

2023 ESG REPORT

南茂科技
永續報告書

ChipMOS
南茂科技

CONTENTS



About This Report 3
Message from the Chairman 4
2023 ESG Performance 5
2023 Awards and Honors 6
Thematic Report 1 7
Thematic Report 2 9
Thematic Report 3 11
Sustainable Strategies 13

01 Operations 14
1.1 About ChipMOS 16
1.2 Main Products and Services 16
1.3 Operational Performance and Tax Governance 21
1.4 External Initiatives and Organizational Engagement 24

02 Sustainable ChipMOS 26
2.1 Sustainability Policies and Actions 27
2.2 Materiality Analysis 30
2.3 Sustainability Objective Management and SDGs 38
2.4 Sustainable Value Management 40

03 Sound Governance 42
3.1 Corporate Governance 44
3.2 Ethical Management 50
3.3 Risk Management 51
3.4 Information Security Management 55

04 Environmental Friendliness 60
4.1 Climate Governance 63
4.2 Climate Change and Energy Management 67
4.3 Maintaining Biodiversity 78
4.4 Water Resources Management 80
4.5 Recycling 87
4.6 Green Products 93

05 Customer Service and Sustainable Supply Chain 96
5.1 Customer Service 98
5.2 Product Quality 101
5.3 Supply Chain Management 103
5.4 Conflict Mineral Management 110

06 Inclusive Workplace 112
6.1 Attraction and Retention of Talents 114
6.2 Employee Incentives and Benefits 121
6.3 Talent Development 129
6.4 Safeguarding Human Rights 134
6.5 Healthy and Safe Workplace 138
6.6 Social Engagement 151

Appendix 1: Index of GRI Standards 164
Appendix 2: SASB Standards Index _ Semiconductors 167
Appendix 3: Sustainability disclosure indicators for the semi-conductor industry 168
Appendix 4: Climate related information for Listed Companies 168
Appendix 5: Sustainable Development Goals (SDGs) Index 169
Appendix 6: Measurement and Implementation of Stakeholder Capitalism Metrics 170
Appendix 7: Independent Third Party Assurance Statement 171
Appendix 8: ISO-Certified Fabs at ChipMOS 172
Appendix 9: 2021-2023 Awards and Honors 173

About This Report

GRI 2-1~2-5

Thank you for reading the ChipMOS TECHNOLOGIES INC. (hereinafter referred to as “ChipMOS”) 2023 Sustainability Report (hereinafter referred to as “the Report”). This Report is the 10th report issued by ChipMOS to explain ChipMOS's Corporate Governance, environmental and social management practices and performance, and to continue to demonstrate to all stakeholders ChipMOS's commitment and determination to achieve sustainable development.

Reporting Period

This Report covers the corporate sustainability results and performance of ChipMOS from January 1, 2023, to December 31, 2023. ChipMOS publishes ESG reports on an annual basis.

- Current Release: August 2024
- Previous Release: June 2023
- Next Release: Expected August 2025

Report Boundary and Scope

The entities of the consolidated financial statements of ChipMOS include (1) ChipMOS (2) 100% owned subsidiary ChipMOS U.S.A., Inc. (3) 100% owned subsidiary ChipMOS TECHNOLOGIES (BVI) LTD. and (4) 100% indirectly owned subsidiary ChipMOS SEMICONDUCTORS (Shanghai) LTD. The report boundary of this Report is primarily ChipMOS. ChipMOS U.S.A., Inc., ChipMOS TECHNOLOGIES (BVI) LTD. and ChipMOS SEMICONDUCTORS (Shanghai) LTD. are outside the scope of this Report.

All fabs mentioned in this report refer specifically to all operating locations under the management of ChipMOS in Taiwan, and Tainan fab. 2 is covered under Tainan fab. Any adjustment in the scope of data reference shall be duly accounted for in this report. In addition, for the information in the previous reports not restated, the sustainability topics in 2023 comply with the AA1000 principle to focus and converge the topics, from 8 Material Topics in 2022 to 8 Material Topics in 2023; for the description of the changes in, Material Topics and topic boundaries, please refer to Chapter 2.2 Materiality Analysis.

Principles of Compiling the Report

This Report follows the GRI Sustainability Reporting Initiative (GRI)'s Sustainability Reporting Standards, the standards for semiconductor industry established by the Sustainability Accounting Standards Board (SASB) and the Task Force on Climate-Related Financial Disclosures (TCFD). Relevant contents and references to the applicable standards are provided in Appendix 1~4.

External Guarantee and Assurance

Report Quality

To ensure the quality of information disclosed, this report has undergone internal audit and external verification:

Stage 1 — **Internal audit:** The data disclosed in the report has been audited by the Audit Office.

Stage 2 — The Report has been verified by the British Standards Institution (BSI Taiwan) to be in accordance with the spirit of the GRI Standards, the AA1000 AS v3 Application Type II High Assurance Level, and SABA Type II Application Type Moderate Assurance Level. A Statement of Assurance is provided in Appendix 7.

Financial Data

The financial data disclosed in this Report was obtained from the consolidated financial statements audited and attested by PricewaterhouseCoopers, Taiwan in accordance with the Regulations Governing the Preparations of Financial Reports by Securities Issuers and the International Financial Reporting Standards, International Accounting Standards, IFRIC Interpretations, and SIC Interpretations that came into effect as endorsed by the Financial Supervisory Commission ("IFRSs").

International Standards Management System

In order to enhance the credibility of the data quality, relevant data from 2023 in this Report has been verified by a third party and obtained from international standard management systems such as ISO 9001, IATF 16949, ISO 26262 and ISO 50001. The fab data of each international standard system through third-party verification is provided in Appendix 8. If there is data estimation, it will be indicated in the relevant chapters.

Contact Information and Feedback

We sincerely look forward to your continued guidance and encouragement, and we are committed to sustainable development for all our readers who are interested in ChipMOS. To promote paperless environmental protection, this Report is published in PDF format on the Company's website for readers and stakeholders to download and peruse. We welcome your valuable comments and suggestions.

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ChipMOS website-ESG section

ChipMOS CSR FB Fan Page

Message from the Chairman

GRI2-22



The impact of the inflation continued in 2023 and the semiconductor industry underwent inventory adjustments due to weak demand for end products after the pandemic, resulting in an economic recovery not as strong as expected. Enterprises faced many problems such as excessive inventory and rising costs. In the face of these challenges on the market, our revenue gradually rebounded in the second half of the year thanks to the prudent and steady operation strategies of ChipMOS and the endeavor of the management team and all of our employees. Regarding the overall deployment of the Company, we actively grasp the innovation trends of the industry and continue investing our core technologies in high-end display ICs and related automotive fields to meet customer needs, maintain stable business growth, and continue extending automation and intelligence to enhance competitiveness in all aspects.

Nowadays, customers, investors and other stakeholders have increasingly stringent requirements on companies' ESG management and strategies. In view of this, ChipMOS has incorporated ESG into the operations and, at the same time, defined the sustainability management strategies, sustainability goals, and execution mechanisms for the issues that stakeholder are concerned about in accordance with ChipMOS's strategic blueprint of sustainable development. The Company will continue to implement and improve ESG in the operations to lead the Company to achieve the goals of sustainable management.

Resilience of Corporate Governance

Good Corporate Governance can help improve business operation, management and economic performance. Therefore, the Nomination Committee was established in November 2023 to improve the functions and management mechanism of the Board of Directors and strengthen its competence to assist the Company in making the best decisions. The Audit Committee supervises Risk management to ensure the effectiveness of the Risk management mechanism. At the same time, the Company is continuously dedicated to the diversification of the members and the linkage to the ESG performance. Looking forward to the future, ChipMOS will uphold the principles of ethical management and continue to improve the governance measures and optimize management in order to improve the overall Operational performance of the Company, ensure the rights and interests of the stakeholders, and create more benefit for shareholders.

Deployment for Green Operations

The impact of climate change is huge, not only on the environment but also on the well-being of the people. We take climate issues seriously and continue to respond to these issues with positive and specific actions by formulating and implementing environment-related goals in accordance with our net-zero emission strategies. Regarding the green energy, we increased the proportion of renewable energy in 2023 by building our own solar power facilities and purchasing renewable energy certificates. As for energy management, we developed reduction plans to address the root cause of energy conservation and carbon reduction, and implemented water resource management in a systematic manner according to international standards to reduce the risk of water scarcity. From 2024, we will work with customers to launch green production-related projects, promote circular economy issues within plants, create resource value, and strengthen employee education on energy saving to drive suppliers toward low-carbon sustainability.

Bolster capacity for sustainability

Employees are a critical foundation for the operations of a company and the key for its sustainable development. ChipMOS values and respects every employee and is dedicated to realizing diversity and equality, creating an inclusive, healthy, safe and friendly environment where employees can feel safe, secure and happy. The Company has a complete Talent development system that provides employees with a wide range of cross-field, diversified learning resources, in-depth leadership training, and continuous professional ability development to achieve Talent development goals. In 2023, the employee stock ownership trust plan was launched for all regular employees to participate in, hoping that this plan cam help employees accumulate retirement assets and share operating results. In addition to continuing leading all employees to grow together, ChipMOS demonstrates the respect for the employees and fulfills the commitments to them through concrete actions.

Fulfilling social responsibilities is one of the key plans of our sustainable development strategies. As for management of social engagement, we have launched a long-term approach of environmental sustainability and social welfare to lead employees for sustainable cultivation and exert greater social influence. As the ESG wave continues to spread, I will lead the Company and all employees to strengthen corporate resilience and make a comprehensive ESG deployment jointly and continuously, so that we can quickly connect with future trends to create values and a future with unlimited possibilities.

Chairman & President 鄭世杰

2023 ESG Performance

Governance

NT$ 21.36 billion
Consolidated revenues for 2023
Adhering to sound operating strategies and deploying business growth momentum

15 cases
Increase of cases introduced by 25% in 2023 compared to 2022.
Focus on AI models from 2023

Driving the supply chain
"Big leads small" of the Industrial Development Administration, MOEA, driving 12 suppliers to jointly promote low carbon and energy conservation

Environmental

Leadership level (A-)
2023 CDP Climate Change Questionnaire

Management level (B)
2023 CDP Water Security Questionnaire

2.77%
2023 company-wide Energy saving rate
Increase of Energy saving rate by 137% compared to 2022

Social

17%
Internal employees promoted to managerial positions
Active cultivation of talents to achieve the goal of sustainable Talent development

Achieving "Win-Win-Win"
Dedicated to industry-academia collaboration to enhance the competitiveness of students, schools and ChipMOS

NT$22,651,727
Social Engagement Investment Amount

2023 Awards and Honors

1. **6%-20%**
   the results of the 10th Corporate Governance Evaluation
2. Taiwan Corporate Sustainability Awards (TCSA):
   Top 100 Corporates
3. Occupational Health and Safety Indicators Disclosed in the Corporate Sustainable Reports:
   Top 10% of TWSE-listed Electronic Companies

Economy & Society

- Taiwan Corporate Sustainability Awards (TCSA): Sustainability Report - Platinum Grade in the Electronic Information Manufacturing Industry
- Best testing supplier, outstanding supplier, and engineering support awards, as well as best partner award (recognized by major customers)
- TWSE Corporate Governance 100 Index
- Taiwan Employment Creation 99 Constituent

Environment

- Outstanding Unit of Green Procurement and Promotion of Green Consumption Promotion (Ministry of Environment, Executive Yuan)
- Doulun Air Quality Purification Area (Excellence Award) ((Ministry of Environment, Executive Yuan)
- Private Enterprise Green Procurement - Special Contribution Award (Hsinchu County Government)
- Environment-Friendly Enterprise Fleet (Hsinchu County Government)
- Environmental Protection Outstanding Unit - Net Zero Benchmark Award (Tainan City Government)

*For more accolades and recognitions ChipMOS has received, please refer to Appendix 9



01 Thematic Report

Climate Resilience_Smart Energy Conservation Management

We attach importance to the global disaster and impact of climate change and continue striving for climate change mitigation through proactive actions.

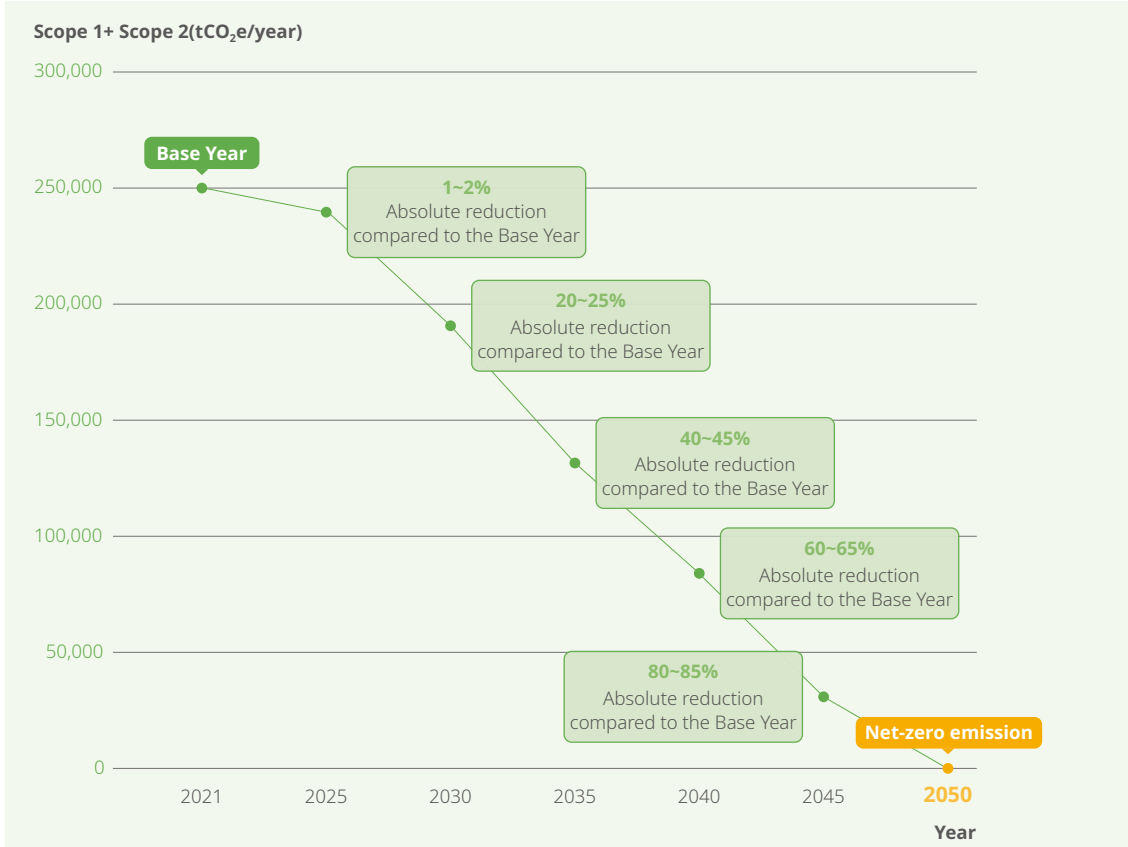
1. **Climate issues are regarded as a normal material issue and we continue developing specific goals and implementations.**
2. **The Board of Directors regularly monitors the implementation of climate issues to improve project efficiency.**
3. **We lead employees, customers, and suppliers to jointly promote low-carbon sustainability.**

Carbon Reduction Roadmap/Short, Mid and Long-term Goal

Net-zero emission goals

	2025	2030	2050
Annual carbon reduction goals	1.7%	20~25%	100%
	Compliance with legal requirements	Reduce carbon emissions by an average of **4.2%** per year from the Base Year in absolute intensity	

ChipMOS' Roadmap to Carbon Reduction



Carbon reduction approaches

1. Internal operation energy conservation and energy efficiency management.
2. Introduction and establishment of green energy facilities, as well as the purchase of green energy certificates.
3. Others: Ex: carbon capture technology or carbon market trading.

