independent Directors, with one as the convener. A total of 5 Audit Committee meetings were held in 2021 with a 100% attendance rate of the committee members.

2.1.4 Remuneration Committee

The Remuneration Committee of eMemory takes charge of assisting the Board in executing and assessing the remuneration and welfare policies of the company, and the remuneration of Directors and managers. The committee members are appointed by the Board, composed of at least one Independent Director. The Remuneration Committee consists of 3 Independent Directors, with one as the convener. A total of 2 Remuneration Committee meetings were held in 2021 with a 100% attendance rate of the committee members.

For further details on the Board, Audit Committee, and Remuneration Committee, please refer to the [eMemory 2021 Annual Report](#).



2.2 Internal Audit

eMemory's Audit Office is an independent department comprising a full-time dedicated member of staff who reports directly to the Board of Directors. Any appointment or discharge of the internal audit manager shall be approved by the Board of Directors after being reviewed by the audit committee and be reported to the FSC for recordation via the Internet-based information system within 2 days from the date of occurrence.

The internal auditor assists the Board of Directors and Executives in reviewing the effectiveness of eMemory's internal controls and operational efficiency, followed by corresponding recommendations. It guarantees the continuous function of the internal control system and improves the integrity, rationality, and effectiveness of management policies. The internal auditor reviews the company's internal tasks and monitors its subsidiaries in accordance with annual plans, which need to be approved by the Board of Directors. Besides informing the Board of Directors during its ordinary meetings, the internal auditor briefs the Board Audit Committee quarterly. Please refer to our "[Summary of Communication between Independent Directors, Internal Audit Supervisors, and Accountants](#)" for further details.

2.3 Integrity and Ethics

eMemory's "[Ethical Corporate Management Practice Principles](#)" acts as a guideline for a fair, honest, trustworthy, and transparent engagement in business activities, which applies to all employees, including the Directors and Executives. We hold zero-tolerance for bribery, corruption, fraud, intellectual property infringement, insider trading, or any other illegal activities. Any behaviors of providing or receiving inappropriate benefits, breaching fiduciary duties, or disclosing trade secrets are strictly prohibited. We also establish the "Work Rules" which stipulate that all employees must be honest in their words and deeds in order to prevent damage to the company's benefits due to individual interests.



The President’s Office is the dedicated unit responsible for establishing and revising the ethical management policies and prevention programs. It also supervises the implementation of the policies and reports to the Board of Directors annually. According to our [“2021 Business Integrity and Ethical Management Report”](#), eMemory’s corruption risk has been controlled appropriately with no significant risks being found. No record of employees dismissed or punished due to corruption incidents. During the reporting period, we were not involved in any lawsuit related to anti-competitive, anti-trust, and monopolistic behavior.

In addition, eMemory provides a series of training courses to ensure all employees are aware of the importance of integrity and ethical management and will practice them fully during daily business. The “Information Environment and Information Safety” course emphasizes the confidentiality of both tangible and intangible information assets possessed by eMemory. The “Personal Information Protection” training course focuses on the execution of a non-disclosure agreement by the individual who handles any personal information, confirming their confidentiality obligations and the parameters of the permissible legal use of personal information. The “Insider Trading” course propagates the inhibition of making use of undisclosed information to conduct insider trading and disclosure to others. In 2021, 35 new employees at eMemory participated in the courses mentioned, totaling 49.2 hours.

2.4 Whistle-blowing System

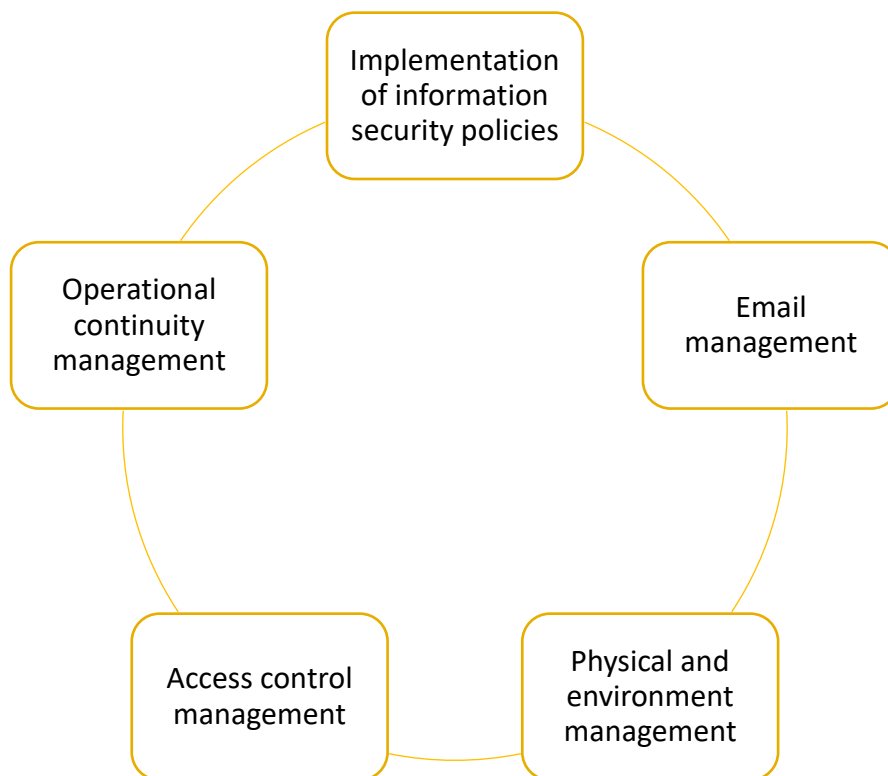
The whistle-blowing system has been long established for our stakeholders to report any unethical deeds or violations of the regulations or principles (for more details, please refer to [“Whistle-blowing Procedures”](#) on our website). For any received claims, eMemory appoints related personnel to investigate the case. The appointed personnel then reports to eMemory and the whistleblower about the handling methods, schedule, and results. The whistleblower and appointed personnel are required to keep the investigation and related information confidential. eMemory is obligated to protect the whistleblower from any possible retaliation or improper treatments. The involved parties

that fail to retain confidentiality and are responsible for any public disclosure shall be disciplined according to the related rules.

Meanwhile, all employees are obligated to report any misconduct discovered to their immediate supervisors or through the Whistle-blowing system. If a violation of the relevant laws or ethical principles was confirmed, eMemory will immediately request the perpetrator to stop the conduct and seek legal proceedings if necessary to protect eMemory’s reputation and rights.

2.5 Cyber Security Management

eMemory spares no efforts to ensure the effectiveness and continuity of our information business operations and protect the confidentiality, integrity, and availability of its information assets. The Information Security Committee was established in April 2013 to improve information security management. The information security policies and related operation rules were later introduced. Under the governance of the Information Security Committee, the Information Security Execution Team is responsible for planning and executing information security operations. The Information Security Event Response Center is established for responding and giving directions to the material information security event.



Our Cyber Security Management Program is based on the ISO-27001 framework and led by the Information Security Committee to reinforce eMemory’s information security in various aspects. Quarterly meetings for examining affairs related to the information security management of the Company and reviewing the execution of information security policy are convened. The Information Security Execution Team is required to report implementation results during the Management Review Meeting hosted by the President. The Audit Office assesses the execution of information security management annually and reports to the Audit Committee and the Board of Directors.

Cyber Security Management Results in 2021

0 losses caused by significant cyber security incidents	100% coverage rate in the vulnerability scanning of external servers.
30 executions of relevant Patch updates	4 internal educational announcements of information security risks
Strengthened password management mechanism and data access authorization control	100% information security education and training completion for new employees

2.6 Risk Management

eMemory places great emphasis on risk management to control risks and diminish possible damages which might affect business operations. Led by the President, relevant departments are the authorities in charge of risks in different domains including finance, research, changes in industries, changes in regulations, litigation, corporate image, share transfer, and management rights. The



Management Examination Meeting is conducted semiannually to review the issues related to the environment, society, and corporate governance concerned by our stakeholders. Risk assessments on such issues are then performed, followed by related risk management strategies and measures.

To ensure the thorough implementation of the sustainable strategies, internal audits are conducted and the frequency is by the importance of the risk. Moreover, the audit supervisor assists the Company in strengthening internal controls to minimize risks and increase shareholders' interest.

Project	Risk Management Strategy and Measures
Environmental Protection and Ecological Conservation	eMemory is a professional silicon IP company, and does not engage in the production and manufacturing of tangible products; thus, no GHG from manufacturing (Scope 1, which is from the emission sources owned or controlled by the Company) is produced, so is industrial waste. Domestic waste is divided into general waste, including kitchen waste and recyclable waste. The waste is gathered by employees in the temporary waste storage area; then the property management company assists in its removal. The waste is then transported by a qualified waste handling operator to the incineration plant for treatment and disposal. In addition, eMemory has promoted the implementation of energy-saving measures in the office. For example, air conditioning systems have been equipped with timers for scheduled operation; tap water savers have been installed to save water; and employees are encouraged to turn off any unused lights, adopt paperless operations, and practice water conservation. Moreover, a regular annual inventory of greenhouse gases and water consumption is carried out, to achieve the goals of reducing carbon dioxide emissions, water consumption, and total waste generation each year, and thus implementing environmental protection.
Climate Change	The rising tangible risks brought on by climate change, such as natural disasters, market volatility, and supply chain disruptions, have been carefully evaluated by eMemory. Across all aspects of our business, we are looking to minimize our impact on the environment big or small, and play an active role in finding solutions within our industry. As an example, the innovative nature of our core technology removes the need for complex additional manufacturing processes, that are required by conventional non-volatile memory solutions, and in turn, plays a part in reducing the carbon footprint.
Workplace Safety	eMemory is dedicated to securing labor health and improving the working environment by periodically implementing health and safety education. The "Fire Safety Seminar" and "CPR First Aid Training" is provided in accordance with the occupational safety and health-associated laws and regulations. Free parking spaces, transportation allowances, a nursing room, a full-time security system, and rest areas are provided for employees to enjoy a comfortable and healthy working environment. We believe that the health of our employees is eMemory's greatest asset. Therefore, we provide health club membership subsidies which