Three Stages of Smart Energy Management to Implant Energy Saving Issues in Employees' DNA

We introduced the ISO 50001 Energy Management System in 2014 as a guidance for the employees to learn in-depth and extensive knowledge and new thinking about energy saving. We have educated employees on energy saving techniques and their applications with a point-line-plane-based approach, and implanted Energy saving issues in our employees' DNA to make Energy saving a habit

- **Spot:** Guidance period - single-point component upgrade (single equipment or hardware)
- **Line:** Growing period - operation system (software+hardware)
- **Plane:** Autonomy period - integrated with factories (semiconductor equipment, clean room) for comprehensive evolution and reduction of energy consumption

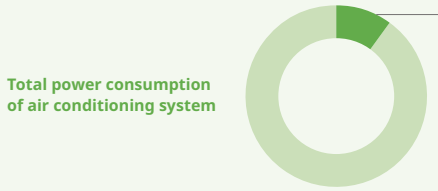
Guidance Period
Annual Energy saving rate: **1.0%** ; annual power saving: **4,803 MWh**

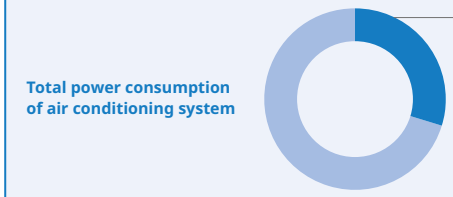
Growing Period
Annual Energy saving rate: **1.58%** ; annual power saving: **7,590 MWh**

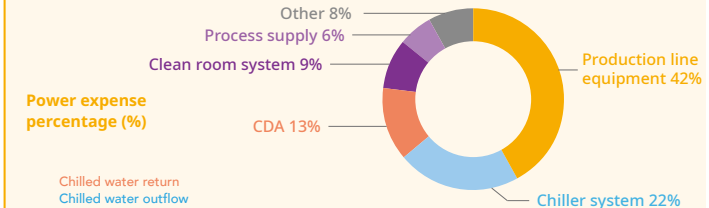
Autonomy Period
Annual Energy saving rate: **2.77%** ; annual power saving: **13,296 MWh**

Three Stages of Energy Management

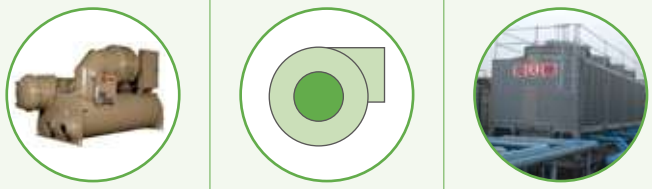
Guidance Period	Growing Period	Autonomy Period
Annual Energy saving rate: 1.0%; **annual power saving:** 4,803 MWh	**Annual Energy saving rate:** 1.58%; **annual power saving:** 7,590 MWh	**Annual Energy saving rate:** 2.77%; **annual power saving:** 13,296 MWh
Point-Single-point component (Energy saving improvement rate:0%)	**Line-Operation system** (Energy saving improvement rate:0%)	**Plane-Integrated with factories** (Energy saving improvement rate:75%)
Chiller system Single equipment Energy saving improvement	**Optimized chiller control system for optimal energy efficiency**	

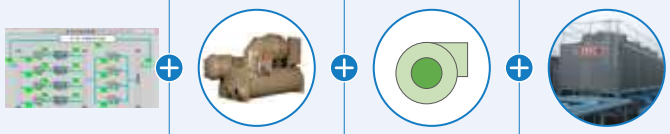


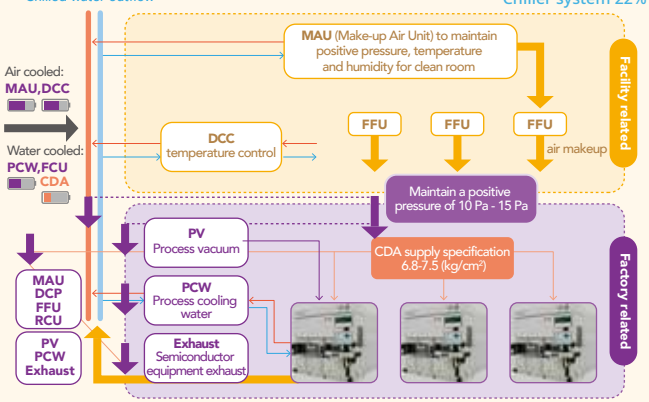




Single equipment or hardware			Software	Single equipment or hardware		
Chiller unit (Copper tube cleaning and maintenance)	Chilled water pump/ cooling water (New variable frequency drive)	Cooling tower (Heat sink cleaning and replacement)	Monitoring and automatic energy saving control	Chiller unit (Copper tube cleaning and maintenance)	Chilled water pump/ cooling water (New variable frequency drive)	Cooling tower (Heat sink cleaning and replacement)







Further Reading: [Chinese version]
*Industrial Development Administration, MOEA - Industrial Energy Saving And Carbon Reduction Information Web: Energy Management System Demonstration, Guidance, and Promotion Result Handbook for Manufacturing Industry
*Business Today - Annual Reduction Equivalent to a Carbon Absorption of 18.9 Da'an Forest Parks ChipMOS Helps the Supply Chain Launch Carbon Inventory with Its Successful Energy Saving Achievements

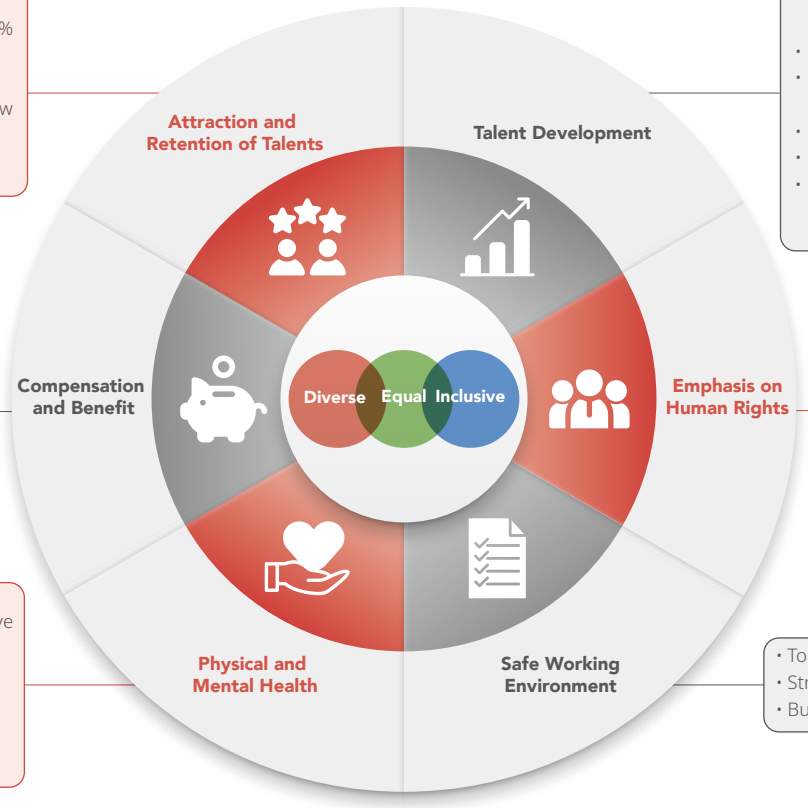
02 Thematic Report

Diverse, Equal, and Inclusive Workplace

We are dedicated to improving ESG in all aspects. As for society (S), we continue to build a friendly workplace and incorporate the three core concepts of DEI (Diversity, Equity, and Inclusion) into daily operation and management, thereby realizing DEI-based corporate culture and workplace environment and helping employees feel respected and valued, so that they are more motivated to work.

Diverse, Equal, and Inclusive Workplace
- Equal employment environment
- More than 20% of femalover the past 3 years
- The employment renewal rate of foreign workers more than 75% over the past 3 years.
- Dedicated to promoting disability-friendly care measures.
- Continuous creation of employment opportunities; the new employee enrollment rate in 2023 was 13.6%
- Providing more maternity-related benefits.

Creation and Demonstration of diverse values in Development of Talents
- In 2023, each employee spent an average of 123.6 hours on training
- Course satisfaction up to 4.7 out of 5 points
- Systematical establishment of a leadership team and planned cultivation of management talents.
- Internal transfer success rate of 44.35%.
- Internal lecture courses occupying 76.58% of internal training.
- Diverse learning channels and rich and autonomous learning resources.



- Fair and reasonable remuneration
- Long-term incentive measures
- All-Encompassing Insurance Plans
- Diverse and rich employee benefit activities

Implementation of human rights and ethics risk assessments
- Human rights related education and training
- Extension to suppliers

Well-Being + Comfort + Peace of Mind
- Annual planning of diversified screening tests for 21 consecutive years
- Promotion of cancer screening tests
- Health promotion activities
- Healthcare for Middle- aged and Elderly Workers
- EAP consultation service

- Top-down promotion strategy
- Strengthening healthy labor force
- Building a healthy supply chain

*For more information, please refer to CH6 Inclusive Workplace

Cancer Screening Tests for More Than 12 Years to Protect the Health of Employees

01 Rotating screening tests for Top 10 cancers (the annual screening items are determined by the doctor of occupational medicine upon assessment)

02 100% implementation of grading management and follow-up care

03 Execution of on-site screening tests to increase the willingness of employees for the test.

2023 Screening Event x Women's Health Month

Event	Inspection Item	Better Than What Regulations Require
Employee Health Examination	Colorectal cancer screening	✓
	Liver cancer screening	✓
	Cancer tumor marker screening-liver/pancreas/intestine/prostate/ovary	✓
Oral Cancer Screening	Oral Cancer Screening	On-site inspection
Women's Health Month	Cervical cancer - smear	
	Breast cancer screening	
	Ovarian cancer screening	

Employee Feedback

I was found to have abnormal thyroid during the health checkup at the company. I am very grateful for the doctor's careful examination and the company nurse for their care. They recommended me to go to the hospital for an in-depth examination, and the operation was arranged to bring my condition under control. Many thanks to the company for the health checkup benefit.

Employee Feedback

The company's health checkup revealed a 1.5-cm-long hypoechoic liver spot. The company nurse continued to follow up with the re-examination results. The next year's health checkup revealed a liver mass of 5.4cm. If I did not receive timely treatment for regular check-ups, it would inevitably lead to serious consequences. The continuous health care that the company arranges allows us to work without concern. I am also grateful for the company's quality health checkup program every year.

03 Thematic Report

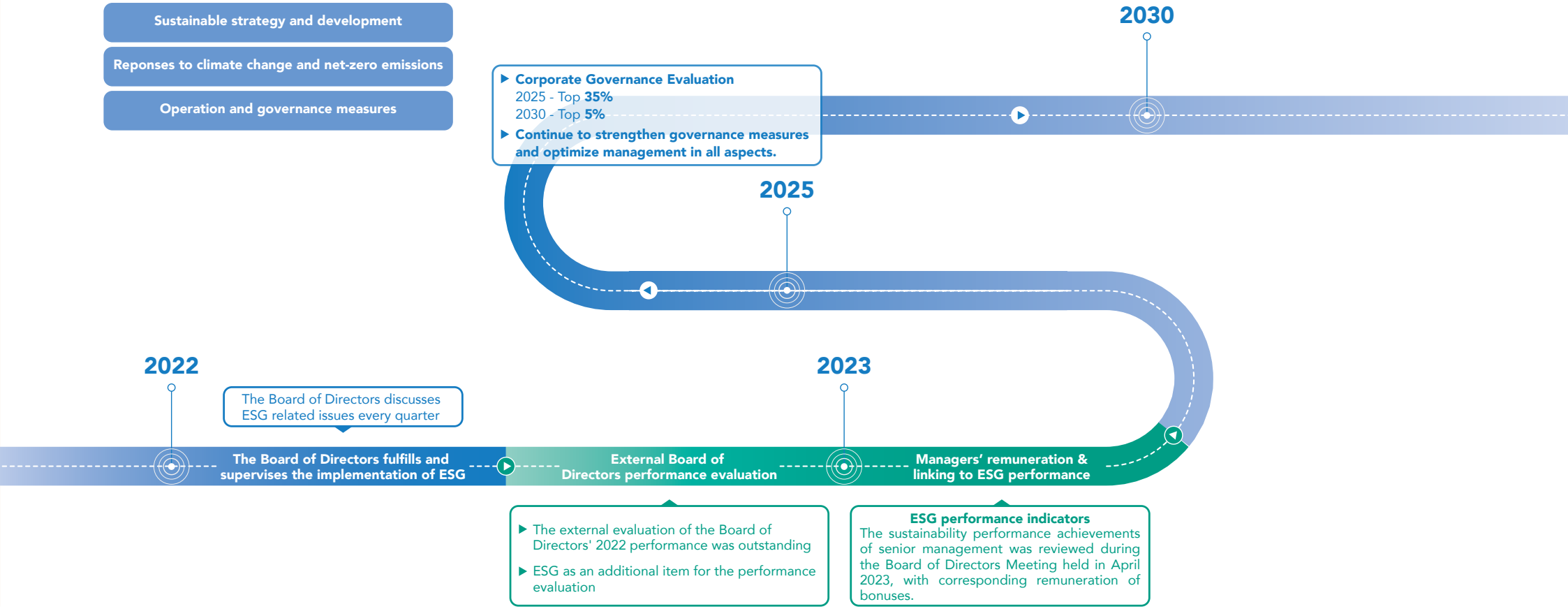
Sustainable Governance - Sustainable Supply Chain Management

Corporate Governance is the vital factor for sustainable management of a company. ChipMOS has continued to strengthen the governance measures and improved the management to bolster the Company's capabilities in all aspects and maintain our competitiveness in the capital market. In recent years, sustainable development planning and implementation have been supervised by the Board of Directors on a quarterly basis to effectively improve the implementation of the projects.

Sustainable strategy and development

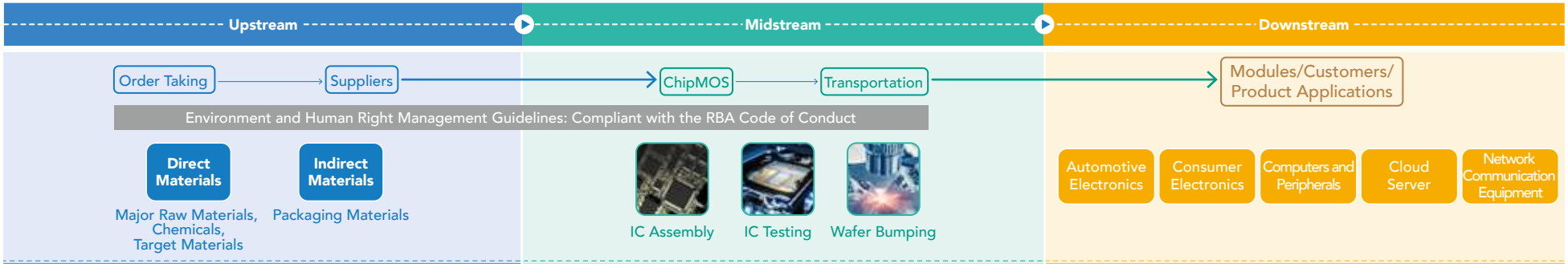
Reponses to climate change and net-zero emissions

Operation and governance measures



Sustainable Supply Chain Management

We value the relationship with the upstream and downstream value chains and are dedicated to continuous enhancement of mutual resilience and sustainability to jointly create direct and indirect values. In recent years, the world has been significantly affected by climate change. In addition to facing climate issues with a positive and proactive attitude, the Company has taken concrete actions on issues such as green energy, energy management, water resource management, circular economy, and environmental protection activities. We extend the measures to suppliers and stakeholders to jointly promote low-carbon, energy-saving, and green friendliness.



Work with Suppliers

Led 12 Suppliers under the "Big Leads Small" Project

- ▶ **Implementation period:** 2023-July 2024, under implementation
- ▶ **Realized/estimated benefits**
  - A total of 11 suppliers completed the application for diagnosis and guidance.
  - A total of 12 suppliers were assisted in improving their carbon management capabilities.
  - A total of 59 energy saving projects are expected to be implemented.
  - Estimated power saving: 11,070 MWh
    Reduction of carbon emissions: 5,480 tCO_2e

Successfully Guided Suppliers to Complete GHG Inventory

- ▶ **Progress:** In the case-closing stage, the supplier will apply for third-party verification
- ▶ **Project period:** November 2023 to March 2024

Education & training → Data collection → Inventory checklist and report → Assistance in verification

Worked with Group Catering Suppliers to Promote Low-Carbon Life.

- ✓ About 21 tons of carbon emissions can be reduced annually by implementing a low-carbon diet.
  Implementation has been conducted for more than 6 years and received enthusiastic responses from employees.
- ✓ The concept of green restaurant will be introduced in Q2 of 2024
  - ▶ **Expected benefit:** Reduction of ingredient carbon footprints.

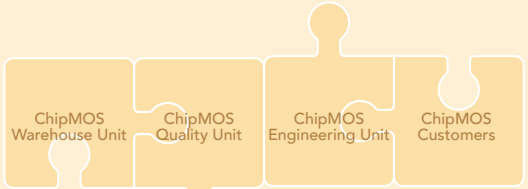


Established Partnerships with Customers

Water Security Implementation and Experience Sharing

- ▶ **Time:** July 2023
  - We assisted customers to participate in the 2023 CDP water securityquestionnaire survey for the first time, which was recognized at the management level.

Work with Customers on Reuse of Packaging materials in 2024



Cross-department collaboration to jointly define recycling standards

- ✓ Reuse of the inner box of semi-finished products.
- ✓ Recycling of shipping carbons.

- Cooperated with 2 major testing customers
- Estimated reduction of carbon emissions: about 16.03 tCO_2e
- Joint reduction of plastics and carbon emissions.
- Continuous development of other possibilities for reuse of packaging materials.

Sustainable Strategies

The Company has linked to pertinent Sustainable Development Goals (SDGs) established by the United Nations in the formulation of our ESG strategies, which shall enable us to achieve our sustainable objectives in our operations so that we can achieve sustainable management.



E

Green management and the path to low-carbon transitioning

- Commitment to the development of green production
- Continued promotion of green energy plan
- Collaboration with supply chain
- Continuation of water resources management



S

Diversity and inclusion to create sustainable future

- Creating a friendly work environment
- Offering competitive remuneration and benefits
- Emphasizing human rights for employees and supply chain partners
- Talent development and incubation to ensure ample room for career development
- Continuous cultivation of environmental sustainability and fulfillment of public welfare



G

Sound governance to bolster organizational resilience

- Strengthen Board of Directors operation
- Improve risk management
- Establish long-term partnerships with customers
- Grasp industrial trends and proactively commit to the development of relevant technologies



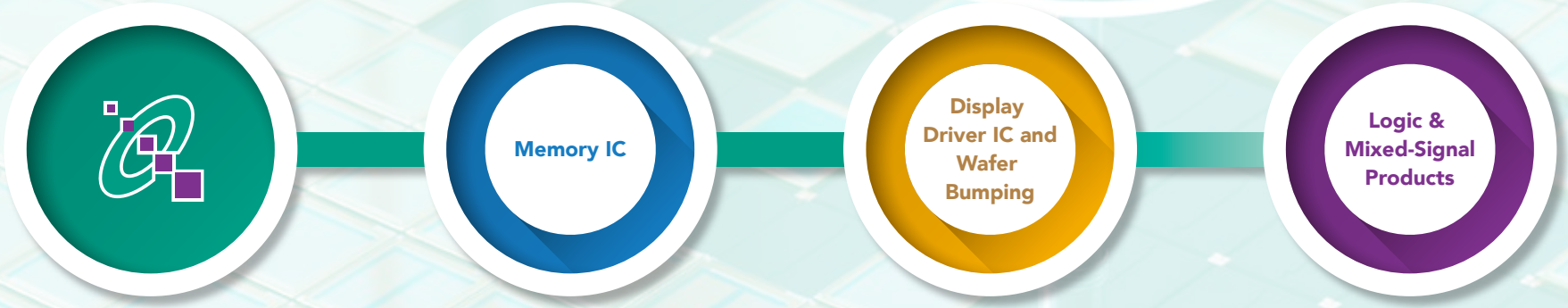
CHAPTER

1 Operations



Highlight of the Year's Notable Achievements

ChipMOS Successfully Developed Relevant Product Technologies and Actively Helped Customers to Formulate Technological Blueprints in 2023



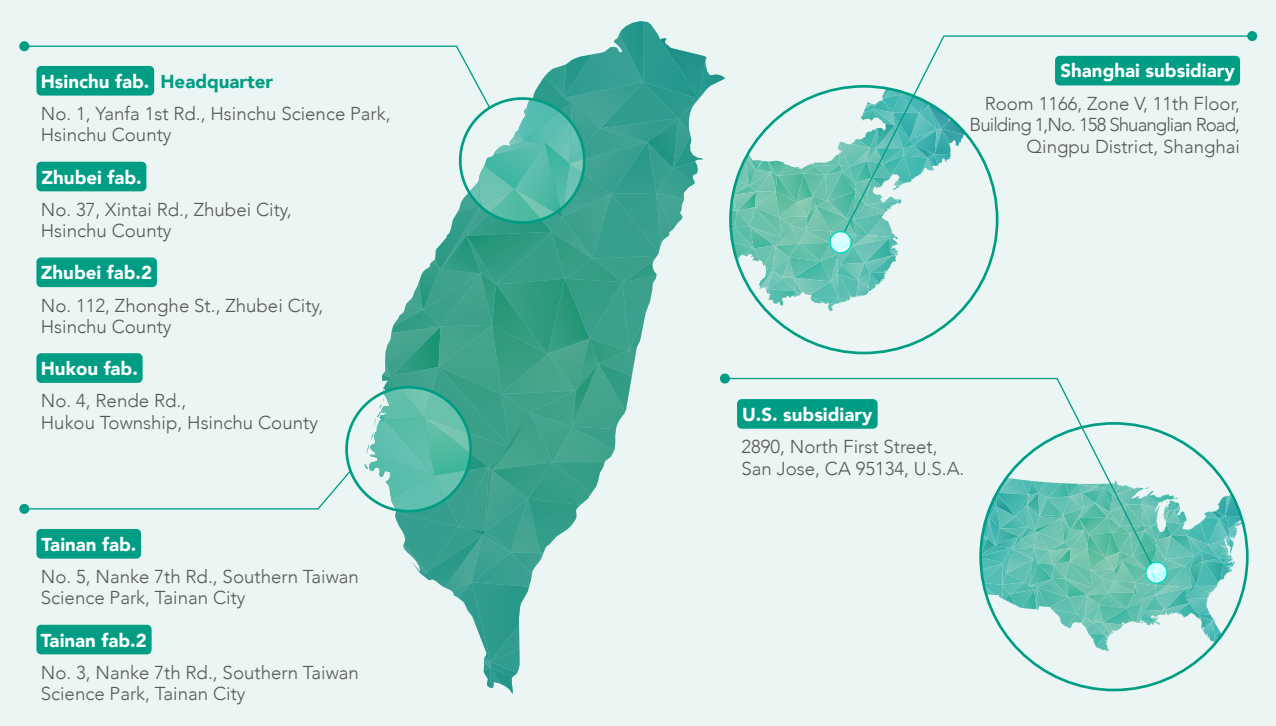
Successful Development of Key Products and Technologies	Developed a new Tall bump Height Cu Pillar process to meet the demand for bump height of 100um products.	Developed the next-generation Micro LED driver IC packaging process applications for technical services of high-resolution panels.	Assembly design for optimized electrical property for high- frequency applications High-density flip chip (FC) application solutions for high-speed server chips.
Performance	✓ Micro LED driver IC Assembly process shifting to large-size 4K and above TV displays ✓ Design and development of server products with high-speed, high-bandwidth of up to 40Gbps of data transfer rate that are compatible with USB 4.0 specifications ✓ Passed customers' reliability test and collaborated with the customer for production verification for new products ✓ Successful collaboration in multiple projects with potential customers ✓ Apt demonstration of ChipMOS' one-stop product and technology services		

1.1 About ChipMOS

GRI 2-1

Incorporated on July 28, 1997, ChipMOS is a leader in the field of semiconductor Assembly testing. The test capacity of Display Driver IC assembly ranks 2nd in the world. At present, ChipMOS's testing and Assembling equipment machines are mainly set in two major science and industry parks in Taiwan: Hsinchu Science and Industry Park, mainly providing memory testing services; and Tainan Science Park, mainly providing memory Assembling and Display Driver IC Assembly testing services. In addition, the factories in Zhubei and Hukou, Hsinchu County, provide Wafer Bumping and Wafer Testing services, giving full play to the functions of independent operations oftesting and packaging technical services, and integrating technical resources to provide a series of complete all-round services. In addition to providing semiconductor post process services, we also cooperate with global customer partners to provide vertically integrated and high-quality Assembling and testing solutions. As of December 31, 2023, ChipMOS Taiwan has a headcount of 5,410.

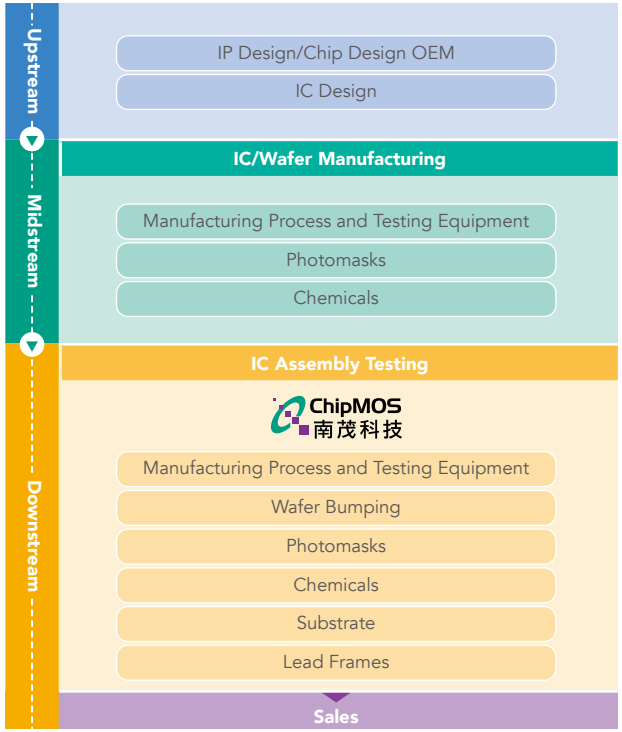
Operational Sites



1.2 Main Products and Services

GRI 2-6

The vertical division of labor in the semiconductor industry is divided into upstream Chip Design, midstream IC Wafer Manufacturing, and downstream IC Assembly and testing according to the manufacturing processes. ChipMOS is engaged in the downstream industry of the semiconductor industry. Its main products and services include: LCD Driver ICs, Memory ICs, Logic/Mixed-Signal IC and Back-End Services as well as Wafer Bumping (Bump Services). It vertically integrates the back-end process of semiconductors and provides customers with One Turn-Key Solution/ Service.



1.2.1 Main Products and Markets



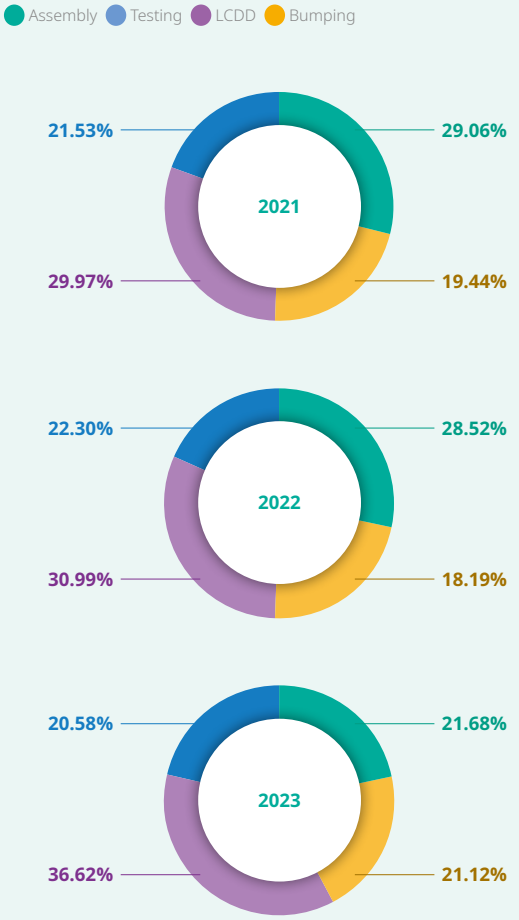
ChipMOS provides customers with back-end Assembly and testing services for memory, Display Driver IC and mixed-signal products, as well as diversified technology selection and technology integration services including Lead Frames and organic Substrates, etc.

Our main products include the Assembling and testing OEM of Thin Small Outline Package (TSOP), Fine-Pitch Ball Grid Array (FBGA), Tape Carrier Package (TCP), Chip on Film (COF), Chip on Glass (COG), Wafer Level Chip Scale Packaging (WLCSP), and Wafer Bumping Manufacturing (Gold Bump). Our customers include semiconductor design companies, integrated component manufacturers and semiconductor wafer factories. Our products are mainly used in consumer electronic products such as personal computers, automotive electronics, communication equipment, office automation and mobile phones, etc.

ChipMOS provides customers with Display Driver ICs and memory Assembl ing and testing, and provides one-stop services. ChipMOS U.S.A., Inc. is established in the United States to provide local Customer service and business support and cooperation. In addition, ChipMOS has a professional national R&D laboratory to provide the driving force for future development. To cope with the continuous innovation of downstream electronic products, ChipMOS continues studying the improvement of packaging technology in three major areas of basic R&D: packaging materials (such as extending the service life and reducing the material cost), mechanical characteristics (strengthening the external structure and eliminating the internal stress), electrical characteristics (high-speed high-frequency/microwave RF). In 2023, ChipMOS obtained 14 patents, and as of the end of December, ChipMOS had 565 valid patents, 53 trademark rights and a total of 93 patent applications currently under review. ChipMOS is a professional manufacturer of professional IC all-round back-end services.

ChipMOS's top five key customers are mainly distributed in the United States, Taiwan, etc. The revenue, cost and gross profit of the products are attributed to departments concerned. Therefore, ChipMOS's and its subsidiaries' products are divided into four categories: Assembly, Testing, Flat panel display driver IC and Wafer Bumping.

Distribution of Revenues of Main Products



Note: According to the proportion of revenue in the customers' regions: 80.9% in Taiwan, 5.5% in Japan, 8.1% in China, 3.2% in Singapore and 2.3% in other regions.

1.2.2 Growth Momentum of Future Operations

Multi-Faceted Product Layout

The development trend of the electronics industry in 2023 changed significantly due to the technology, material and end-user demands. In recent years, the semiconductor industry is involved in every innovation trend from 5G, artificial intelligence (AI), electric vehicles, to cloud computing. To embrace the new industrial transformation, ChipMOS has assessed the introduction of corresponding mainstream products based on our competitive advantages. Looking into the new business expansion and growth momentum, we focus on the development of the following products:

Driver IC

Our 3 major product lines, OLED smartphones, high-end 8K TVs, and automotive DDICs, experienced continuous growth in market demands in 2023. The new application product line of Mini LED has entered the mass production stage, continuing to drive the growth of the COF packaging and high-frequency testing business. Due to the improvement in smart phone panel specifications in conjunction with improving OLED panel yield rate, the demand for OLED Driver IC has also grew noticeably. Given that OLED testing usually takes longer than traditional Driver IC, the trend has translated to substantial boost in the average sales price (ASP) for relevant testing. In addition, thanks to the capacity support from the wafer fab for the automotive products, the shipment of automotive Driver ICs showed steady growth in 2023, which was obviously helpful for the increase of the testing price and gross profit for Driver ICs.