Project	Risk Management Strategy and Measures
	<p>are applied by one fourth of the employees each quarter. We also hold health examinations which are utilized by more than three quarters of our employees. Health consulting services also are available on-site regularly. During the high-risk period of the COVID-19 pandemic, employees were required to come to the office on alternate weeks to reduce the risk of cross-infection among employees. An additional epidemic compensation was provided to the employees. Later on, precautions to help fight the pandemic have continued to be periodically promoted.</p>
<p>Product Safety</p>	<p>eMemory has passed the TÜV Rheinland ISO 9001:2015 Quality Management System certification and obtained corresponding certificates. The NeoBit & NeoEE AS series products have passed the TÜV Rheinland ISO 26262 (Road Vehicles-Functional Safety) & Industrial Specifications IEC 61508 (Functional safety of electrical/electronic/ programmable electronic safety-related systems) certification and obtained corresponding certificates. Besides, we hold on to the spirit of “First-Class Quality, Best Service, and Satisfied Customer” and focus on excelling product quality to reach our goals of increasing customer’s satisfaction, providing customers with safe, reliable, and high-quality products, and maintaining good communication with customers by providing transparent and effective complaint handling procedures for products and services. In addition, the customer satisfaction survey is conducted every year, with excellent results, improving customers’ recognition.</p>
<p>Social Economic and Compliance</p>	<p>By establishing corporate governance organization and internal control system, we ensure that all personnel and operations at eMemory comply with relevant laws and regulations.</p>

2.7 Stakeholder Management

eMemory engages with stakeholders through a variety of communication channels that touch on important issues.

Stakeholders	Importance	Communication Channel	Frequency	Issues	Results
Employees	Employees are the most important asset of eMemory. With continuous innovation and efforts in IP design, eMemory has become a global technology leader.	<ul style="list-style-type: none"> • Performance assessment • Feedback mailbox • Quarterly employee meeting 	<ul style="list-style-type: none"> • Semi-annually • 24/7 • Quarterly 	<ul style="list-style-type: none"> • Ethics and regulatory compliance • Talent attraction and retention • Talent cultivation and development 	<ul style="list-style-type: none"> • 2 performance assessments • 3 quarterly employee meetings • 5,079.7 hours of employee training
Shareholders and Investors	Shareholders and investors are the driving force behind eMemory. Through capital investment and participation in corporate governance, our shareholders and investors help us go further on the road of sustainable development.	<ul style="list-style-type: none"> • Annual general shareholders' meeting • Quarterly investor conferences • Investor meetings • Investor relation contact window 	<ul style="list-style-type: none"> • Annually • Quarterly • According to demand • Any time 	<ul style="list-style-type: none"> • Corporate governance • Ethics and regulatory compliance • Customers and services • Technology development • Financial performance • Stock price • ESG execution 	<ul style="list-style-type: none"> • Annual general shareholders' meeting • Quarterly investor conferences • Attended 39 external investor conferences • Selected as "MSCI Taiwan Index" constituents

Stakeholders	Importance	Communication Channel	Frequency	Issues	Results
Customers	Customers are our best strategic partners. Adhering the customer-oriented spirit, eMemory develops various IPs and provides professional services in order to assist our customers in successful product development.	<ul style="list-style-type: none"> • Designated customer service team • Customer complaint channels • Customer satisfaction survey 	<ul style="list-style-type: none"> • Daily • Annually 	<ul style="list-style-type: none"> • Technology innovation • Customer service • Brand value • Information confidentiality 	<ul style="list-style-type: none"> • The average customer satisfaction score was 95.15 out of 100 in 2021 • Received TSMC’s IP Partner Award for 12 consecutive years
Suppliers	Suppliers are eMemory’s crucial partners, providing us with excellent products and support. Because of the close collaboration with our suppliers, our IPs can be evaluated and pass various verification tests on schedule.	Supplier audit	Annually	Supply chain sustainability management	Distributed 28 “Supplier Checking List” in 2021 to review suppliers’ performance in labor, health and safety, environment protection, ethics, and management system
Government	The government is the bridge for eMemory to enter the stock exchange market. Investors around the world are able to learn about us through the platforms built by the government.	<ul style="list-style-type: none"> • MOPS • Conferences 	<ul style="list-style-type: none"> • Any time • Aperiodically 	<ul style="list-style-type: none"> • Regulatory compliance • Corporate governance • Corporate social responsibility • Ethics and business integrity 	<ul style="list-style-type: none"> • Ranked as top 5% in the corporate governance evaluation system • Selected as “TPEX Corporate Governance Index”, “TPEX 50 Index”, “TPEX 200 Index”, “TPEX Compensation Index”, “TPEX RGA Quality 50 Index” and “TPEX Semiconductor Leaders Total Return Index” constituents

Environmental Sustainability



Environmental protection is one of the most important parts of corporate sustainability. While eMemory authorizes pollution-free silicon IPs and does not manufacture tangible products, we are committed to protecting the environment by adopting sustainable practices in our daily operations proactively.

3.1 Environmental Management

Given the business characteristics of eMemory, the verification of the Environmental Management System (EMS) does not apply to eMemory. Nonetheless, eMemory complies with all environmental regulations on environmental protection, energy conservation, and water resource protection.

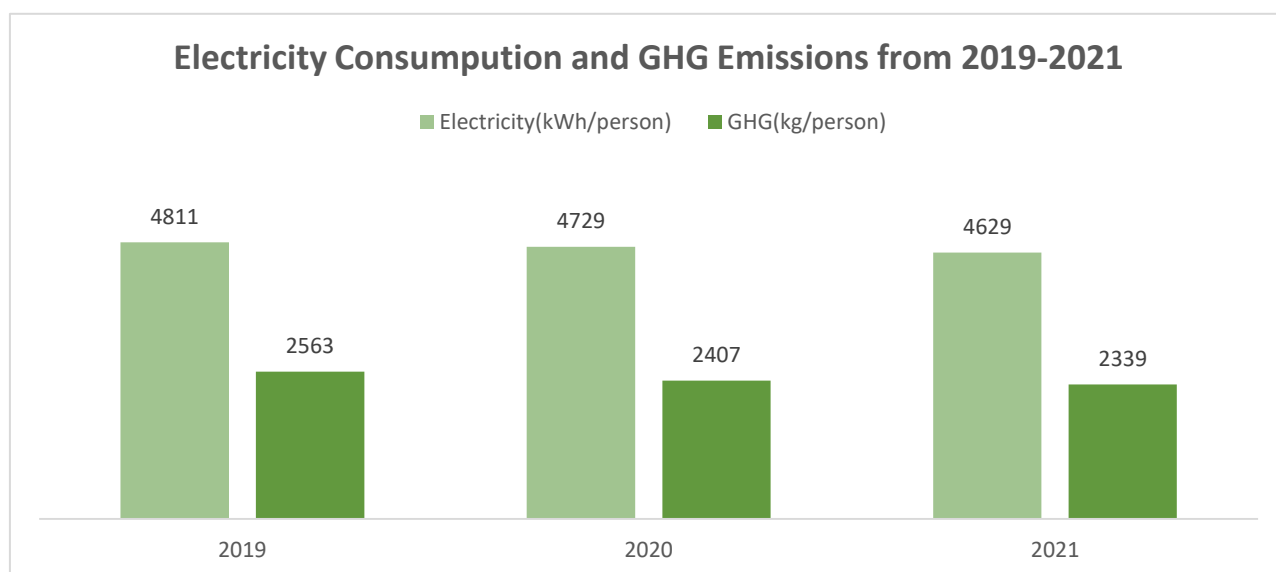
We adhere to the sustainable environmental protection management policies and promote practices of reducing, reusing, and recycling in the office. Our daily work environments use energy-efficient lighting, heating, and cooling systems. We are also transforming to paperless operations to conserve paper usage and increase work efficiency. Regular inspections of GHG emissions, water consumption, and total waste generation are performed. All of these measures help to ensure our activities are as sustainable as possible

3.1.1 Electricity and GHG Management

Most of the company's energy consumption is from air-conditioning and lighting. To reduce energy consumption and decrease operation costs, the lighting within the company uses high efficient energy-saving light-emitting diode (LED). The air-conditioners are also inspected and cleaned

periodically to maintain efficiency, and timers are configured on the air-conditioners after certain non-working hours. The total electricity consumption in 2021 was 1,374,725 kWh, with 4,628.7 kWh per capita, a decrease of 2.1% compared to 4,729.1 kWh per capita in 2020.

Since eMemory does not operate factories of any sort, we do not have direct GHG emissions (Scope 1). The main source of GHG emissions is indirect GHG emissions (Scope 2), which are associated with the purchase of electricity from Taiwan Power Company. In 2021, the total carbon dioxide emission was 690,112kg, with 2,339.4 kg of average emission per capita, which is a reduction of 2.8% from 2,407 kg in 2020. The emission of carbon dioxide is expected to reach 2,300 kg per capita by 2022, which we have almost achieved and will work toward it.