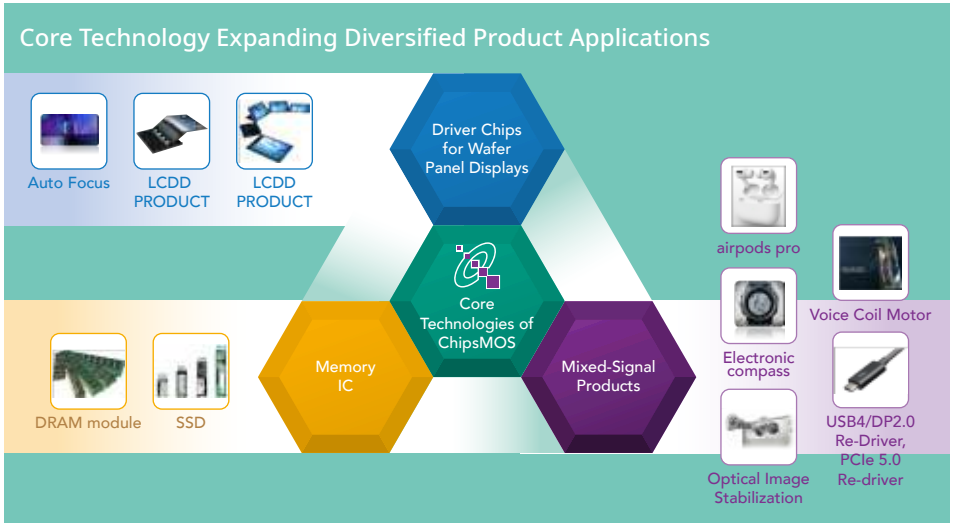
Memory

Thanks to the rapid development of generative artificial intelligence (AI) and cloud data processing, the demand for massive data processing and high-performance computing continues to grow and thus accelerates the upgrade of the memory technology. The introduction of DDR5 technology has become an inevitable trend and this has driven the development of the Registering Clock Driver (RCD) and the SPD Hub (SPD Hub). In this regard, ChipMOS has actively developed new products, passed a series of reliability verifications, and entered the small-volume trial production stage.

In addition, in response to the development of forward-looking technologies such as artificial intelligence (AI), Internet of Things (IoT), and Internet of Vehicles, the demand for storage capacity and density specifications has increased significantly. The NAND Flash wafer technology is evolving from the traditional 2D to 3D stacking structure. Its high storage density and low manufacturing cost enable NAND Flash to give full play to its performance through the high-performance PCIe interface, and the performance, bandwidth, and storage density are improved continuously to support artificial intelligence, automotive electronics, industrial control servers, etc. For the emerging applications, ChipMOS invest more resources in the field of flash memory with our capacity and technology of advanced bumping process, circuit redistribution, packaging and testing.

Mixed-Signal Products

More types of sensors have been provided with the development of the Internet of Things. ChipMOS meets the needs of customers for thin and small terminal applications, such as fingerprint readers, capacitive sensors, and various detectors, such as the auto focus of camera lenses, Optical Image Stabilization (OIS), Hall Motor Sensors, and Smart Sensor Hub used for smart household appliance. These drive the development and business of the Wafer Level Chip Scale Packaging (WLCSP) process and testing technology. Our wafer-level advanced bumping and Flip Chip-Chip Scale Package technologies are also integrated and successfully applied to USB4/DP2.0 Re-Driver and PCIe 5.0 Re-Driver products for notebook computers and their peripheral products.



R&D Momentum

In response to the rise of artificial intelligence, Internet of Vehicles, and cloud computing technologies, the integration of heterogenous chips, the light, thin, short, and compact package size, and the needs for low power consumption and high heat dissipation are becoming more and more popular. For these, ChipMOS actively grasps the opportunities of industrial development and makes investment in related fields. The key technologies and related products successfully developed in 2023 are as follows:

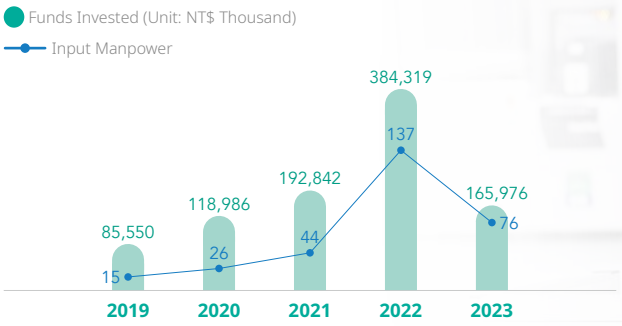
- Developed a new tall bump height Cu pillar process to meet the demand for bump height of 100um products.
- Developed 2P2M Cu Pillar products with a new structure to meet the rewiring needs of Cu pillar products.
- Developed high-density (>4000 Chs) inner lead flip chip services for multi-layer COF boards.
- Developed the next-generation Micro LED Driver IC Assembly process applications for technical services of high-resolution panels.
- High-density flip chip (FC) application solutions for high-speed server chips.
- High thermal conductivity Compound applicable to heat dissipation Assembling services for high-speed Universal Flash Storage (UFS).

R&D Investment in the Recent 5 Years

Year	2019	2020	2021	2022	2023
R&D Expenses (NT$100 Million)	10.0	10.2	11.4	11.6	10.9
Proportion in Revenue (%)	4.95	4.41	4.16	4.93	5.12
R&D Personnel (persons)	645	671	680	677	707

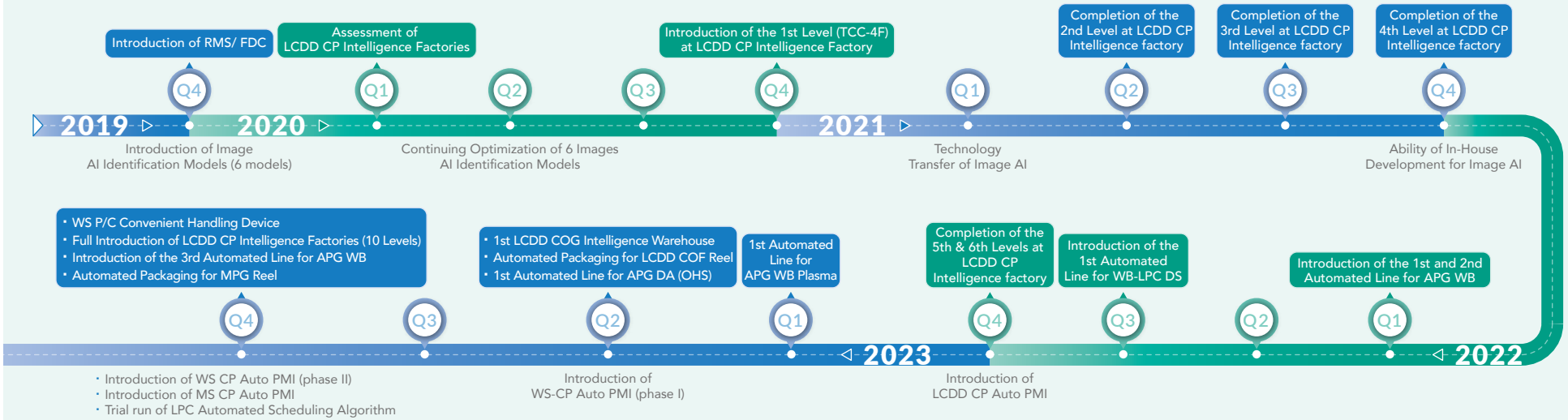
Intelligence factory

In order to effectively respond to the trend of Industry 4.0, improve overall organizational competitiveness and elevate Product quality and services so as to create superior work efficiency and environment, since 2019, ChipMOS has been increasing the investment of funds and manpower year by year, and actively promotes automated intelligent manufacturing, going beyond simple computerization and automation and implementing intelligent development; Since 2023, as large-scale investment projects are gradually completed, introduction of AI models became the focus and the development was conducted by internal professional technology teams. Therefore, the amount of investment focused on the reduction of the hardware expenses.





ChipMOS Intelligence factory Milestones



To ensure comprehensive development of ChiMOS' Intelligence factory and industrial 4.0, our facilities have continued to develop relevant smart productions by leveraging process automation to reduce production cycles, reduce production variations and improve Product quality; at the same time, we have also used production data for big data analysis to optimize our operating costs and strengthen production quality. The introduction of Intelligence factory can be broken down into 6 major aspects: iManagement, iAPS, iControl, iLogistics, iImage and iExchange for relevant planning and implementations.

In the near future, the Company shall continue to expand its development of automation/intelligence items in these 6 aspects in order to achieve our goal of establishing Intelligence factory and industrial 4.0. Through improvements in different areas, we shall boost our corporate competitiveness and strive for a future of sustainable development.

Achievements in 2023	introduced on
Continuous development of automated production lines to replace manual loading and unloading • Continuous introduction of automated production lines for LCDD CP for a total of 10 levels • Continuous introduction of automated production lines for APG W/B for a total of 3 automated lines	 December 1, 2023 December 8, 2023
Set up of the 1st automated production line at the APG W/B plasma process station	March 19, 2023
Set up of the 1st intelligence warehouse: automated LCDD COG inbound/outbound operations	April 1, 2023
Setup of the first automated OHS ((Over Head Shuttle) production line for APG D/A (Die bond)	June 30, 2023
Setup of an automated packaging line • LCDD COF Reel • MPG Reel	 May 31, 2023 December 30, 2023
Introduction of the convenient handling device for Prober Card to create a friendly working environment for employees and prevent work-related injuries caused by handling heavy objects	November 30, 2023
Continuous development of Auto PMI (Probe Mark Inspection) image processing system • Set up of a MS PMI probe mark recognition system to reduce the false rate and optimize personnel work efficiency • Set up of a WS PMI probe mark recognition system to reduce the false rate and optimize personnel work efficiency	 December 1, 2023 Phase I : June 1, 2023 Phase II : November 1, 2023
Development o the first station - iAPS/iControl algorithm for Wafer Lapping to optimize production line arrangement efficiency	December 26, 2023

1.3 Operational Performance and Tax Governance

1.3.1 Operational Performance

GRI 201-1 GRI 201-3 SASB TC-SC-000.A SASB TC-SC-000.B

Following from the second half of the year of 2022 demand softness and customer destocking, it impacted our 2023 results, including revenue and profit both declined compared to 2022. By cautiously stable operating strategy, in line with industry trend and customer requirements, ChipMOS will keep moving forward expanding the core technologies and product developments, as well as investing in the automation and intellectualized of production lines to maintain growth momentum and improve profitability. The followings are the major operating results of 2023:

Achievements of Business Plan Implementation

Consolidated revenue for the fiscal year ended December 31, 2023 was NT$21.36 billion, which reflects 9.2% down from 2022. The consolidated gross margin for the year was 16.6%. In individual product lines, memory product revenue decreased 24.2% from 2022, and represented 34.9% of 2023 total revenue. The revenue of flat panel display driver IC (DDIC) related products, including gold bump increased 9.1% from 2022 and represented 56.8% of 2023 total revenue. Driven by automotive and smart mobile, Automotive panel and OLED panel driver IC revenue grew more than 27% and 125% from 2022, respectively.

Regarding the soft end demand and customers' destocking, we strictly control the capital expenditure related to capacity expansion except the necessary green energy investment, plant renovation, quality improvement and R&D activities. Our 2023 CapEx was NT$3.23 billion.

Financial Performance

The profit attributable to equity holders of the Company and the basic earnings per share were NT$1.89 billion and NT$2.60. Till the end of 2023, the aggregated amount of ChipMOS' consolidated assets were NT$46.16 billion and the cash and cash equivalents was NT$12.35 billion. The consolidated liabilities were NT$21.31 billion with the consolidated liabilities to assets ratio of 46.2%. The equity attributable to equity holders of the Company was NT$24.85 billion with the Return on Equity (ROE) was 7.6% for 2023. Overall, ChipMOS has strengthened financial structure.

Future Development

Looking ahead to 2024 and beyond, ChipMOS will continue to focus on the niche market about automotive electronics, as well as high-growth markets about smart mobile devices which are driven by the automation and intellectualized in industrial. By offering leading edge and reliable semi-conductor back end turnkey solutions that integrated wafer bumping and assembly, to meet the industry demand and customers' requirements. ChipMOS is also driving higher efficiency and profit through increased AI and automation to further reduce the operating cost to be able to drive growth in revenue and profitability.



Operational Performance in the Recent 5 Years

	2019	2020	2021	2022	2023
Capital Stock (NT$100 million)	72.7	72.7	72.7	72.7	72.7
Revenue (NT$100 million)	203.4	230.1	274.0	235.2	213.6
Gross Profit (NT$100 million)	39.3	50.3	72.5	49.1	35.5
Income Tax Expense (NT$100 million)	4.5	6.1	9.8	6.6	3.7
Net Profit (NT$100 million)	25.8	23.7	50.6	33.7	18.9
Earnings per Share - Basic (NT$)	3.55	3.26	6.96	4.64	2.60
Net Worth per Share (NT$)	27.02	28.64	33.53	34.12	34.18
Employee Salaries and Benefit Expenses (NT$100 million)	60.8	60.1	67.6	64.7	58.4
Cash Dividends (NT$100 million)	8.7	13.1	16.0	31.3	16.7
Return on Total Assets (%)	8.07	7.20	13.29	7.97	4.62
Return on Equity (%)	13.70	11.70	22.38	13.71	7.62

Note 1: Data source: the each Consolidated Financial Report has been audited by the certified public accountants.
Note 2: As of December 31, 2023, the ChipMOS's authorized capital was NT$9.7 billion, consisting of 970 million ordinary shares, and the paid-in capital was NT$7.27 billion with a par value of NT$10 per share, consisting of 727.24 million ordinary shares. All proceeds from shares issued have been collected.
Note 3: On November 1, 2016, ChipMOS publicly listed some of its outstanding shares in the form of American Depositary Shares ("ADSs") on the NASDAQ Global Select Market. As of December 31, 2023, the outstanding ADSs were 4,234,970 units representing approximately 84.7 million ordinary shares. Each ADS represents 20 ordinary shares of ChipMOS.

Output and Self-Made Rate of Main Products in the Recent 3 Years

Unit: thousand wafers/piece ; NT$ thousand

	2021			2022			2023		
	Capacity	Output	Production Value	Capacity	Output	Production Value	Capacity	Output	Production Value
Assembly	4,603,841	3,783,937	6,521,438	4,829,713	3,063,895	6,127,244	4,481,953	2,093,855	5,089,426
Testing	4,468,592	3,419,085	3,701,942	3,908,306	2,397,496	3,599,504	3,973,811	2,233,262	3,519,636
Flat panel display driver IC	2,759,920	2,101,102	5,477,583	2,705,370	1,678,623	5,144,675	2,634,201	1,759,564	5,369,720
Wafer Bumping	1,876	1,529	4,369,317	1,827	1,141	3,620,181	1,858	1,115	3,615,770
Total	-	-	20,070,280	-	-	18,491,604	-	-	17,594,552
Self-Made Rate (%)		100			100			100	

Note 1: For relevant contents, please refer to page 137 of the ChipMOS 2023 Annual Report



1.3.2 Tax Governance GRI 207-1~GRI 207-3

ChipMOS is committed to information transparency and believes that honest tax payment will help promote economic growth and sustainable corporate development. We formulate tax management policies and implement them in accordance with laws and regulations, continue to create long-term value of the Company and fully protect the rights and interests of shareholders and investors. The Financial Accounting Function is the authority and responsible unit in charge of various kinds of taxes. When handling various kinds of tax returns, they are responsible for obtaining the approval of the appropriate authority according to different levels. At the same time, it continues to train talent and improve the professional quality of taxes in order to ensure the effective operation of the tax management mechanism, and it appoints external tax consulting institutions to handle relevant tax matters, so as to ensure proper compliance with tax norms and reporting obligations.

Tax Policy

1. Comply with local tax laws and relevant regulations in all operating areas, declare and pay taxes within the time limit, and fulfill tax obligations
2. Tax information is transparent. Tax disclosure has been handled in accordance with relevant regulations and standards.
3. Apply for relevant tax concessions and tax savings, and prohibit avoiding taxes in improper ways.
4. Based on the principles of mutual trust and respect, maintain good communication and discussion with tax authorities at appropriate times.
5. The Company's important decisions should consider the long-term impacts of taxes and implement routine transactions.
6. Continuously understand the new knowledge and changes of relevant national laws and regulations, strengthen professional tax capabilities, and reduce future tax risks.

Income Tax Paid in the Recent 3 Years

Unit: NT$ 1,000

	2021		2022		2023	
Country	**Amount**	**Proportion**	**Amount**	**Proportion**	**Amount**	**Proportion**
Taiwan	690,122	99.79	1,353,195	99.90	183,215	98.36
United States	1,337	0.19	1,159	0.09	2,947	1.58
Others	107	0.02	194	0.01	118	0.06
Total	691,566	100	1,354,548	100	186,280	100

Effective Tax Rate in the Recent 3 Years

Unit: NT$ 1,000

	2021	2022	2023
Net Profit before Tax	6,035,585	4,027,872	2,268,226
Income Tax Expense	976,516	655,898	374,798
Effective Tax Rate	16.2%	16.3%	16.5%

Note 1: The lower effective tax rate in 2021 was due to the share of profits and losses of affiliated enterprises and joint ventures recognized using the equity method – NT$625,733 thousand, which was due to unrealized benefits and investment credit in accordance with the Industrial Innovation Ordinance – NT$105,141 thousand.

Note 2: The lower effective tax rate in 2022 was due to the share of profits and losses of affiliated enterprises and joint ventures recognized using the equity method – NT$453,715 thousand, which was due to unrealized benefits and investment credit in accordance with the Industrial Innovation Ordinance – NT$87,194 thousand.

Note 3: The lower effective tax rate in 2023 was due to the share of profits and losses of affiliated enterprises and joint ventures recognized using the equity method – NT$219,891 thousand, which was due to unrealized benefits and investment credit in accordance with the Industrial Innovation Ordinance – NT$49,892 thousand.

Note 4: For further information on income tax, please refer to the ChipMOS Consolidated Financial Report.

1.4 External Initiatives and Organizational Engagement GRI 2-28

External Initiatives

Responsible Business Alliance (RBA) Code of Conduct

ChipMOS follows the Responsible Business Alliance (RBA) Code of Conduct. This Code aims to fulfill corporate social responsibility, and fully serves to measure the performance achievement of ChipMOS sustainability in 5 major aspects of the Company's operations: labor, health and safety, environment, ethics and management system. It also serves as the implementation policy for supply chain management. Through the Self-Assessment Questionnaire (SAQ) and supplier RBA audit, we are committed to protecting the rights and interests of all employees and supply chain personnel. ChipMOS RBA policies and objectives will be released after being approved by the Chairman to all colleagues.

Carbon Disclosure Project (CDP)

Starting from 2021, ChipMOS has voluntarily participated in the 2022 Carbon Disclosure Project (CDP) and completed its Climate Change and Water Security Questionnaires. We received the Leadership level (A-) score in the Climate Change Questionnaire and the Management level (B) score in the Water Security Questionnaire for two consecutive years (2022-2023). In addition to signing to become a TCFD Supporter in 2022, we independently published the first "Climate and Environmental Report" in 2023 to further explain, based on the Climate-related Financial Disclosures (TCFD) framework, that the Nature-related Financial Disclosures (TNFD) had been deployed in advance to identify and manage nature-related risks. These actively demonstrate the determination to address the issues such as nature ecology, climate, and water management.

TALENT, in Taiwan

Sustainability of talent has always been a priority for ChipMOS. In order to create a more diverse, equal and inclusive workplace, the Company has joined 2022 “TALENT, in Taiwan” initiated by CommonWealth Learning x Cheers Happy Workforce x For a Better Future for 3 consecutive years and the initiatives promoted by more than 400 alliance partners. We are committed to 6 key indicators of sustainable talent action: "Meaning and Value", "Diversity and Inclusion", "Reward and Incentives", "Physical and Mental Well-being", "Cultivation and Growth" and "Organizational Communication".

By implementing specific promotion measures continuously, we strive to maintain our competitive edge in nurturing sustainable talent amidst the dynamic challenges of the industry.

Participation in External Organizations

A member of the Tainan City Government “Net-Zero Coaching Group”

Since 2018, ChipMOS has participated in the “Net-Zero Coaching Group”, the former “ Power Saving Alliance”, of Taiwan City Government formed together with other companies, schools, organizations including TSMC, UMC, Kun Shan University of Science and Technology, National Cheng Kung University’s Research Center for Energy Technology and Strategy, Far East University and Southern Taiwan Science Park Administration to share our own experiences in energy conservation at relevant organizations such as schools and hotels. The Coaching Group also provides services such as energy efficiency diagnostics and reduction strategies so that more experienced companies can assist those with lesser experience by guiding members of the supply chain to promote greenhouse gas reduction and collectively work towards the goal of net-zero emissions.

In 2023, ChipMOS took the initiative to guide SMEs to strengthen energy saving and carbon reduction strategies and actions.

- **The groups that ChipMOS participated in:** Energy Saving Group and Carbon Reduction Group under the Net-Zero Coaching Group.
- Companies that ChipMOS gave guidance: Hanpin Electron, Shuan Hwa Industrial (CBAM-governed companies)
- **ChipMOS’s actions:** On-site visits to provide practical experience and advice on energy saving and carbon reduction:
  - Strengthen the ability to GHG inventory and identify emission hotspots.
  - Energy saving diagnosis and improvement suggestions for the main energy-consuming areas in the fab

Chang-Lan Yin/Chi-Feng, Liu
Specialist/Manager, Quality Assurance Department
Shuan Hwa Industrial Co., Ltd.

We are fortunate to be selected by the Environmental Protection Bureau of Tainan City Government to participate in the Net-Zero Coaching Group, and appreciate the assistance of ChipMOS's team in building our carbon reduction capabilities in the “Big Leads Small” mode. This is particularly true for its guidance and assistance in the greenhouse gas inventory. For the unclear awareness in the first inventory, they patiently answered every question, shared their experiences, made on-site diagnosis and evaluation, and gave improvement suggestions. Given our limited manpower for carbon footprint verification, the resources, guidance and assistance provided by ChipMOS greatly shortened the time for self-exploration, and successfully generated the greenhouse gas inventory report in just 3 months.

Continue working with the industry to promote the joint audit of waste management

Since 2016, together with the Taiwan Semiconductor Industry Association (TSIA) – Packaging Environmental Safety Team, we have promoted joint audits and jointly designed the audit system. The Company has since continued to take part in the joint audit of waste management service providers and the team has commissioned Industrial Technology Research Institute (ITRI) to audit 19 providers in 2023, and the audits have revealed no issues of concern. ChipMOS shall continue to strengthen the depth and breadth of waste management and ensure a sound control mechanism that will facilitate legally compliant disposal of wastes.

In addition, in accordance with the regulations of the Ministry of Environment for determining the due care of business contractors, we continue to conduct annual visits to the treatment plants to understand the operation and management of the storage, clearance, treatment, and reuse of the waste commissioned by the business, and make records. In 2023, ChipMOS voluntarily visited[Note 1] a total of 15 providers, of which 7 were outstanding and 8 were fair, and none needed improvement.

Note 1: Criteria for visit and evaluation of ChipMOS's waste management service providers:
Outstanding: Environmental certifications such as ISO 14001 and compliance with requirements.
Medium: No environmental certifications available, but all requirements are met.
Need for improvement: There was no noncompliance, or major deficiencies discovered by the competent authority.

Cleaner production and promotion of the circular economy

We continued to respond to the global trend of the circular economy, participated in the "2023 Asia Sustainability Supply + Circular Economy Expo" and discussed relevant energy-saving cooperation opportunities with manufacturers through the TASS 2023 Business Opportunity Matching Expo.

Proactive participation in external events to stay abreast with the latest trends in information security protection

We pass the ISO 27001 certification and implement the information security policy every year to ensure the security of the information and communication environment. In addition, we participate in information security seminars and courses organized by the government and external organizations to stay abreast of information security trends and learn new knowledge (such as information security education and promotion class for executives, vulnerability scanning of system and web applications and defense practices, advanced information security threat defense practices, practices of response to information security incidents and sharing of cases, malware reverse engineering, information security leadership workshops) to continuously enhance information security knowledge and skills and design a better information security environment for the organization.

ChipMOS's Participation in External Organizations

Organization Name	Participation Status
Taiwan Semiconductor Industry Association (TSIA)	Member - Assembly and Testing Environmental Safety Team
Taiwan Alliance for Sustainable Supply (TASS)	Member
Chinese National Association of Industry and Commerce (CNAIC)	Member
The Allied Association for Science Park Industries	Member
Taiwan Electrical and Electronic Manufacturers' Association	Member
Southern Taiwan Science Park – Water and Electricity Committee	Member
Southern Taiwan Science Park – Environmental Protection and Development Promotion Foundation	Director
Tainan City Government "Net-Zero Coaching Group"	Member
Academia-Industry Consortium for Southern Taiwan Science Park	Member
International Microelectronics Assembly and Packaging Society - Taiwan Chapter	Member
Taiwan Institute of Chemical Engineers	Member
Information Sharing and Analysis Center, Science Park, Ministry of Science and Technology (SP-ISAC)	Member
Security Platform as a Service (SECPAAS)	Member
Taiwan Computer Emergency Response Team/Coordination Center (TWCERT/CC)	Member
CISA (Information Service Industry Association of R.O.C.)	Member
CISA (Information Service Industry Association of R.O.C.) - CISO committee	Member
NCHC (National Center for High-Performance Computing)	Member
The Institute of Internal Auditors - Chinese Taiwan	Member
Computer Audit Association	Member
Hsinchu County Nurses Association	Member
Greater Tainan Nurses Association	Member

CHAPTER

2 Sustainable ChipMOS





2.1 Sustainability Policies and Actions

GRI 2-13 GRI 2-14 GRI 2-16 GRI 2-22

ChipMOS adheres to the mission of "Acting with Integrity, Strengthening Environmental Protection, Caring for Disadvantaged" and has formulated the "Sustainable Development Best Practice Principles" and "Corporate Sustainability Policy", which are adopted by the Board of Directors as the highest principle for the Company to promote sustainable development. At the same time, ChipMOS has formulated specific implementation policies, and regularly reviews their implementation effectiveness and continuous improvement. We also incorporate relevant implementation policies in our operations and implement sustainability actions in various aspects, including continuously improving Corporate Governance, complying with ethical management and focusing on the R&D and innovation of core technologies, so as to practice our commitments and responsibilities to employees. We also proactively execute green energy plans, continue to invest in green production and strive for environmental protection as our way of contributing to the greater goal of net-zero emissions by 2050. Internally, we protect and care for employees' health and rights, assist employees in career development; externally, we continue cultivating environmental sustainability and implementing public welfare, giving full play to our sustainability influence.

ChipMOS's Corporate Sustainability Policy



*For the Corporate Sustainability Policy and Sustainable Development Best Practice Principles, please refer to ChipMOS website – ESG at ChipMOS

2.1.1 Sustainability Promotion

Following a top-down promotion strategy, the Board of Directors is the highest decision-maker at ChipMOS. The progress is reviewed quarterly, and the plans are promoted via the ESG Committee, to establish the sustainable culture and the sustainability mindsets of the employees step by step, and pursue relevant targets in our day-to-day activities. With regards to the promotion of sustainable development, the Company has opted for a slow-and-steady approach along the path of "laying the groundwork, sustainable establishment and sustainable cultivation". in 2024, we will extend, deepen and expand the "sustainable advancement" planned for the period from 2023 to 2025, and continue to create greater breakthroughs and results in sustainability. For these, we will implement ESG management with a more aggressive and proactive mindset and develop concrete action plans in accordance with our mid/long-term sustainability objectives in order to boost our overall sustainable competitiveness.

ESG Committee

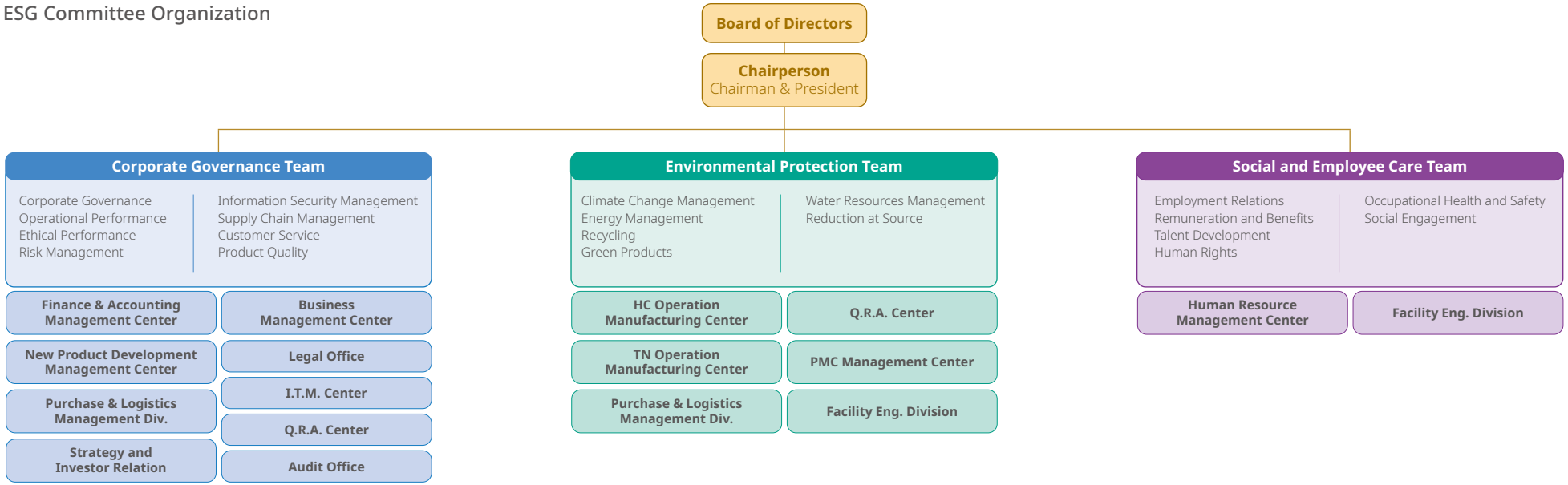
The ChipMOS ESG Committee (hereinafter referred to as the ESG Committee) is the highest sustainability management organization within the organization. The Chairman & President serves as the Chair and the Lead executive, and regularly report to the Board of Directors on the status and results of sustainability project implementations; the Executive Vice Presidents holds the highest management position for the south and north fabs. Executive Vice Presidents are entrusted to analyze international trends in the environment and sustainable and clear understanding of stakeholders' expectations in the identification of key topics and priorities.

According to the professional division of labor and the management of sustainability issues, the ESG Committee is divided into three groups: "Corporate Governance", "Environmental Protection" and "Social and Employee Care". The top managers of each unit are the main members, responsible for coordinating and promoting sustainability development goals. The ESG Committee meets regularly every year to jointly review the promotion of goals and discuss sustainability related plans.

The ESG Committee aims to promote sustainability related activities, formulate sustainability strategies, establish employee sustainability thinking, prepare ChipMOS ESG reports and manage the engagement of all stakeholders. When formulating the annual company policy, "enterprise commitment", "environmental protection" and "social engagement" are taken as the practical guidelines, while incorporating the issues of concern for stakeholders into management actions, actively implementing and promoting the economic, environmental and social aspects, and continuing to practice the responsibility of corporate citizens.



ESG Committee Organization



Resolutions and discussions on ESG related issues by the Board of Director every quarter

The Board of Directors at ChipMOS is entrusted to the task of supervising the Company's planning and implementation of sustainable development. ESG related issues discussed by the Board of Directors on a quarterly basis include: promotion of net-zero emission for sustainable development, outcome of sustainable development for the year (including the status of Stakeholders Communication), mid/long-term goals for sustainable development, implementations relating to the Procedures for Ethical Management and Guidelines for Conduct, intellectual property management, risk identification and Risk management outcomes and so forth. The highest governance unit had a total of 10 communication of critical events in 2023, to improve the efficiency of project execution and implement the corporate sustainable development.