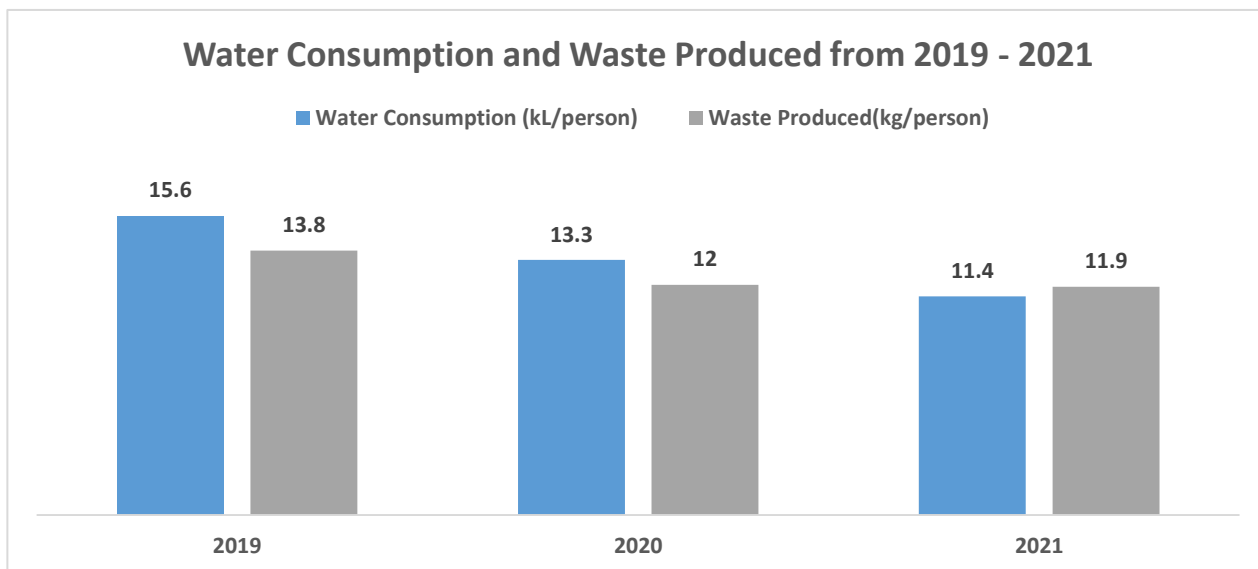


3.1.2 Water and Waste Management

We use water in our daily operations for food services and sanitation. The main water sources are the Touqian River and Baoshan Reservoir. The total water consumption in 2021 was 3372 kL, with 11.4 kL average water consumption for each person, a drop of 14.3% compared to 13.3 kL in 2020. Our future goal is to maintain the water consumption by 12 kL per capita. The Taiyuen Hi-Tech Industrial Park (Science Park), where eMemory is located, has a sewage recovery system. This will be used for the watering of plants and flowers around the Science Park. The domestic sewage is discharged to the domestic sewage treatment facilities in the Science Park before being discharged to the water system without significant impact on the water system.

Although no manufacturing wastes are produced, we implement careful waste management of waste collection, recycling, and disposal. The waste is collected by employees in the temporary waste storage area. The cleaning service company that we have a contract with assists in its recycling and removal. The waste is then transported by a qualified waste handling operator for treatment

and final disposal. The total weight of domestic waste in 2021 was 3,525kg, equaling 11.9 kg per capita (9.3 kg for general waste and 2.6kg for recycled resources).



3.2 Green Product Development

eMemory supports energy conservation and environmental protection by continuing to develop advanced semiconductor process technologies that support our customers’ designs. Collaboratively, our customers can thereby produce the most advanced, energy-efficient, and environmental-friendly products possible. With advances in the semiconductor manufacturing process and the increasing complexity of IC design, our IPs can be used to enhance the efficiency of the IC design process and shorten development time. As the process nodes evolve, not only is the chip size significantly reduced but the power consumption of each type of chip is effectively reduced.

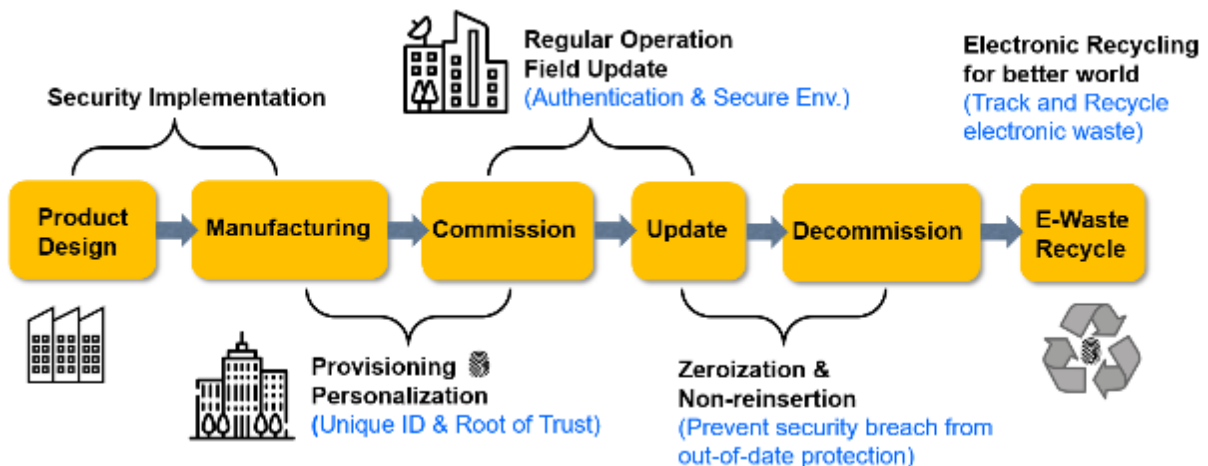
Take display driver ICs (DDI) for example, which is one of the applications with the largest shipments among various products embedded with our IPs. The main demand for DDI covers from 0.35µm High Voltage Process (HV) to 28nm HV. Each generation of the HV process saves 50%-70% of power consumption compared to the previous generation. As the process advances, the power saving rate is reduced to 30%-50%. Based on these power consumption characteristics, it is conservatively estimated that the average power saving rate of DDI chips embedded with eMemory’s IP was 13.6%.

Based on the wafer shipments of major products in 2021, we helped to reduce the electricity consumption of the end-use products with our IPs up to 390 million kWh, which is equivalent to 195,000 tons of CO2 emissions, equivalent to the carbon absorption capacity of 430 New York Central Park.



Moreover, eMemory’s IP can improve the stability and yield of the wafers and further reduce resource consumption during wafer manufacturing. During the fabrication and packaging stages, the trimming function of eMemory’s IP can be used to meet the required product specifications, thereby reducing the cost of wafer remanufacturing. Based on the wafer shipment in 2021, eMemory contributed to saving nearly NT\$160 billion in manufacturing costs and reduced 2.53 billion kilowatt-hours of electricity usage and 12 million cubic meters of water consumption, equivalent to the carbon adsorption of nearly 2,800 New York Central Park and the water consumption of 4,867 Olympic standard swimming pools.

In addition, our PUF-based solutions can help to reduce and recycle electronic waste (e-waste) throughout the product lifecycle. Nowadays, with various electronic devices being manufactured, e-waste has become another vital environmental issue. Discarded e-waste could cause public health and environmental concerns, and security breaches without proper disposal. Our PUF-based IPs provide each chip/device with its own unique identity and root of trust which strengthens product and application security. It prolongs the product lifecycle and prevents the chip/device from becoming e-waste due to a lack of security protection. During the decommissioning phase, we can also easily track the discarded products by their unique IDs to properly recycle and decommission the products which further prevents the ecosystem from being hacked.

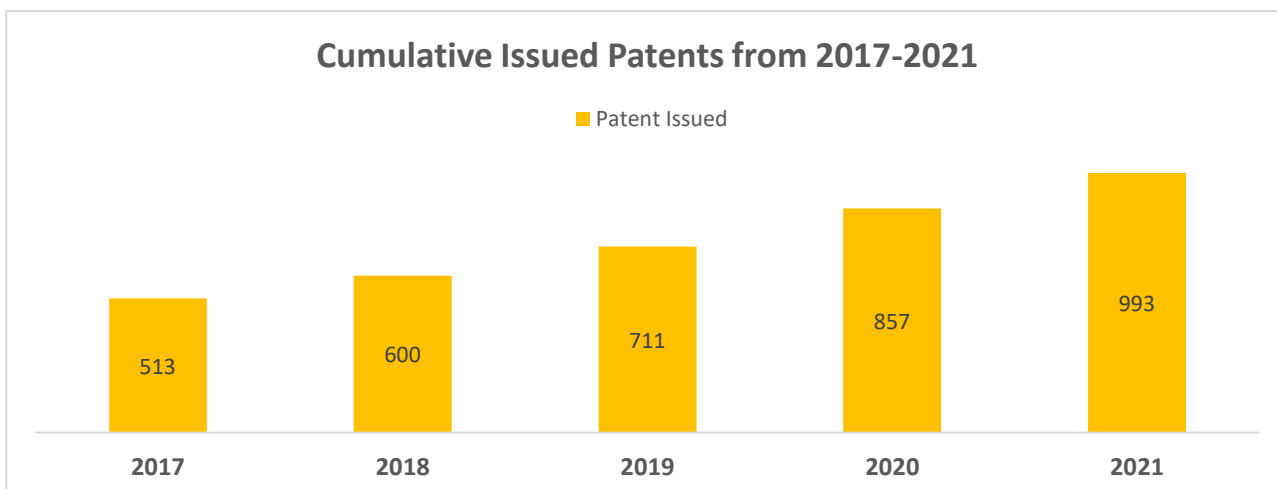


3.3 Patent Management



eMemory values intellectual property rights, patent quality, and patent protection. We continue to enhance both the quantity and quality of our IPs to create economic value and strengthen competitive advantages. Our Patent Strategy Committee formulates patent strategies and annual goals based on eMemory’s business objectives. The patent process control, patent risk reminding, and other IP rights related matters are performed and inspected by the Intellectual Property Department. Each patent is carefully reviewed by the Patent Examination Board before application to guarantee the novelty and quality of the patent. .