Green Factory Visit Event

After 7 years, ChipMOS and the Industrial Development Administration, MOEA, jointly organized the "Green Factory Visit Event 2023" to promote on-site visit, learning and exchange opportunities among the industry, government and academic circle. More than 30 companies participated in the event. By sharing the long-term experiences in green operations and promotion of environmental friendliness, we hope to work together to mitigate climate change and create a net-zero sustainable future.



Sustainable Promotion by ChipMOS

Laying the Groundwork
Setting solid groundwork and fundamentals

- Established the "Sustainable Development Best Practice Principles" to be approved and announced by the Board of Directors
- Established a dedicated CSR unit in charge of planning and promoting relevant sustainability projects
- Issued ChipMOS' first CSR report, which has been verified by third party
- Continued improvement in the quality of relevant sustainability issues

2013-2016

Sustainable Establishment
Internal and external sustainability efforts

- Establish ChipMOS' image of sustainability through external awards
- Develop a digital communication platform that strengthens stakeholder engagement
- Help employees foster sustainability thinking through their daily lives to achieve total promotion of ESG actions
- Assist the ESG Committee to establish a common language and grasp relevant trends through the organization of training and trend seminars
- Referring and linking to pertinent SDGs for the establishment and implementation of ChipMOS' sustainability goals

2017-2019

Sustainable Cultivation
Entrenchment of ESG management

- ChipMOS' ESG Reports were prepared in accordance GRI, SASB guidelines and were verified by third party, along with the introduction of TCFD to address the concerns of investors and stakeholders
- Voluntary participation in the CDP questionnaire to bolster areas of internal vulnerabilities
- The Board of Directors supervisors the Company's promotion of sustainability project on a quarterly basis
- Publication of CSR Report in English
- The Board of Directors approved and announced ChipMOS "Corporate Sustainability Policy"
- Continue to take part in external awards and participated in international award for the first time in the hopes of assessing the Company's current standing from diverse perspectives

2020-2022

Sustainable Advancement
Bolstering sustainable competitiveness

Continuous development and deepening of sustainable actions in 2023

- Continuous development of green energy
- Promotion of in-plant circular economy
- Motivating suppliers: Big Leads Small, participation in Net Zero Coaching Group
- Working with customers to reduce carbon emissions from packaging materials

2024~2025

- Continuation of green energy plan to achieve the goal of net-zero emissions by 2050
- Continuous creation of ChipMOS' sustainable values
  - -By paying attention to sustainability trends and assessing current situations for the evaluation of corresponding strategies
  - -By creating more opportunities for stakeholder engagement
  - -By achieving specific goals for related issues
- Comprehensive improvement of sustainable competitiveness
  - -Participation in sustainability awards and completion of CDP questionnaire
  - -Improve Corporate Governance mechanism
  - -Natural environment risk assessment management

2023-2025

2.2 Materiality Analysis GRI 2-29 GRI 3-1~3-3

2.2.1 Maintenance of Good Interaction and Communication with Stakeholders

Understanding the suggestions and needs of various stakeholders through specific management policies and smooth communication channels, and conducting effective communication and issue management.

Policy

Listening and communicating instantly

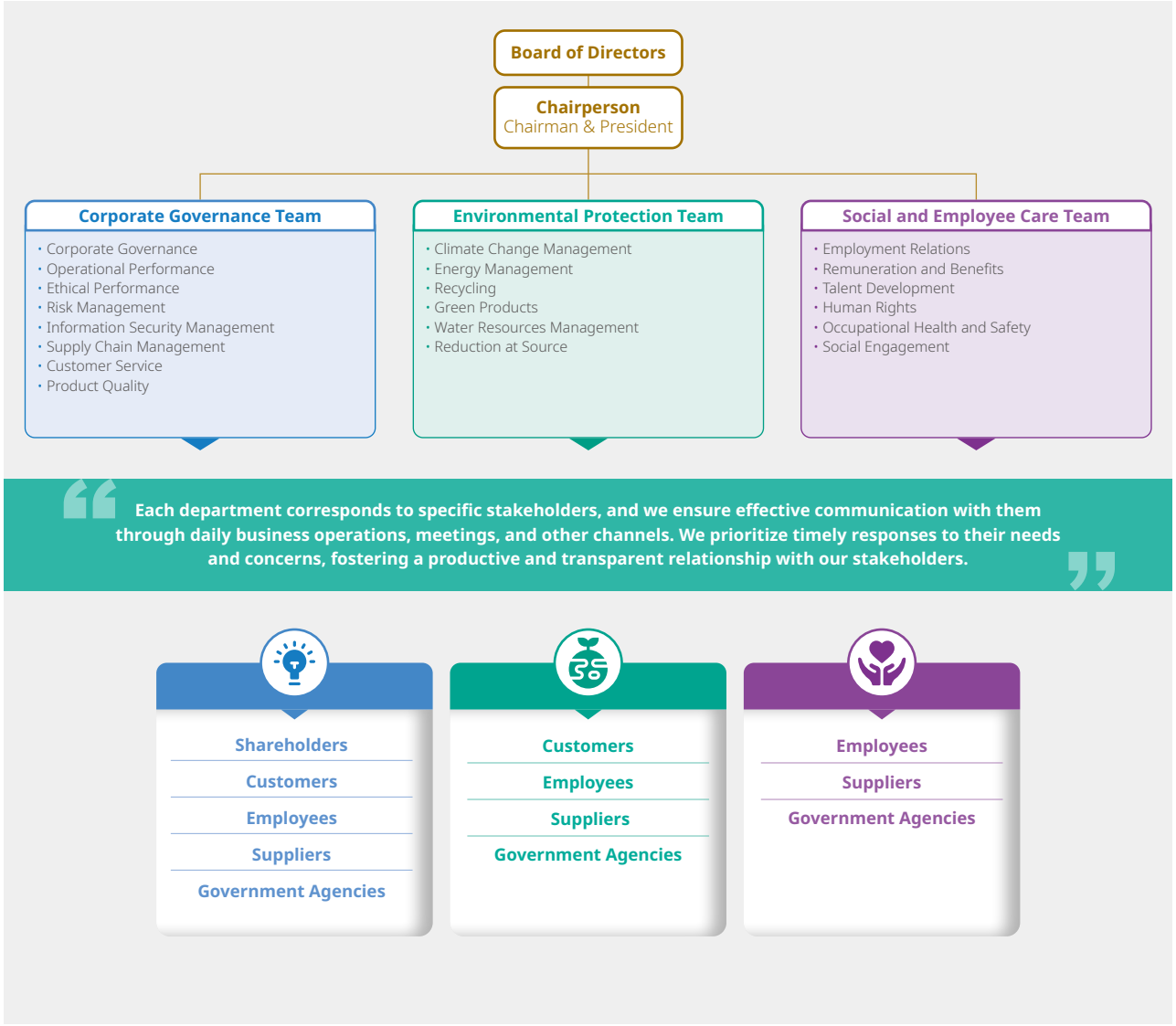
Paying attention to the voices of stakeholders and giving timely responses in appropriate manners during daily business.

Paying attention to feedback and responding clearly

Understanding the issues of concern for various stakeholders through various communication channels, conducting effective communication, and responding one by one in this Report.

Continuous sound interaction and cooperation

Maintaining smooth communication, and continuing to promote and develop various cooperation plans to jointly create a sustainable future.



2.2.2 Thorough Development of a Diversified Communication Platform

ChipMOS actively manages diverse communication platforms and regularly makes adjustments and additions to enhance user experience and meet the needs of stakeholders. By doing so, we aim to achieve effective communication that is more timely and aligned with the voices of our stakeholders.

Sustainability Influence

External ---------- Internal

- ChipMOS website-ESG at ChipMOS
- FB-ChipMOS CSR Fan Club
- Sustainability Videos
- Sustainability School-Digital Course
- EMOS Intranet-Sustainable ChipMOS
- ChipMOS Sustainability Quarterly E-Paper
- ChipMOS Quarterly Publication



Sharing Information

- Sustainability trends at home and abroad
- Sustainability news/hot keywords
- ChipMOS economic, environmental and social information

Sustainability Influence

- Deeper understanding of ChipMOS
- Grasping sustainability trends
- Improving sustainability knowledge
- Subtly influencing readers to establish correct thinking and behavior

Wonderful Sharing in 2023

Sustainability Video (Chinese Version)

Since the establishment in 1997, ChipMOS has been actively engaged in Corporate Governance, environmental protection and social responsibility over the past 26 years. In the 2023 Sustainability Video, the Chairman's message and ChipMOS sustainability strategy highlighted the results of our ESG investments and future goals. We will continue to abide by the sustainable strategy, fulfill our goals and enhance our overall competitiveness. Just like the theme of the film, we will continue to lead the way into the future for the next 20 years to create sustainable values for ChipMOS.

*Video information: https://youtu.be/2G1mpZYe610?si=eVpik5S9eGY1Ak_2





2.2.3 Analysis of Material Topics

Individual departments of ChipMOS communicated with various stakeholders through various channels in their daily business, collected and managed various issues. During our annual ESG seminar, we work with our ESG members to achieve consensus and integration. Following the GRI Standards, SASB standards and AA1000 principles (sustainability context, significance, integrity and stakeholder inclusion), we systematically carried out the Material Topic analysis process: identification, analysis and confirmation. This was done to identify ChipMOS' Material Topics as an important basis for the formulation of sustainability management strategies and objectives.

2.2.3.1 Analysis Process

In order to make sustainability issues cover the overall operations of the Company, ChipMOS convened all members responsible for ESG development such as environment, society, governance and products to review the diversified communication results and feedback of stakeholders. We comprehensively considered international ESG standards (e.g., GRI Standards, SASB Standards, TCFD, SDGs, RBA Code of Conduct) and sustainability trends to determine a total of 21 general and industry-specific sustainability issues. Based on the suggestions of various groups, the main stakeholders concerned were divided into 6 classes: shareholders, customers, employees, suppliers, government agencies and community groups. In the 3rd phase, we collected 409 stakeholder concern questionnaires and 71 two-way impact questionnaires. Using the matrix formulated based on the impact of the issues and the concerns of stakeholders, we finally identified 8 Material Topics for 2023. Then, we examined the influence boundary of the 8 Material Topics, including the organization itself, upstream industries and downstream industries. Finally, we set measurable internal management goals for each Material Topic and respond to the 10 development goals of the United Nations (SDGs).



2.2.3.2 Stakeholder Communication

ChipMOS attaches importance to various stakeholders and firmly believes that the primary task of sustainable operations of the Company is to establish a good relationship with stakeholders and obtain more trust and support, which will be helpful for the operations and sustainable development of the Company.

We define stakeholders as "internal and external groups or organizations that will affect or be affected by ChipMOS". Through the annual ESG Committee meeting, we gather the suggestions of all members, and discuss the same according to the Company's sustainability context, industrial characteristics and practical experience, and with reference to the 5 major principles of the AA1000 SES-2015 Stakeholder Engagement Standard (SES) (Dependence, Responsibility, Influence, Diverse Perspectives and Tension), and identify 6 types of stakeholders by voting: shareholders, customers, employees, suppliers, government agencies and community groups.

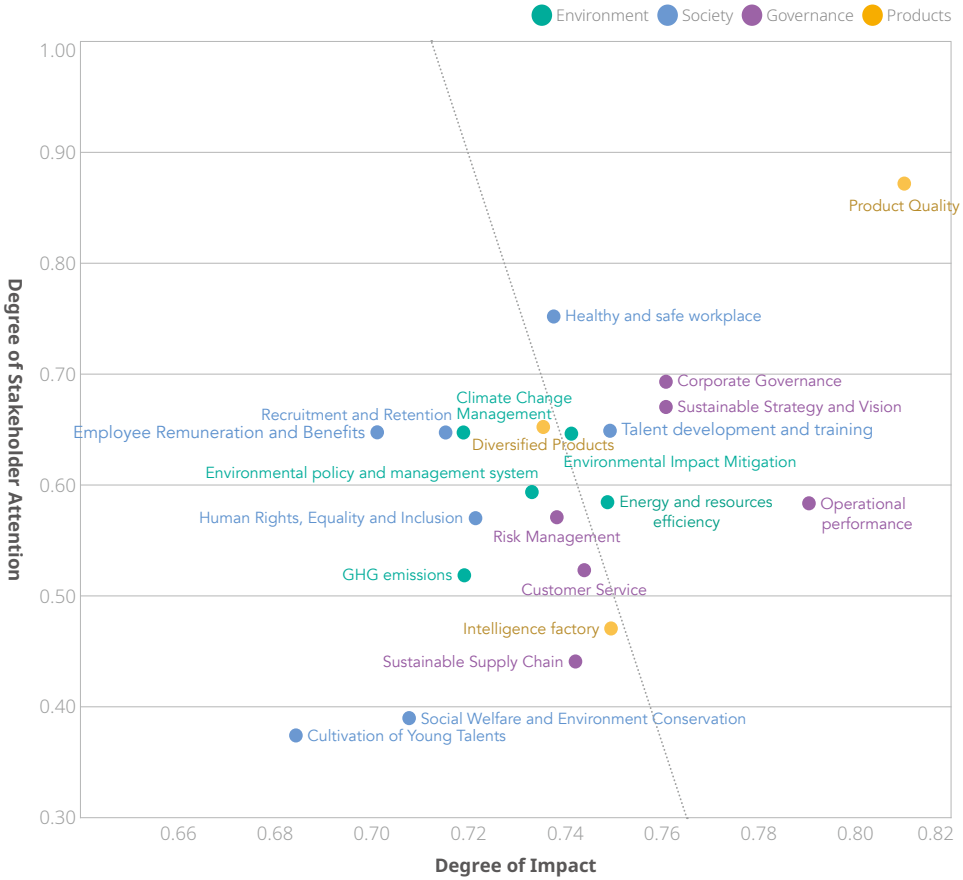


Issues of Concern for Stakeholders and Communication Effectiveness

Stakeholders	Significance to ChipMOS	Main Concerns in 2023	Communication Channel and Frequency	Communication Effectiveness in 2023	Response Section
Shareholders	ChipMOS attaches importance to the rights and interests of shareholders and investors to pursue the development of sustainable operations and is responsible to shareholders and investors.	Product Quality Recruitment and Retention Operational performance Healthy and safe workplace Corporate Governance Sustainable Strategy and Vision Diversified Products	Company Financial Report (quarterly) Quarterly Corporate Briefing (quarterly) Company Annual Report (annually) Annual Shareholders Meeting (annually) Market Observation Post System (irregularly) ESG Report (annual) Company Website and Community Website (irregularly)	• A total of 11 meetings (general meeting/corporate briefing/investor conference and forum) and at least 31 major information items and announcements were made to communicate the Company's development strategy and overall operations with shareholders. • A total of more than 137 messages were released, and the sustainability actions and achievements were communicated with various stakeholders through the Company's official website, social networking website and other channels from time to time. • The average rate of return on shareholders' equity in the most recent 5 years from 2019 to 2023 was at least 10%; the rate of return on shareholders' equity in 2023 was 7.62%	3 Sound Governance
Customers	Mutual trust and customers' recognition are the key to ChipMOS's continuous growth.	Product Quality Healthy and safe workplace Human Rights, Equality and Inclusion Customer Service GHG emissions Diversified Products	Customer Satisfaction Survey (annually) Sustainability Report (annual) Customer Service/Quality Assurance Dedicated Window (permanent) Customer Audit (irregularly) Business Meeting (irregularly) Company Website and Community Website (irregularly)	• Passed the third-party management system verification of ISO 9001, IATF 16949, ISO 26262, IECQ QC080000, ISO 17025, and ISO 27001. • In the Customer Satisfaction Survey, items such as quality, technology, hazardous substance management, delivery date and service were evaluated, which met the customers' requirements, and the evaluation score was 4.3 (out of 5). • Zero customer complaint cases related to customer information security.	5 Customer Service and Sustainable Supply Chain
Employees	ChipMOS's core competitiveness is an important key and the biggest driver of the Company's continued operation and development.	Product Quality Corporate Governance Employee Remuneration and Benefits Healthy and safe workplace Sustainable Strategy and Vision	Production Line Meeting (monthly) Labor-Management Meeting and Welfare Committee Meeting (quarterly) Environmental Safety, Health and Energy Management Committee (quarterly) Company Publication – ChipMOS (quarterly) Chairman's mailbox, employee mailbox/special line (permanent) Intranet, physical bulletin board (permanent) Chairman's talk and luncheon with shift leader (irregularly) Company Website and Community Website (irregularly)	• A total of 53 Labor-Management Meetings, Production Line Meetings, Welfare Committee Meetings, Occupational Safety Meetings and monthly Filipino employee meetings were held. • Chairman's Face-to-Face Talk with Employees, 4 sessions in total • Employee care interviews: A total of 898 employees were interviewed, and these include interviews with new employees, rotation interviews and project interviews • ChipMOS Quarterly, sharing relevant information of the Company and works contributed by colleagues (reading reflecting, baking, travel, pets, etc.). • Sustainability electronic newspaper, 4 in total, helping colleagues grasp the sustainability trend and the Company's sustainability actions.	6 Inclusive Workplace
Suppliers	As important partners for long- term cooperation, we work together for stable development and sustainable operations.	Product Quality Healthy and safe workplace Corporate Governance Talent development and training Environmental policy and management system	Supplier Quarterly Assessment (quarterly) Supplier On-Site Audit (annually) ESG Report (annual) Procurement/Quality Assurance/Training Window (permanent) Supplier Meeting and Questionnaire Survey (irregularly) Company Website and Community Website (irregularly)	• Worked with suppliers to jointly implement corporate sustainability; signed and fully followed the corporate social responsibility statement in 2022 together with a total of 267 suppliers. • Provided appropriate guidance and training to suppliers, and conducted regular written assessments and on-site visits. • In 2023, 58 suppliers conducted RBA audits, with an average compliance of 99%. • Continuously and actively encouraged suppliers to obtain certification in international standards.	5 Customer Service and Sustainable Supply Chain 6 Inclusive Workplace
Government Agencies	ChipMOS follows laws and regulations and performs relevant operations with a high degree of self-discipline and prudence, and actively participates in the plan promoted by the governments.	Product Quality Healthy and safe workplace Employee Remuneration and Benefits Environmental Impact Mitigation Sustainable Strategy and Vision Risk Management	Market Observation Post System (regularly) Pollution Control Declaration (regularly) ESG Report (annual) Government Agency Audit (irregularly) Official documents, e-mails and meetings (irregularly) Company Website and Community Website (irregularly)	• 0 major violations. • Completed relevant declarations regularly in accordance with the provisions of the government and the applicable laws and regulations. • The use of raw materials was fully in line with international regulations and green product regulations • Actively responded to and participated in government promotion projects, such as: - Ministry of Labor Youth Employment Flagship Program and Secure Employment Program to increase youth employment opportunities. - Green Factory Label and Green Purchasing - Coastal clean beach adoption, air quality purification area, public toilet promotion adoption programs	3 Sound Governance 4 Environmental Friendliness
Community Groups	Deeply understand local needs, actively cooperate with community groups and give the most sincere care.	Product Quality Corporate Governance Climate Change Management Sustainable Strategy and Vision Diversified Products Healthy and safe workplace	ESG Report (annual) Employee relations/general affairs special window (permanent) Public welfare organizations (irregularly) Social engagement related activities (irregularly) Company Website and Community Website (irregularly)	• The total amount of social engagement investment came to NT$22,651,727. • Care for disadvantaged groups, a total of 42 organizations and more than 1,722 people benefited. • A total of 22,352 volunteers participated. • Support traditional lantern arts events in Taiwan - Sponsoring the "2024 Taiwan Lantern Festival in Tainan"	6 Inclusive Workplace

2.2.3.3 Analysis Results of Material Topics

After comprehensive consideration of the impact of the issues and the concerns of stakeholders, we have identified and determined 8 Material Topics for ChipMOS in 2023. Compared to the analysis results in 2022, stakeholders paid more attention to "Environmental Impact Mitigation" and "Sustainable Strategy and Vision." These 8 Material Topics corresponded to 2 environmental aspects, 2 social aspects and, 3 governance aspect and 1 product aspect of the GRI Standards.



Description of the discrepancies in Material Topics for 2023 and 2022

2023	Discrepancies in degree of attention	Description
Environmental Impact Mitigation	**Improvement ↑**	In addition to energy saving and carbon reduction issues, recycling and water resource management issues were also emphasized. The Company introduced the ISO 46001 water resource efficiency management system in 2023.
Sustainable Strategy and Vision	**Improvement ↑**	Stakeholders' attention to sustainability issues was increased.
Environmental policy and management system	**Reduction ↓**	We aligned with international standards, continued to introduce various environmental management systems, and passed third-party verification, such as: ISO 14001, ISO 14064-1, ISO 50001, ISO 14067, and ISO 46001
Sustainable Supply Chain	**Reduction ↓**	The Sustainable supply chain management mechanism was strict and comprehensive, and we continued to work with suppliers to implement low-carbon energy-saving actions and expand our influence.



★ ChipMOS Material Topics

	Sustainability Issues	Corresponding GRI-specific Topic		Chapters
Environment	Environmental policy and management system	(Topic chosen by ChipMOS)		4.1 Climate Governance
	Environmental Impact Mitigation ★	302 Energy ★	302-1 Energy consumption within the organization , 302-3 Energy intensity, 302-4 Reduction of energy consumption	4.2 Climate Change and Energy Management 4.4 Water Resources Management 4.5 Recycling
		303 Water and Effluents ★	303-1 Interactions with water as a shared resource, 303-2 Management of water discharge-related impacts, 303-3 Water withdrawal 303-4 Water discharge, 303-5 Water consumption	
		306 Waste ★	306-1 Waste generation and significant waste-related impacts, 306-2 Management of significant waste-related impacts, 306-3 Waste generated, 306-4 Waste diverted from disposal, 306-5 Waste directed to disposal	
	Climate Change Management	201 Economic Performance	201-1 Direct economic value generated and distributed, 201-3 Defined benefit plan obligations and other retirement plans	4.2 Climate Change and Energy Management 4.4 Water Resources Management 4.5 Recycling
		302 Energy	302-1 Energy consumption within the organization, 302-3 Energy intensity, 302-4 Reduction of energy consumption	
		305 Emissions	305-1 Direct (Scope 1) GHG emissions, 305-2 Energy indirect (Scope 2) GHG emissions, 305-4 GHG emissions intensity, 305-5 Reduction of GHG emissions, 305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	
	GHG emissions	305 Emissions	305-1 Direct (Scope 1) GHG emissions, 305-2 Energy indirect (Scope 2) GHG emissions, 305-4 GHG emissions intensity, 305-5 Reduction of GHG emissions, 305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	4.2 Climate Change and Energy Management
	Energy and Resources Efficiency ★	301 Materials ★	301-1 Materials used by weight or volume, 301-3 Reclaimed products and their packaging materials	4.2 Climate Change and Energy Management 4.4 Water Resources Management 4.5 Recycling
		302 Energy ★	302-1 Energy consumption within the organization, 302-3 Energy intensity, 302-4 Reduction of energy consumption	
		303 Water and Effluents	303-1 Interactions with water as a shared resource, 303-2 Management of water discharge-related impacts, 303-3 Water withdrawal 303-4 Water discharge, 303-5 Water consumption	
Society	Recruitment and Retention	202 Market Presence	202-1 Ratios of standard entry level wage by gender compared to local minimum wage, 202-2 Proportion of senior management hired from the local community	6.1 Attraction and Retention of Talents
		405 Diversity and Equal Opportunity	405-1 Diversity of governance bodies and employees, 405-2 Ratio of basic salary and remuneration of women to men	
	Talent Development and Training ★	404 Training and Education ★	404-1 Average hours of training per year per employee, 404-3 Percentage of employees receiving regular performance and career development reviews	6.3 Talent Development
	Healthy and Safe Workplace ★	403 Occupational health and safety ★	403-1 Occupational health and safety management system, 403-2 Hazard identification, risk assessment, and incident investigation, 403-3 Occupational health services, 403-4 Worker participation, consultation, and communication on occupational health and safety, 403-5 Worker training on occupational health and safety, 403-6 Promotion of worker health, 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships, 403-8 Workers covered by an occupational health and safety management system, 403-9 Work-related injuries, 403-10 Work-related ill health	6.5 Healthy and Safe Workplace
	Employee Remuneration and Benefits	401 Employment	401-1 New employee hires and employee turnover, 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees, 401-3 Parental leave	6.2 Employee Remuneration and Benefits
	Human Rights, Equality and Inclusion	406 Non-discrimination	406-1Incidents of discrimination and corrective actions taken	6.4 Safeguarding Human Rights
		409 Forced or Compulsory Labor	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	
	Social Welfare and Environment Conservation	413 Local Communities	413-1 Operations with local community engagement, impact assessments, and development programs	6.6 Social Engagement
	Cultivation of Young Talents	(Topic chosen by ChipMOS)		6.1 Attraction and Retention of Talents
Governance	Corporate Governance ★	205 Anti-corruption ★	205-1 Operations assessed for risks related to corruption, 205-2 Communication and training about anti-corruption policies and procedures, 205-3 Confirmed incidents of corruption and actions taken	3.1 Corporate Governance 3.2 Ethical Management
		206 Anti-competitive Behavior ★	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	
	Sustainable Strategy and Vision ★	(Topic chosen by ChipMOS)		Message from the Chairman
	Risk Management	(Topic chosen by ChipMOS)		3.3 Risk Management
	Operational Performance ★	201 Economic Performance ★	201-1 Direct economic value generated and distributed, 201-3 Defined benefit plan obligations and other retirement plans	1.3 Operational Performance and Tax Governance
	Customer Service	418 Customer Privacy	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	5.1 Customer Service
	Sustainable Supply Chain	204 Procurement Practices	204-1 Proportion of spending on local suppliers	5.3 Supply Chain Management
		308 Supplier Environmental Assessment	308-1 New suppliers that were screened using environmental criteria, 308-2 Negative environmental impacts in the supply chain and actions taken	
		414 Supplier Social Assessment	414-1 New suppliers that were screened using social criteria, 414-2 Negative social impacts in the supply chain and actions taken	
Products	Product Quality ★	416 Customer Health and Safety ★	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	5.2 Product Quality 4.6 Green Products
		417 Marketing and Labeling ★	417-2 Incidents of non-compliance concerning product and service information and labeling, 417-3 Incidents of non-compliance concerning marketing communications	
	Diversified Products	(Topic chosen by ChipMOS)		1.2 Main Products and Services 5.2 Product Quality
	Intelligence factory	(Topic chosen by ChipMOS)		1.2 Main Products and Services 5.2 Product Quality

2.2.3.4 Boundary of Material Topics

ChipMOS examines the impact boundaries of 8 major issues from the perspective of technical services provided (Display Driver IC and Wafer Bumping, Memory IC and Logic and Mixed-Signal products) and the upstream and downstream value chain. The impact categories are divided into direct cause, indirect cause, and business partnership.

● Direct cause ■ Indirect cause ▲ Business partnership

Sustainability Issues		Material Topics	Value Chain Boundary							
			Organization			Upstream Industry			Downstream Industry	
			Driver IC	Memory	Mixed-Signal	Raw Materials	Equipment	Service Supply	Model	Customers
Environment	Environmental policy and management system		●	●	●	■	■		▲	
	Environmental Impact Mitigation	✓	●	●	●				▲	
	Climate Change Management		●	●	●	■	■		▲	▲
	GHG emissions		●	●	●	■	■		▲	▲
	Energy and resources efficiency	✓	●	●	●	■	■			▲
Society	Recruitment and Retention		●	●	●					
	Talent development and training	✓	●	●	●					
	Healthy and safe workplace	✓	●	●	●	■	■	■		
	Employee Remuneration and Benefits		●	●	●					
	Human Rights, Equality and Inclusion		●	●	●					
	Social Welfare and Environment Conservation		●	●	●					
	Cultivation of Young Talents		●	●	●					
Governance	Corporate Governance	✓	●	●	●					
	Sustainable Strategy and Vision	✓	●	●	●	■	■			
	Risk Management		●	●	●	■	■	■		
	Operational performance	✓	●	●	●	■	■			
	Customer Service		●	●	●	■	■		▲	▲
	Sustainable Supply Chain		●	●	●	■	■	■		
Products	Product Quality	✓	●	●	●	■	■	■	▲	▲
	Diversified Products		●	●	●	■	■	■		▲
	Intelligence factory		●	●	●		■			▲

2.2.3.5 Impact Management of Material Topics

Through 8 indicators (increase revenue/reduce cost/obtain capital/enhance customer trust/reduce goodwill risk/enhance cohesive force/exert social influence), ChipMOS assessed the impact of Material Topics on the Company and adopted mitigation measures and target management against the impact.

★ ChipMOS Material Topics
■ Highly correlated and actual positive impact ▲ Highly correlated and potential positive impact
● Moderately correlated and actual positive impact ◆ Moderately correlated and potential positive impact

Sustainability Issues		Significance to and Influence on ChipMOS						
		Increase/reduce revenue	Increase/reduce cost	Obtain/reduce funds/capital	Enhance/reduce customer trust	Reduce/enhance/ goodwill risk	Enhance/reduce cohesive force	Exert social influence
Environment	Environmental policy and management system				■	◆		▲
	Environmental Impact Mitigation ★				■	◆		■
	Climate Change Management				▲	◆		▲
	GHG emissions				▲	◆		▲
	Energy and Resources Efficiency ★				◆	◆		■
Society	Recruitment and Retention						■	◆
	Talent Development and Training ★	●					▲	
	Healthy and Safe Workplace ★					◆	▲	▲
	Employee Remuneration and Benefits						■	▲
	Human Rights, Equality and Inclusion				◆	◆	■	●
	Social Welfare and Environment Conservation				◆	▲		■
	Cultivation of Young Talents		●					▲
Governance	Corporate Governance ★	■	◆	■				
	Sustainable Strategy and Vision ★			◆	■			●
	Risk Management				■	▲		
	Operational Performance ★	●		■	◆			
	Customer Service	■			■	■		
	Sustainable Supply Chain		▲		▲	●		
Products	Product Quality ★	●			■	■		
	Diversified Products	■		●	◆			
	Intelligence factory	◆	▲		◆			

2.3 Sustainability Objective Management and SDGs

In accordance with the Company's ESG development direction and the results of major issues, ChipMOS focuses on 10 major SDGs to respond and set measurable and timely internal management objectives.