The patent portfolio developed by eMemory has spread all over Taiwan, United States, China, Japan, and Europe. By 2021, the number of worldwide patent applications has reached over 1200. There has also been a significant rise in patents issued (over 990), with a growth rate of 93.6% being achieved between 2017 and 2021.



To encourage innovation among employees, eMemory establishes the Patent Award and the Golden Brain Award to reward inventors with top-ranking numbers of issued patents and patent applications. We also have the New Brain Award to motivate junior employees in applying for patents. Moreover, events such as the “Innovation Competition” and patent training courses are held occasionally, to enrich employees' patent knowledge and to imprint the mindset of "every idea matters!"

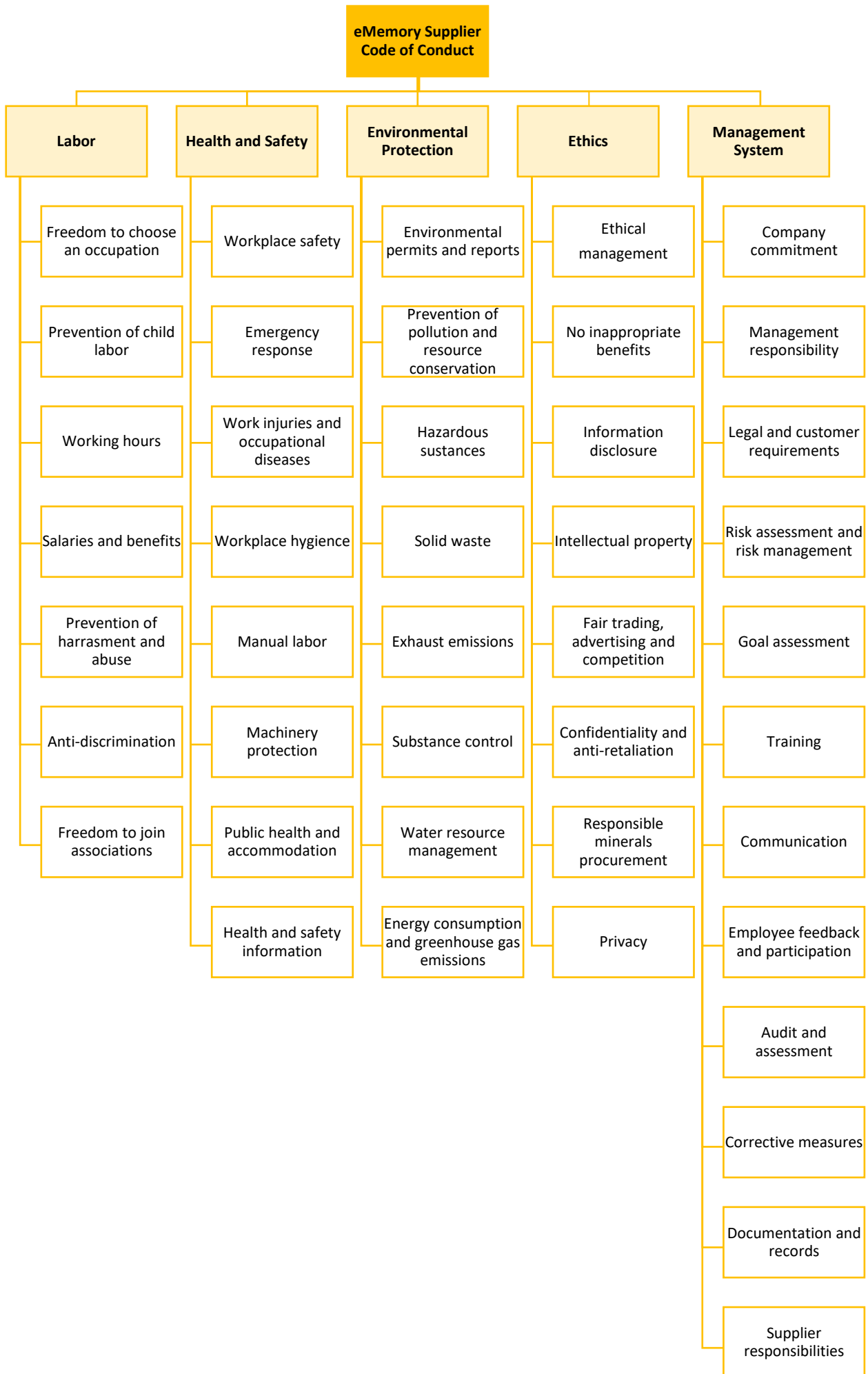
eMemory has been receiving national recognition for our outstanding innovative patents and creations. In 2019, we were the winner of the National Industrial Innovation Award by the Economic Affairs of Taiwan. We have also received the Gold Medal Award and the Contribution Award of the National Invention and Creation by the Intellectual Property Office of Taiwan respectively in 2005, 2008, and 2020. Furthermore, eMemory has been ranked as “The Top 50 TWSE/GTSM Listed Companies with Most Valuable U.S. Patents” by Institute for Information Industry (III) and Ocean Tomo in 2013.

3.4 Supply Chain Management

eMemory establishes the “[eMemory Supplier Code of Conduct](#)” to ensure that our supply chain vendors and their supply chains meet the same sustainability standards as we do, which includes providing a safe working environment, respecting employees, facilitating environment protection in business operations, and complying with ethic codes.

Our major suppliers are requested to sign the “eMemory’s Supplier Social Responsibility Commitment.” Suppliers are committed to adopt a zero-tolerance policy and prohibit any form of bribery and corruption. They cannot provide or accept bribes or any forms of inappropriate benefits. Abiding fair trade and competition standards and obeying local laws and regulations regarding daily operation are also demanded.

The Procurement Department and the Quality Management & Process Integration Department are in charge of evaluating customers’ credibility and overseeing the quality of the products and services provided by the suppliers. Every year, our major suppliers are mandatory to perform a self-assessment by replying to the “[Supplier Compliance Checklist](#).” The checklist specifies five domains for evaluation, including labor rights, health and safety, environmental protection, ethics, and corporate management. The replies are carefully reviewed and improvement programs and on-site audits are implemented when necessary.



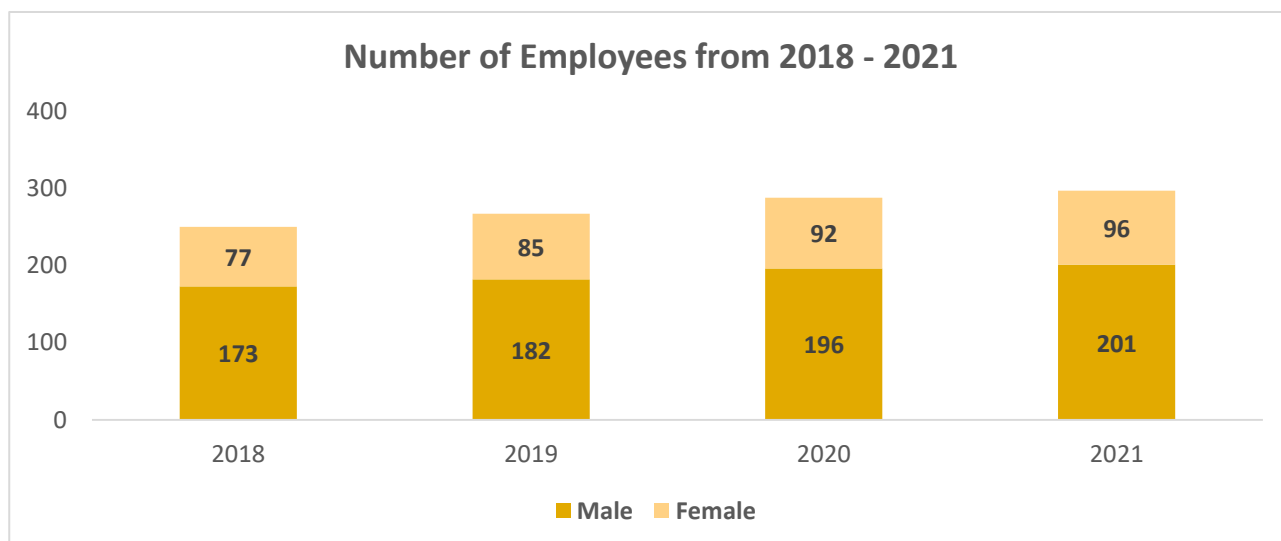
People



As a leading IP technology developer and provider, employees are eMemory’s most valued asset. From recruitment to retirement, from training programs to traveling programs, eMemory supports and provides opportunities for our employees to grow, innovate, and maintain a healthy work-life balance from day one.

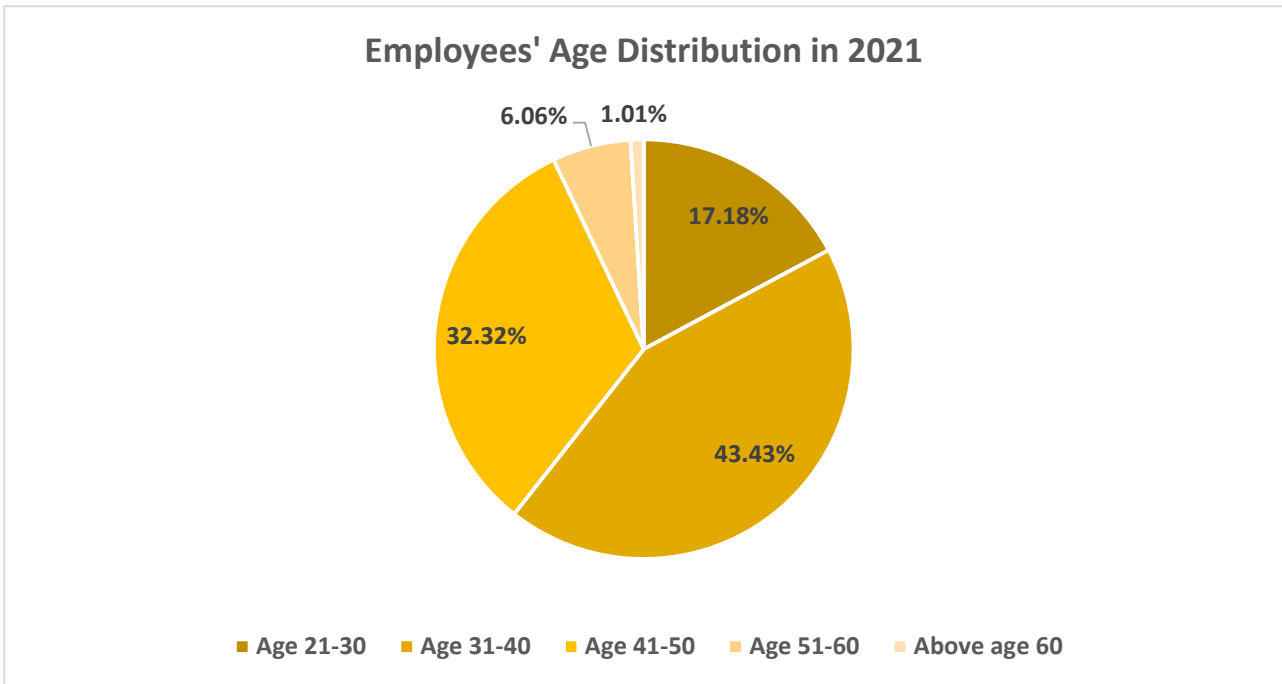
4.1 Human Resources

In 2021, the total number of employees was 297 with 67.7% of males and 32.3% of females. The gender ratio has been relatively steady for the past few years because of the nature of the semiconductor industry in Taiwan. eMemory continues to recruit great talents regardless of their gender, sexuality, race, class, age, marital status, language, religion, political party, place of origin, place of birth, appearance, facial features, or disability.

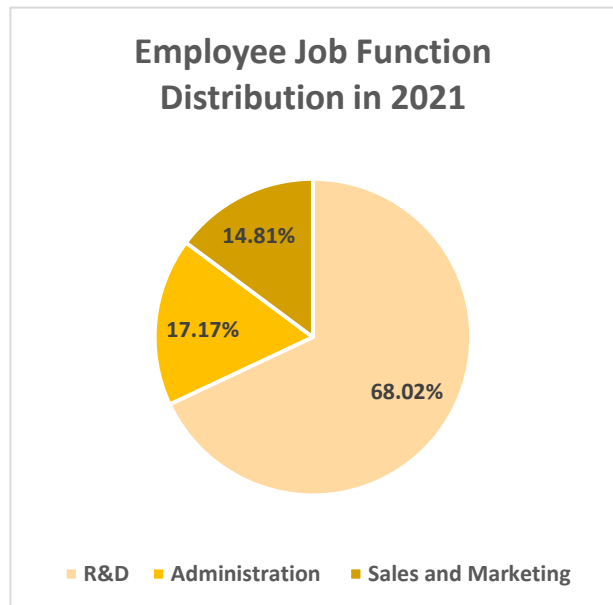
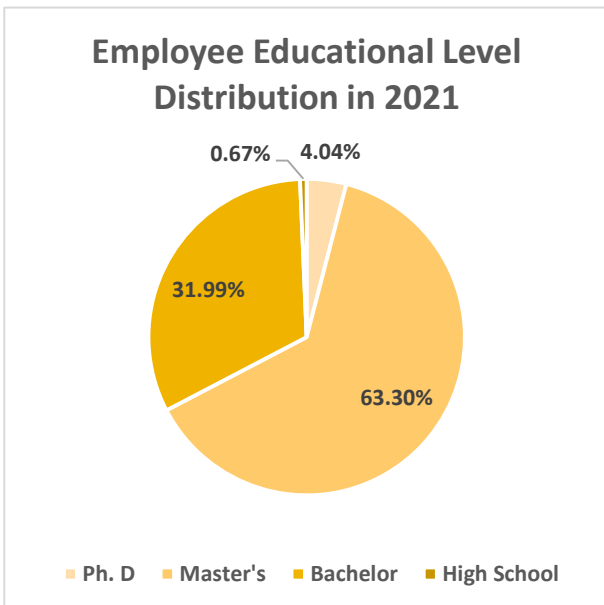


4.1.1 Basic Demographics

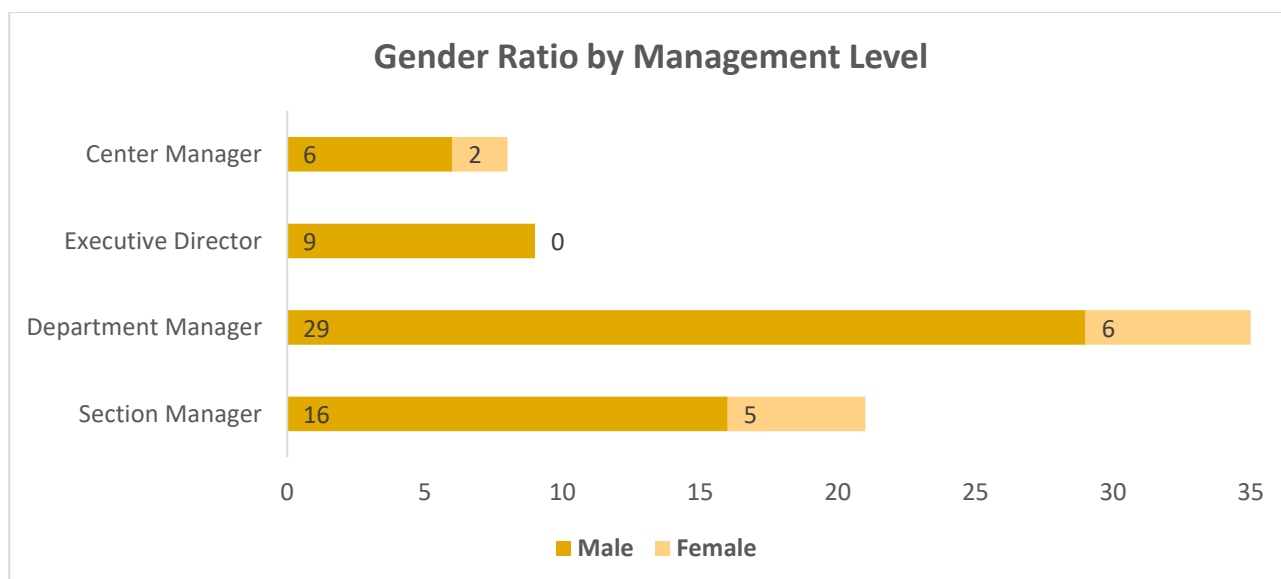
The average age of our employees is 39 years old. To look into details, employees aged between 31 to 40 years old are our majority, taking 43.43% of the total employees. Age 41-50 is our second largest group representing 32.32% of the total employees, followed by 17.18% aged between 21 to 30, 6.06% aged between 51 to 60, and 1.01% aged above 60.



In terms of employee’s educational level, around 63.30% of the total employees have their Master’s degrees, 31.99% have their Bachelor’s degrees, and 4.04% have their Doctoral degrees. We have 68.02% of R&D personnel, 17.17% of Administrative personnel, and 14.81% of Sales and Marketing personnel.



Regarding the gender ratio of each management level, 25.0% of our center managers are female, 17.14% of the department managers are female, and 23.81% of the section managers are female.



4.1.2 New Hire and Turnover

In 2021, eMemory had an overall turnover rate of 9.43 % and a new hire turnover rate of 5.56%. There were 39 new talents joining us in 2021, with 69.23% of males and 30.77% of females. In order to enhance the company’s growth in the long run, eMemory continues to recruit new talent via various recruitment channels, including job search websites, university career fairs, and intern programs. Not only did we recruit for current positions, but also collaborate with universities on providing recruitment sessions to juniors, seniors, and graduate students to establish a corporate image and attract young potential talent.

4.2 Training and Development

Having innovation as one of our core values, eMemory provides our employees continuous and comprehensive training and learning opportunities. In order to maintain the innovation momentum, both technical and non-technical training are available for employees of all levels and functions.

Course Types	Number of Courses	Total Participations	Total Hours
New Employee Training	1	97	267.05
Vocational Training	90	1,802	3,257.16
Supervisor Training	7	183	377.25
General Training	16	687	1,178.23
Total Amounts	114	2,769	5,079.69

In 2021, the total staff training time reached 5080 hours, equating to an average of 17.1 hours received by each employee. This data demonstrates a good level of enthusiasm from our staff in the further advancement of their skills.

4.2.1 Training for New Hires

For new hires to have better understandings of the company, eMemory develops comprehensive training programs for our full-time, part-time employees, and interns. On the first day, a general orientation is given to each new hire, introducing the working environment, basic policy and procedures, benefits and rights. New hires will later attend a one-day training given by the executives. This training focuses on delivering the company core values, functions, and responsibilities of each division, and common corporate languages such that the new employees could not only learn about the firm but also build a sense of inclusiveness. A half-day safety, health, and human rights training is given to the new hires as well, which equals a total of 267.1 hours of training delivered in 2021.

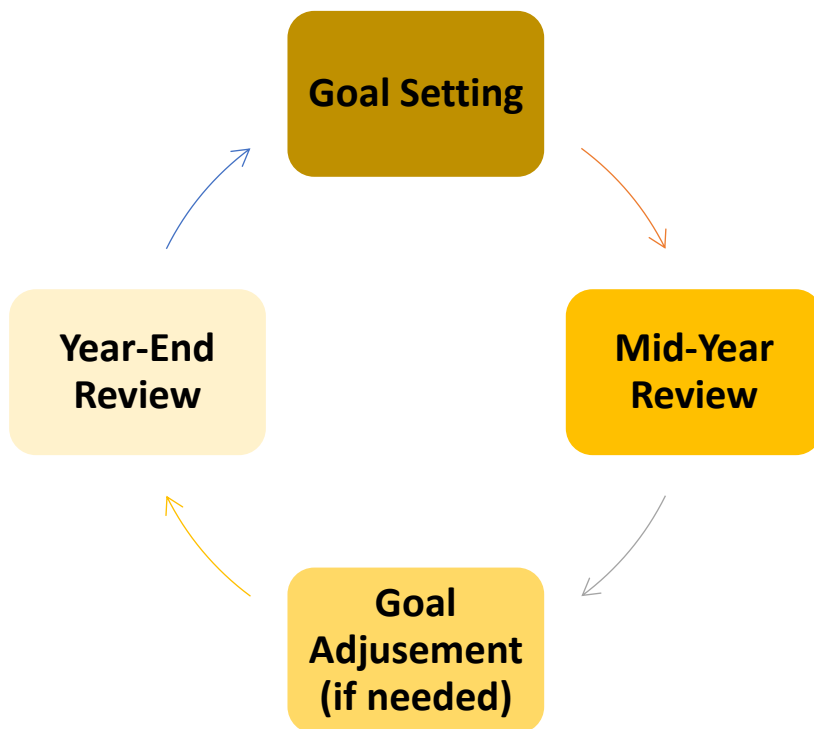
4.2.2 Diversified Learning Courses

eMemory spares no effort in the cultivation and development of talents. Although the pandemic in 2021 limited our opportunities in taking external training courses, which we have always encouraged our employees to do, we continue to uphold the frequency and quality of our internal training programs by utilizing the e-learning system to deliver professional knowledge sharing sessions, Business English courses, health and wellness workshops, and so on. Employees can develop the expertise for their profession, as well as achieve improvement in other domains.



4.2.3 Performance Management and Career Development

The performance management at eMemory includes goal setting and performance review. Based on personal achievements and project goals, each employee would set his/her annual goals, which are later discussed with the supervisors, at the beginning of the year. The performance review is conducted twice a year, the mid-year review and the year-end review. Not only will an employee be reviewed by the supervisors, but self-evaluation is also mandatory in the review process to make the evaluation impartial and comprehensive. In addition to work-related performance, we also expect employees to integrate the core values, innovation, customer trust, continuous improvement, and teamwork, into their jobs and daily operations. We believe that it would improve team efficiency and personal sense of inclusiveness when the core values are incorporated into our daily operations.



In addition to the performance management system mentioned above, eMemory also conducts appraisal meetings semi-annually. It is an opportunity for employees to demonstrate their aptitude and merit in their current role and, following an evaluation by the committee, whether a promotion or a raise may be appropriate. Based on the company’s needs, internal promotions to the management team and/or a higher rank within the profession is a career track we encourage. eMemory assists our employees in developing their preferred career paths and achieving personal goals. As for a transition assistance program, we currently do not have one for career endings resulting from retirement or termination of employment.

4.3 Benefit and Welfare

With employees being our most important asset, eMemory provides competitive compensation, a healthy workplace, and other benefits for our employees. We believe that maintaining a good work-life balance is the key to great innovation, better productivity, and higher job satisfaction.

4.3.1 Compensation Program

In addition to the monthly salary and fixed bonus paid for the three traditional festivals, quarterly bonuses, performance bonuses, and project bonuses are also distributed to employees for encouragement. eMemory also distributes a range from 1% to 25% of the pre-tax profits to eligible employees as profit sharing. In 2021, there are 252 non-management employees, with the average salary of NT\$ 2507 thousand, which is 15% higher than last year. The ratio of the average employee benefit expenses and the average salary expenses of eMemory increased 13% in comparison with those of the preceding year.

In order to encourage patent innovation and award outstanding performance, eMemory has established various awards for best performance, most patent receiving, most patent proposal, best instructor, and so on. Not only are these awards a part of the compensation program but they also serve as recognition for personal achievements and valuable contributions to the company.

Our salary and remuneration policies are applied to both male and female employees at eMemory. While the compensation program is designed on the basis of job category and job performance, there is no different treatment due to employee's gender. Salary adjustments are performed based on work performance and years of work experience.



4.3.2 Leave Program

In addition to the leave regulated in the Labor Standards Act, eMemory also grants 7 extra days of special leave per year as well as the birthday leave which can be redeemed within the birthday month. Under certain requirements, seven days of full-pay sick leave are provided to employees if needed. For maternity leave, a total of 8 weeks are granted before and after childbirth. There are 7 days granted for paternity leave. The leave program mentioned is applied to both full-time employees, part-time employees, and interns. In 2021, there were two female employees taking parental leave with the returning and retention rate both being 100%.

4.3.3 Health and Well-Being

eMemory is dedicated to securing the health and well-being of our employees. In addition to the competitive compensation program and leave program mentioned, we also care about the physical and mental health of our employees. There is a long-established tradition of “the snack shelf” since the company’s founding. Healthy snacks, fruit, and beverages are provided at all times. Every day, employees can also use the afternoon tea subsidy for some refreshments. Membership in the on-campus gym is encouraged by providing a “sports and fitness” subsidy for maintaining a regular fitness regime. Regarding the work environment, eMemory provides a staff rest area, nursery room, reserved parking space, and so on in order to create a pleasant and comfortable environment for our employees.

The Employee Welfare Committee, formed by individuals from different departments, is in charge of the recreational activities to build stronger bonds and a sense of inclusiveness among colleagues



and teams. Activities, such as quarterly birthday parties, family days, special holiday celebrations, company trips, and our year-end party are held for all employees to participate in. Meanwhile, club activities are a common practice at eMemory, including wine tasting, board-game playing, golfing, and many more.

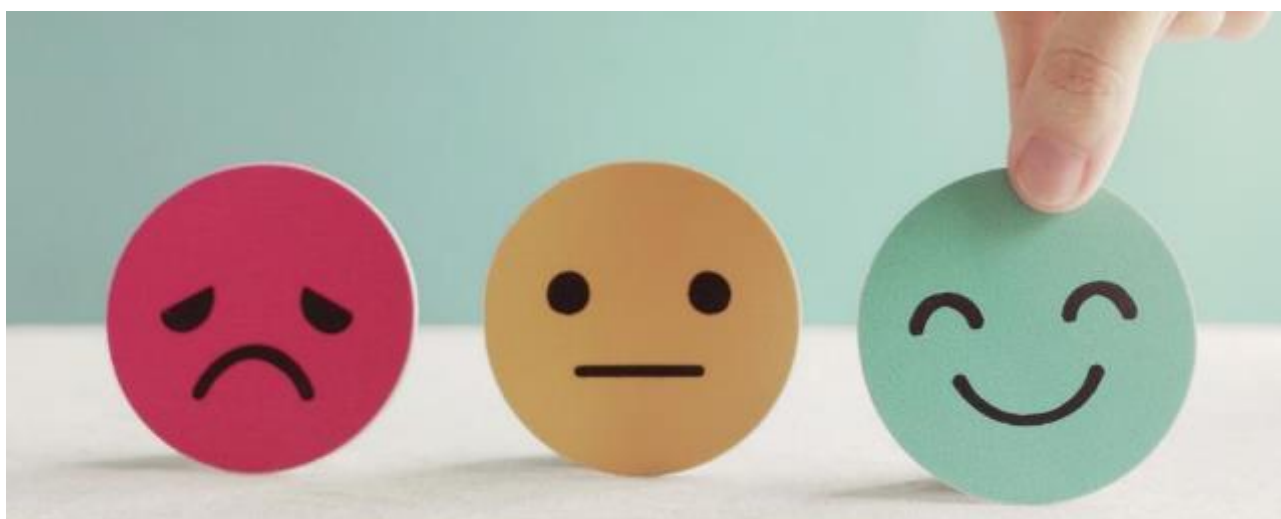
4.3.4 Retirement Plan

Continuing to take care of our retired employees, the Rules for Retirement Management of eMemory have been established in accordance with the Labor Act and Labor Pension Act and applied to all employees. Guidelines and procedures on retirement standards and the application process for benefits are clearly defined and implemented. The Supervisory Committee of Business Entities' Labor Retirement Reserve is established for the preparation of fund distribution-related matters. Since 2005, eMemory has been depositing a 6% monthly pension stipend for each employee to their pension account.

4.4 Occupational Safety and Human Rights

4.4.1 Occupational Health and Safety Management

Given that eMemory licenses IP designs, and does not manufacture tangible products, our operations are mainly based within the office environment. Thus, there were no work-related hazards or incidents that occurred at eMemory in 2021. In the second and third quarters of 2021, eMemory took action to prevent employees from the pandemic outbreak in Taiwan by launching our work-from-home (WFH) program. Stringent guidelines on personal health protection and remote working were implemented to ensure employees' physical and mental health.



Acknowledging the importance of working environment safety and risk management, eMemory regularly delivers occupational health and safety training to employees. For example, our Fire Safety Seminar is provided semi-annually, as well as the evacuation drill. The office is guarded by a 24-hour security system and with keycard access to the office area at all times.

Item/Year	Gender	2018	2019	2020	2021
Occupational injury rate (OIR)	Male	0	0	0	0
	Female	0	0	0	0
Occupational disease rate (ODR)	Male	0	0	0	0
	Female	0	0	0	0
Fatalities	Male	0	0	0	0
	Female	0	0	0	0
Disabling injury frequency rate (FR)	Male	0	0	0	0
	Female	0	0	0	0
Disabling injury severity rate (SR)	Male	0	0	0	0
	Female	0	0	0	0

4.4.2 Health Checks and Insurances

An annual medical examination is offered to every employee. While most employees receive a regular medical examination, an advanced medical examination is provided for managers and employees whose seniority is more than 5 years. Furthermore, employees who work regularly at the laboratory receive additional examinations on their hearing due to the possible exposure to louder noises. In 2021, 32 employees took the hearing exam with a 100% completion rate.

Every week, eMemory collaborates with medical professionals by offering on-site medical consultations for our staff. Although no actual medical treatment is provided during the consultation sessions, employees receive professional and detailed suggestions and possible referrals when necessary. In addition, eMemory also invites external speakers for health promotion seminars. In 2021, employees attended several CPR and AED-related first-aid trainings. Employees not only acquire new medical knowledge but raise their awareness and cautiousness to ensure employees know how to respond in the face of emergencies.



Labor insurance, health insurance, business trip travel insurance, and group insurances (term life insurance, accident insurance, medical insurance, and cancer insurance), are provided for full-time employees, part-time employees, and interns. Group insurance for spouse and children are also available upon application. An insurance agent specialist provides insurance-related services and on-site consultation for employees bi-weekly. We want to ensure that our employees and their family members are financially secure to face any type of incident or risk in life.

4.4.3 Human Rights and Equality

eMemory actively protects the rights of our employees and fully complies with local regulations and internationally recognized human rights standards, such as the UN Guiding Principles on Business and Human Rights, the International Labor Organization Declaration of Fundamental Principles and Rights at Work, the Universal Declaration of Human Rights, and the Responsible Business Alliance Code of Conduct during operations. All full-time employees, contractors, and interns are treated with dignity and respect. Furthermore, our suppliers are obligated to sign the Supplier Social Responsibility Commitment which requires all eMemory’s suppliers to operate based on eMemory’s Supplier Code of Conduct.

All new hires are required to take the human rights training. In 2021, 287 colleagues were receiving such training, equating to a total of 502.7 hours. Continuous attention and awareness are given to human rights, discrimination, and other related issues to minimize any potential risks. A reporting system is established if employees ever experience any discrimination or human rights violation. The system is entirely confidential and the Human Resources department is in charge of any matters reported as well as the corresponding corrective actions. In 2021, there was no discrimination reported during the period.

Social Participation



eMemory sees giving back to society as an obligation for our business as well as an opportunity to foster a positive team spirit in our staff through engaging with our community. We are dedicated to educational activities that help us share our knowledge and help participate in a variety of community events to aid those in need. We also encourage employees to volunteer in the community as we believe that social involvement generates positive energy for our employees and the company as a whole, and makes the world a better place.

5.1 Talent Incubation

eMemory spares no effort in the cultivation and development of talent. We provide our employees with rich and diversified learning plans and establish industrial cooperation plans to enhance the professional skills and practical capabilities of potential talents.

eMemory believes in life-long learning and is committed to promoting diversified learning programs, providing employees with comprehensive and diverse training opportunities. Through the internal lecture system, with guest expert lecturers, and internal tutorial workshops, we encourage the development of professional expertise. This is structured and planned around the company's requirements for talent development, thereby providing solid technical and managerial training for both employees and executives.

5.1.1 Education

Education is the stepping stone to a brighter future. eMemory has not only provided professional courses and educational events for our employees but also developed long-term partnerships with universities and NGOs to share our experiences and inspire young people to pursue their potential. eMemory is a long-term partner of National Tsing-Hua University (NTHU) in Hsinchu and National



Cheng-Kung University in Tainan. eMemory offers industry-related courses and summer internship programs. This resource-sharing opportunity fulfills corporate social responsibilities, provides industry-university cooperation platforms, and enhances the combined application of theory and practice. The students undertaking an internship in eMemory are assigned a mentor to guide and supervise them on areas that suit their talents, as well as to provide them performance evaluations. We want these experiences to be formative in their professional development, wherever they venture in the future.

5.1.2 Knowledge Sharing

To share eMemory's wealth of practical experience and development with industry and academia, eMemory published the first logic NVM book by an IP provider, "LOGIC NON-VOLATILE MEMORY — The NVM Solutions." Copies of the book are distributed to universities and companies in our industry, sharing advanced research in Logic NVM and laying out a long-term foundation for future development in embedded non-volatile memory technology.

On a few occasions, eMemory conducted company tours for students, sharing eMemory's business concepts and technological know-how to inspire students who are interested in a career in the industry. eMemory has partnered with NTHU to develop a one-semester course entitled "Logic Non-Volatile Memory." Employees were invited to share their professional knowledge on Logic NVM with students, in the hope of developing future talent and enhancing industry competitiveness.

5.1.3 Scholarship and Joint Research Projects

eMemory provides an R&D environment with abundant resources for aspiring graduated students from National Tsing-Hua University and National Yang Ming Chiao Tung University utilizing scholarships, sponsorships, and support for long-term research projects. We encourage students to focus on various areas of academic research to stimulate more development potential and

technological innovation. We believe that such resources can support young talent, assist students with academic and professional development, and also improve the international visibility and industrial competitiveness of Taiwan's technology sector.

5.2 Community Engagement

eMemory carries out charitable actions as part of the implementation of corporate social responsibility. Practices such as making donations to public welfare organizations, and providing long-term practical support and resources to disadvantaged groups, are applied to look after the communities in the ways that we identified could provide the most immediate and sustainable assistance.

eMemory actively responds to the immediate donation actions of the government and public welfare organizations for various major disasters. We are concerned about the need for social emergency relief, and continues to provide substantive assistance to socially disadvantaged groups, fulfilling the corporate social responsibilities and obligations.

eMemory has a long-term sponsorship for a non-profit organization (NPO) "Teach For Taiwan (TFT)", and supports TFT with regular donations to help children in remote areas to have a stable and high-quality education. To achieve this, we began the "Afternoon-Tea Donation Program" to increase awareness of this issue and encourage donations from employees. This charitable activity has continued to this day, and the cumulative number of participating employees has exceeded 6,000. We also work with non-government organizations (NGOs) helping them to upgrade the facilities in remote Taiwanese schools, by providing donations for computers and equipment.

In 2021, eMemory offered scholarships to projects at NTHU, sponsored seminars to NTHU Engineering Department, donated stationery to the "Boyo Social Welfare Foundation", donated laptops to the "YWCA of Hsinchu City", and participated in the "Spinal Cord Injury Rehabilitation Center" Christmas fundraising program.



Timeline of Social Participation

Year	Activities
2021	<ul style="list-style-type: none"> • Scholarship for NTHU • Seminar sponsorship for NTHU • Sponsorship for Teach For Taiwan • Donated to NTU’s epidemic prevention facilities • Stationary donation to the Boyo Social Welfare Foundation • Laptop donation to the YWCA of Hsinchu City • Christmas fundraising for Spinal Cord Injury Rehabilitation Center
2020	<ul style="list-style-type: none"> • Scholarship for NTHU • Seminar sponsorship for NTHU • Sponsorship for Teach For Taiwan • Stationery donation for Hsinchu Renai Children’s Home • Laptop donation for Hualien Stella Maris Ursuline High School • Christmas fundraising for Spinal Cord Injury Rehabilitation Center
2019	<ul style="list-style-type: none"> • Scholarship for NTHU • Computer donation for World Vision – Hsinchu • Computer donation for World Peace – Hsinchu • Christmas fundraising for Spinal Cord Injury Rehabilitation Center • Stationery donation for Hsinchu I-Link Community Care Association
2018	<ul style="list-style-type: none"> • Scholarship for NTHU • Scholarship for NCTU • Donation for World Vision Taiwan for the earthquake in Hualien • Computer donation for Teach For Taiwan • Computer donation for Taiwan Fund for Children and Families • Christmas fundraising for Spinal Cord Injury Rehabilitation Center • Stationery donation for Hsinchu I-Link Community Care Association
2017	<ul style="list-style-type: none"> • Scholarship for NTHU • Scholarship for NCTU • Seminar sponsorship for NTHU • Sponsorship for Teach For Taiwan • Christmas fundraising for Spinal Cord Injury Rehabilitation Center • Stationery donation for Hsinchu Renai Children’s Home
2016	<ul style="list-style-type: none"> • Scholarship for NTHU • Scholarship for NCTU • Seminar sponsorship for NTHU • Sponsorship for Teach For Taiwan • Stationery donation for Catholic Church – Hsinchu Diocese, Teresa Children Center • Fundraising for Spinal Cord Injury Rehabilitation Center
2015	<ul style="list-style-type: none"> • Scholarship for NTHU • Scholarship for NCTU • Sponsorship for Teach For Taiwan • Donation for Sunshine Social Welfare Foundation
2014	<ul style="list-style-type: none"> • Scholarship for NTHU • Sponsorship for Teach For Taiwan • Donation for Taiwan Association for Happy Breathing Children

Year	Activities
2013	<ul style="list-style-type: none">• Scholarship for NTHU• Donation for St. Joseph Home• Computer and other equipment donation for Chenggong Junior High School, Chubei Elementary School, and Liujia Elementary School

GRI Content Index

GRI Standard	Disclosure	Location or information
GRI 102: General Disclosures 2016		
Organizational profile	102-1 Name of the organization	About This Report
	102-2 Activities, brands, products, and services	1 About eMemory p.1
	102-3 Location of headquarters	About This Report
	102-4 Location of operations	About This Report
	102-5 Ownership and legal form	About This Report
	102-6 Markets served	1 About eMemory p.1
	102-7 Scale of the organization	1.1 Corporate Overview p.1 4.1 Human Resources p.27
	102-8 Information on employees and other workers	4.1 Human Resources p.27
	102-9 Supply chain	1.1 Corporate Overview p.1 3.4 Supply Chain Management p.25
	102-10 Significant changes to the organization and its supply chain	None
	102-11 Precautionary Principle or approach	2.3 Integrity and Ethics p.12 2.6 Risk Management p.15
	102-12 External initiatives	1 About eMemory p.1
	102-13 Membership of associations	1.1 Corporate overview p.1
Strategy	102-14 Statement from senior decision-maker	A Word from Our Chairman
Ethics and integrity	102-16 Values, principles, standards, and norms of behavior	1 About eMemory p.1 2 Corporate Governance p.10
Governance	102-18 Governance structure	2.1 Governance Structure p.10
	102-20 Executive-level responsibility for economic, environmental, and social topics	1 About eMemory p.1 2 Corporate Governance p.10

GRI Standard	Disclosure	Location or information
	102-22 Composition of the highest governance body and its committees	2.1 Governance Structure p.10 2.7 Stakeholder Management p.18
Stakeholder engagement	102-40 List of stakeholder groups	2.7 Stakeholder Management p.18
	102-41 Collective bargaining agreements	Labor and Management Council is held regularly to communicate about issues on compensation and benefit.
	102-42 Identifying and selecting stakeholders	2.7 Stakeholder Management p.18
	102-43 Approach to stakeholder engagement	2.7 Stakeholder Management p.18
	102-44 Key topics and concerns raised	1.4 Our Approach to Materiality p.7 2.7 Stakeholder Management p.18
Reporting practice	102-45 Entities included in the consolidated financial statements	About This Report 2 Corporate Governance p.10
	102-46 Defining report content and topic boundaries	1.4 Our Approach to Materiality p.7
	102-47 List of material topics	1.4 Our Approach to Materiality p.7
	102-48 Restatements of information	None
	102-49 Changes in reporting	1.4 Our Approach to Materiality p.7
	102-50 Reporting period	About This Report
	102-51 Date of most recent report	About This Report
	102-52 Reporting cycle	About This Report
	102-53 Contact point for questions regarding the report	About This Report
	102-54 Claims of reporting in accordance with the GRI Standards	About This Report
	102-55 GRI content index	GRI Content Index p.42–p.48
102-56 External assurance	None	
GRI 103: Management Approach 2016		
	103-1 Explanation of the material topic and its boundary	1.4 Our Approach to Materiality p.7

GRI Standard	Disclosure	Location or information
	103-2 The management approach and its components	1.4 Our Approach to Materiality p.7
	103-3 Evaluation of the management approach	1.4 Our Approach to Materiality p.7
GRI 201: Economic Performance 2016		
	201-1 Direct economic value generated and distributed	1.1 Corporate Overview p.1 4.3 Benefit and Welfare p.32
	201-2 Financial implications and other risks and opportunities due to climate change	2.6 Risk Management p.15
	201-3 Defined benefit plan obligations and other retirement plans	4.3 Benefit and Welfare p.32
	201-4 Financial assistance received from government	None
GRI 202: Market Presence 2016		
	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	4.3 Benefit and Welfare p.32
	202-2 Proportion of senior management hired from the local community	4.1 Human Resources p.27
GRI 205: Anti-Corruption 2016		
	205-1 Operations assessed for risks related to corruption	2.3 Integrity and Ethics p.12 3.4 Supply Chain Management p.25
	205-2 Communication and training about anti-corruption policies and procedures	2.3 Integrity and Ethics p.12 3.4 Supply Chain Management p.25
	205-3 Confirmed incidents of corruption and actions taken	2.3 Integrity and Ethics p.12 3.4 Supply Chain Management p.25
GRI 206: Anti-Competitive Behavior 2016		
	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	There was no legal actions for anti-competitive behavior, anti-trust, or monopoly practices during the reporting period.
GRI 302: Energy 2016		

GRI Standard	Disclosure	Location or information
	302-1 Energy consumption within the organization	3.1 Environmental Management p.20
	302-2 Energy consumption outside of the organization	3.2 Green Product Development p.22
	302-4 Reduction of energy consumption	2.6 Risk Management p.15 3.1 Environmental Management p.20
	302-5 Reductions in energy requirements of products and services	3.2 Green Product Development p.22
GRI 303: Water and Effluents 2018		
	303-1 Interactions with water as a shared resource	3.1 Environmental Management p.20
	303-2 Management of water discharge-related impacts	3.1 Environmental Management p.20
	303-5 Water consumption	3.1 Environmental Management p.20
GRI 305: Emissions 2016		
	305-1 Direct (Scope 1) GHG emissions	3.1 Environmental Management p.20
	305-2 Energy indirect (Scope 2) GHG emissions	3.1 Environmental Management p.20
	305-3 Other indirect (Scope 3) GHG emissions	None
	305-5 Reduction of GHG emissions	3.1 Environmental Management p.20
	305-6 Emissions of ozone-depleting substances (ODS)	None
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	None
GRI 306: Waste 2020		
	306-1 Waste generation and significant waste-related impacts	3.1 Environmental Management p.20
	306-2 Management of significant waste-related impacts	2.6 Risk Management p.15 3.1 Environmental Management p.20
	306-3 Waste generated	3.1 Environmental Management p.20
	306-4 Waste diverted from disposal	2.6 Risk Management p.15 3.1 Environmental Management p.20

GRI Standard	Disclosure	Location or information
GRI 307: Environmental Compliance 2016		
	307-1 Non-compliance with environmental laws and regulations	No significant fines and non-monetary sanctions for non-compliance with environmental laws or regulations was issued during the reporting period.
GRI 308: Supplier Environmental Assessment 2016		
	308-1 New suppliers that were screened using environmental criteria	3.4 Supply Chain Management p.25
	308-2 Negative environmental impacts in the supply chain and actions taken	3.4 Supply Chain Management p.25
GRI 401: Employment 2016		
	401-1 New employee hires and employee turnover	4.1 Human Resources p.27
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	4.2 Training and Development p.29 4.3 Benefit and Welfare p.32
	401-3 Parental leave	4.3 Benefit and Welfare p.32
GRI 402: Labor Management Relations 2016		
	402-1 Minimum notice periods regarding operational changes	eMemory provides notice of significant operational changes which could substantially affect the employees based on governmental regulations.
GRI 403: Occupational Health and Safety 2018		
	403-1 Occupational health and safety management system	4.4 Occupational Safety and Human Rights p.34
	403-2 Hazard identification, risk assessment, and incident investigation	1.3 Our Responses to COVID-19 p.6 4.4 Occupational Safety and Human Rights p.34
	403-3 Occupational health services	4.3 Benefit and Welfare p.32 4.4 Occupational Safety and Human Rights p.34
	403-4 Worker participation, consultation, and communication on occupational health and safety	4.2 Training and Development p.29 4.4 Occupational Safety and Human Rights p.34

GRI Standard	Disclosure	Location or information
	403-5 Worker training on occupational health and safety	4.2 Training and Development p.29
	403-6 Promotion of worker health	1.3 Our Responses to COVID-19 p.6 4.2 Training and Development p.29 4.4 Occupational Safety and Human Rights p.34
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	4.4 Occupational Safety and Human Rights p.34
	403-8 Workers covered by an occupational health and safety management system	4.4 Occupational Safety and Human Rights p.34
	403-9 Work-related injuries	4.4 Occupational Safety and Human Rights p.34
	403-10 Work-related ill health	4.4 Occupational Safety and Human Rights p.34
GRI 404: Training and Education 2016		
	404-1 Average hours of training per year per employee	4.2 Training and Development p.29
	404-2 Programs for upgrading employee skills and transition assistance programs	4.2 Training and Development p.29
	404-3 Percentage of employees receiving regular performance and career development reviews	4.2 Training and Development p.29
GRI 405: Diversity and Equal Opportunity 2016		
	405-1 Diversity of governance bodies and employees	4.1 Human Resources p.27
	405-2 Ratio of basic salary and remuneration of women to men	4.3 Benefit and Welfare p.32
GRI 406: Non-Discrimination 2016		
	406-1 Incidents of discrimination and corrective actions taken	No incidents of discrimination happened during the reporting period.
GRI 412: Human Rights Assessment 2016		
	412-1 Operations that have been subject to human rights	4.4 Occupational Safety and Human Rights p.34

GRI Standard	Disclosure	Location or information
	reviews or impact assessments	
	412-2 Employee training on human rights policies or procedures	4.4 Occupational Safety and Human Rights p.34
	412-3 Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	No significant investment agreements and contracts that include human rights clauses or that underwent human rights screening were issued during the reporting period.
GRI 414: Supplier Social Assessment 2016		
	414-1 New suppliers that were screened using social criteria	3.4 Supply Chain Management p.25
	414-2 Negative social impacts in the supply chain and actions taken	No negative social impacts in the supply chain were stated during the reporting period,
GRI 415: Public Policy 2016		
	415-1 Political contributions	No political contributions were made during the reporting period.
GRI 416: Customer Health and Safety 2016		
	416-1 Assessment of the health and safety impacts of product and service categories	3.2 Green Product Development p.22 3.3 Patent Invention p.24
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	No incidents of non-compliance concerning the health and safety impacts of products and services were stated during the reporting period.
GRI 418: Customer Privacy 2016		
	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	No substantiated complaints concerning breaches of customer privacy and losses of customer data were stated during the reporting period.
GRI 419: Socioeconomic Compliance 2016		

GRI Standard	Disclosure	Location or information
	419-1 Non-compliance with laws and regulations in the social and economic area	No significant fines and non-monetary sanctions for non-compliance with laws or regulations in the social and economic area were issued during the reporting period.

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