Middle Term → Long-term

● Ahead of schedule ■ On track as planned ▲ More effort needed

Sustainability Issues	Goal Setting	Base Year	Targets in 2025	Targets in 2030	Progress as of 2023	Achievements in 2023	Corresponding SDGs
Governance							
Corporate Governance	Corporate Governance evaluation level	-	Top 35%	Top 5%	■	Top 20%	-
Sustainable Supply Chain	Average conformity of RBA audit results	-	98.5%	98.5%	●	98.5%	12, 17
Information Security Risk Management	ISO 27001 annual audit deficiency improvement completion rate	2020	100%	100%	■	100%	-
	Operation interruption time caused by major information security incidents	2020	<2 hours	<2 hours	■	No major incidents led to operation disruption in 2023	-
Ethical Management	a. Corruption incidents and violations of laws in social and economic fields	-	a. 0 pieces	a. 0 pieces	■	a. 0 cases	16
	b. Conduct promotion on colleagues' professional ethics and compliance with laws and regulations by e-mail	-	b. 4 times	b. 4 times	■	b. 4 times	
	c. Completion rate of adding Regulations Governing Professional Moral Conduct to suppliers' purchase contracts[Note 1]	-	c. ≥96% [Note 1]	c. ≥96%	■	c. 97%	
Customer Service	Overall Score of Customer Satisfaction	-	3.8	4.0	●	4.3	-
Risk Management	a. Number of major economic, environmental and social incidents	-	a. 0 pieces	a. 0 pieces	■	a. 0 pieces	-
	b. Implementation rate of the Company's risk control strategy	-	b.100%	b.100%	■	b.100%	-
Operational Performance_ Organizational Strategy/ Operational Layout	a. Focus on the demand for automotive electronics	-	Maintain competitive advantages and grasp market demands	We continue to maintain competitive advantages and grasp market demands	■	In 2023, automotive electronics accounted for 21.3% of annual revenue	-
	b. Expand the scope of the non-TV related and non-driver related packaging and testing business	-	Expand the business scope	Continue expanding the business scope	■	Continue to actively grasp market demands	-
Products							
Diversified Products_ Product Layout	NPI success rate	2020	95%	95.5%	●	Qualify Project 962 cases IPM Projects 918 cases NPI success rate 95.4%	-
Driver CP Intelligence Factory	Production efficiency improvement	2020	1.0%	1.5%	●	The machinery production efficiency in the automated areas was higher than that of non-automated areas by approximately 2.0% on average	12
Product Quality	Passing third-party ISO 9001/IATF 16949/ISO 17025 certification	-	100% fab	100% fab	■	100% fab	12
	Passing IECQ QC 080000 third party verification	-	Passed	Passed	■	Passed	12
	Number of customer complaints about abnormal hazardous substances in products	-	0 pieces	0 pieces	■	0 pieces	12
	Procurement of non-conflict minerals and raw materials	-	100%	100%	■	100%	12
	Process Improvement Team (PIT) proposal achievement rate	-	100%	100%	●	173%	12

Note 1: Considering that certain contracts with suppliers are standardized and cannot be modified, and that the inclusion of additional clauses related to Regulations Governing Professional Moral Conduct aims to encourage suppliers to voluntarily comply, the target is set to 96% to be accomplished together with the suppliers.

Sustainability Issues	Goal Setting	Base Year	Middle Term Targets in 2025	Long-term Targets in 2030	Progress as of 2023	Achievements in 2023	Corresponding SDGs
Environment							
Environmental Impact Mitigation	Reused rate of packaging materials (Carton & rubber bands)	2019	6%	10%	●	1. Carton: Reused rate: 118%, an increase of 4% compared to 2022. 2. Rubber bands: Reused rate: 93%	13
Water Resources Management	Annual water saving rate ≥ 20% compared with the Base Year (Cumulative ≥ 1.35 million tons)	2015	Water saving rate ≥ 25% compared with the Base Year (Cumulative ≥ 1.74 million tons)	Water saving rate ≥ 30% compared with the Base Year (Cumulative ≥ 2.87 million tons)	●	Water saving rate ≥ 30.78% (Cumulative ≥ 1.378 million tons)	6
Energy and resources efficiency	Company-wide Energy saving rate	2018	5%	10%	■	7.6% (cumulative) from 2019 to 2023	7, 13
Society							
Recruitment and Retention	a. Implementation rate of RBA internal management objectives	2021	a. 100%	a. 100%	■	a. Implementation rate of RBA internal management objectives 100%	8
	b. Renewal rate of Filipino employees	2021	b. 80%	b. 83%	■	b. 88.5%	8
Human Rights, Equality and Inclusion	a. Proportion of disadvantaged people in posts for employees with physical and mental disabilities	2021	a. 50%	a. 50%	▲	a. 35.71%	8
	b. Continuous inclusion and protection of diversified employees	2021	b. Continuous employment of foreign spouses and evaluation diverse groups and employment types	b. Continuous employment of foreign spouses and evaluation diverse groups and employment types	▲	b. Employees include foreign spouses, foreign labors, and the disabled	
Cultivation of Young Talents	a. Retention rate of Interns	2021	a.40%-50%	a.50%-60%	■	a. Retention rate 53.45%	8
	b. Expand and maintain internship cooperation opportunities	2021	b. Continue expanding and maintaining internship cooperation	b. Continue expanding and maintaining internship cooperation	■	b. Cooperating with original schools, and joining the government's specialized class to expand the source of young talents.	
Healthy and Safe Workplace_ Health Management	a. Better than the annual employee health check rate as specified by laws and regulations	-	a. 99.5%	a. 99.5%	■	a. 99.8%	3
	b. Completion rate of the implementation of grading management for abnormal health checks	-	b. 100%	b. 100%	■	b. 100%	
	c. Number of health promotion activities conducted	-	c. 35 sessions	c. 38 sessions	●	c. 41 sessions	
Employee Remuneration and Benefits	a. Organizing at least 12 welfare activities each year [Note 2]	2019	12 sessions	12 sessions	●	20 sessions	8
	b. Proportion of job balance activities		b. ≥25%	b. ≥25%	●	35%	
	If there is any profit in the year, 10% shall be set aside as employee compensation	-	10%	10%	■	10%	8
	Rate of basic conditions in the basic salary and compensation for men and women	-	1:1	1:1	■	1:1	8
Social Welfare and Environment Conservation	Number of people directly benefited from social engagement	-	≥ 1500 people/year	≥ 1500 people/year	■	1,722 people	3, 4, 11
	Cumulated number of volunteers for social engagement	-	≥ 203,000 volunteers	≥ 288,000 volunteers	■	173,647 people	-
Talent development and training	Success rate for internal transfer coordination	2020	60%	70%	■	44.35%	4
	Internal talent promotion rate	2020	60%	70%	■	17% [Note3]	4
	Rate of annual training plan courses adopting diversified training modes	2020	60%	75%	●	63%	4

Note 2: The original target of 5% growth rate every 5 years set for employee participation in welfare is adjusted to a more appropriate target after considering the number of employees, their attributes, and preferences, in order to align with the original intention of providing extensive and diverse options of welfare activities.

Note 3: In 2023, there were a total of 12 managerial vacancies, of which 8 were new highly specialized positions offered to meet the needs of the organization. Therefore, the internal promotion rate was lower than 46% of the previous year.

2.4 Sustainable Value Management

ChipMOS's sustainable value management mode takes six types of capital (finance, wisdom, manufacturing, nature, labor and society) as resource inputs. Through the core operation and management foundation of the Company, ChipMOS faces the upstream, self-operation and downstream stages of ChipMOS's value chain and all ChipMOS stakeholders, continuously creates value and achieves a balance in economic development, environmental protection and social activities.

*For more details on the correlation and explanation of additional SDG sub-goals, please refer to Appendix 5: United Nations Sustainable Development Goals (SDGs) Reference Table

ChipMOS's Sustainable Value Management Mode

ChipMOS Sustainability Vision

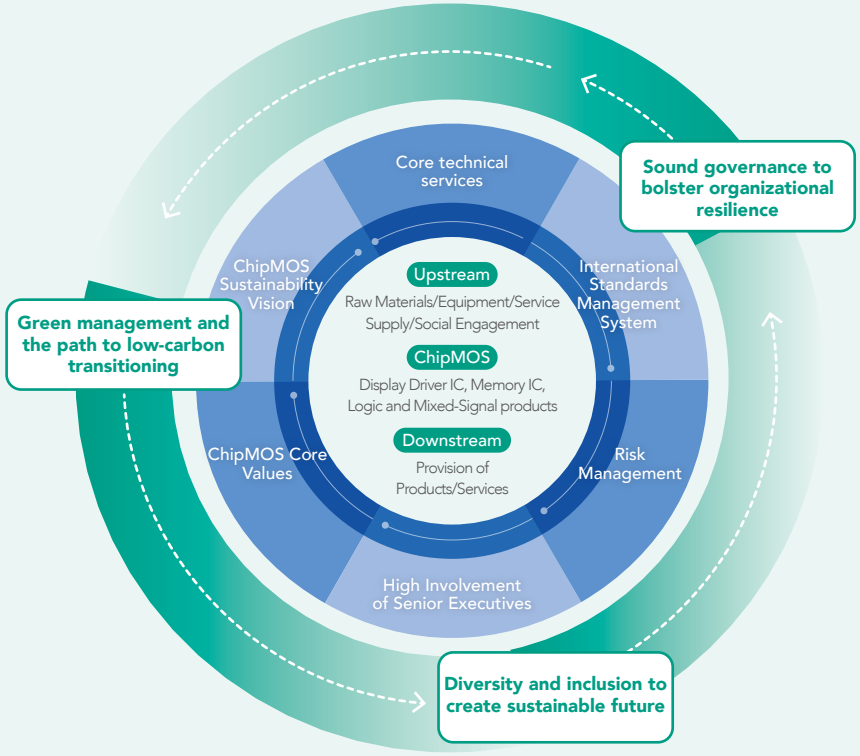
- Steady and healthy Corporate Governance to ensure shareholders' rights and interests
- Leader of semiconductor packaging test service technology
- Establish long-term partnerships with customers
- Practice green production and green processes
- Cherish the value of employees and cultivate internal elites
- Focus on public welfare investment and actively cooperate with local governments

Input Six types of capital

Financial Capital	Sound financial management is the key basis for maintaining the daily operation of the organization and providing product manufacturing and services. ChipMOS Capital: **NT$7.27** billion
Intellectual Capital	Accumulate experience and technology in the field of semiconductor packaging and testing, and continuously invest in innovative R&D and patents. R&D funds: **NT$1.09** billion
Manufacturing Capital	Maintain manufacturing equipment and plant related settings, and provide products and services that meet customer needs. Cost of adding and maintaining plant and equipment: **NT$3,228,471** thousand
Natural Capital	Gradually improve the effective use of energy resources, and promote the maximization of benefits through source input management and waste reduction. Cost of energy-saving actions: **NT$ 74,590,000** Cost of water resource management: **NT$88,735,500** Cost of waste management: **NT$22,876,100** Cost of air pollution prevention and control: **NT$14,303,500**
Human Capital	Attracting high-quality talent and strengthening talent cultivation have become the key capital of the core competitiveness of enterprises. Employee salary and welfare expenses: **NT$5.84** billion
Social Capital	ChipMOS maintains long-term partnerships with stakeholders, and gives back to society and exerts social influence through social engagement. Total investment in social engagement: **NT$22,651,727**

Process Core operation and management

Sustainable strategic blueprint ➡ Goal setting ➡ Creating sustainable values



Stakeholders

Shareholders | Customers | Employees | Suppliers | Government Agencies | Community Groups

Output Sustainability performance

Financial Capital
- Consolidated Revenue: **NT$21.36** billion
- Consolidated After-Tax Surplus: **NT$1.89** billion
- Return on shareholders' equity: **7.62%**

Response Section: Operational Performance

Intellectual Capital
- Valid patents: **565** items
- Valid trademark rights: **53** items

Response Section: Main Products and Services

Manufacturing Capital
- Total output value: **NT$20,070,280**

Response Section: Operational Performance

Natural Capital
- Energy Saving Rate: **2.77%**
- As per the energy saving plan, emissions reduced by: **6,568** tCO_2e
- Total water intake reduced by: **9.0%**
- Wastewater discharge reduced by: **20.19%**

Response Section: Environmental Friendliness

Human Capital
- Headcount: **5,410** persons
- Employee average Monthly Turnover Rate: **0.94%**
- Training Hours per Employee: **123.6** hours

Response Section: Talent Attraction and Retention, Talent Development

Social Capital
- Income tax payment: **NT$183,215** thousand
- Social Influence: **42** organizations benefited and **1,722** people directly benefited

Response Section: Social Engagement

Impact Value creation of ChipMOS

Leading Brands	· **No. 2 in the World -** Display Driver IC Assembly test capacity · **Excellent Quality -** High tech and highly trusted packaging and testing solutions
Corporate Governance	· **Board of Directors Functions -** Implement the Board of Directors diversification policy and implement the Board of Directors performance evaluation mechanism · **Transparent Information Disclosure -** More than 137 public messages
Customers Come First	· **Product Quality -** All fabs pass four quality related management systems · **Customer Satisfaction -** Overall score 4.3 (out of 5)
Supply Chain Partners	· **Support Local Procurement -** The proportion of local procurement expenditure is 63% · **Sustainable Growth -** Drive suppliers should purchase 100% of non-conflict minerals
Environmental Sustainability	· **Reuse of Water Resources -** Nearly 5,019 international standard swimming pools have been saved in recovered water over 16 years · **Energy Saving and Carbon Reduction -** 47 energy-saving schemes, with a total carbon reduction of 6,568 tCO_2e
Friendly Workplace	· **Protect Labor Rights and Interests -** 100% compliant with human rights and laws and regulations · **Salary and Benefits -** Continuously optimizing the salary level of all staff · **Employees Demonstrating Strengths -** The average training and learning hours of each employee are 123.6 hours · **Healthy Workplace** - Employee health examination is implemented every year, which is superior to the diversified screening items in the industry (31 items in total) - Rotational screening tests held for Top 10 cancers every year
Social Integration	· **Join Hands with Schools/Institutions -** 42 institutions that benefited directly · **Expand Influence -** Continuously implement the environmental protection plan, with the participation of suppliers

CHAPTER

3

Sound Governance

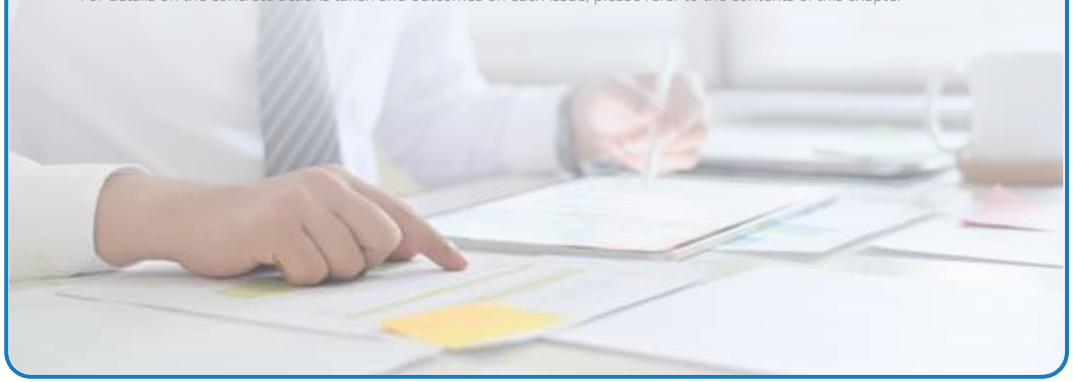


Medium-and Long-term ESG Goals

Governance

	2025(Mid-term)	2030(Long-term)	Outcomes for 2023
Corporate Governance	Top 35% in the Corporate Governance evaluation	Top 5%	Top 20%
Ethical Management	Zero corruption incidents and violations of laws in social and economic fields	0 pieces	0 pieces
Risk Management	Zero major economic, environmental and social incidents	0 pieces	0 pieces

*For more details on our governance, please refer to 2.3 Sustainability Objective Management and SDGs
*For details on the concrete actions taken and outcomes on each issue, please refer to the contents of this chapter



Management Policy

Policy

Fulfill the responsibility of corporate management, protect the interests of shareholders and related stakeholders; comply with laws and regulations and ethical corporate management while actively prevent the unethical conducts; establish the risk control mechanism and maintain the stable corporate operation.

Commitment

On the foundation of the core values, strictly abide with the ethics and insist the transparent operation; establish the effective supervisory mechanism and continuously improve the corporate competitiveness and sustainable operations.

Resources

- Board of Directors, Operational Management
- Functional committees, ESG Committee and Information Security Management Committee

Specific Actions

1. Implementation of diversification by the Board of Directors
2. Board of Directors performance evaluation
3. Ethical management and promotion of legal compliance
4. Routine implementation of risk identification assessment and management
5. Promotion of cybersecurity awareness and training to bolster employee awareness

Evaluation Mechanism

- Supervision and evaluation by competent authorities
- TWSE Corporate Governance evaluation
- Internal audit and customer audit
- Sustainability evaluation by investment institutions
- Information security rating

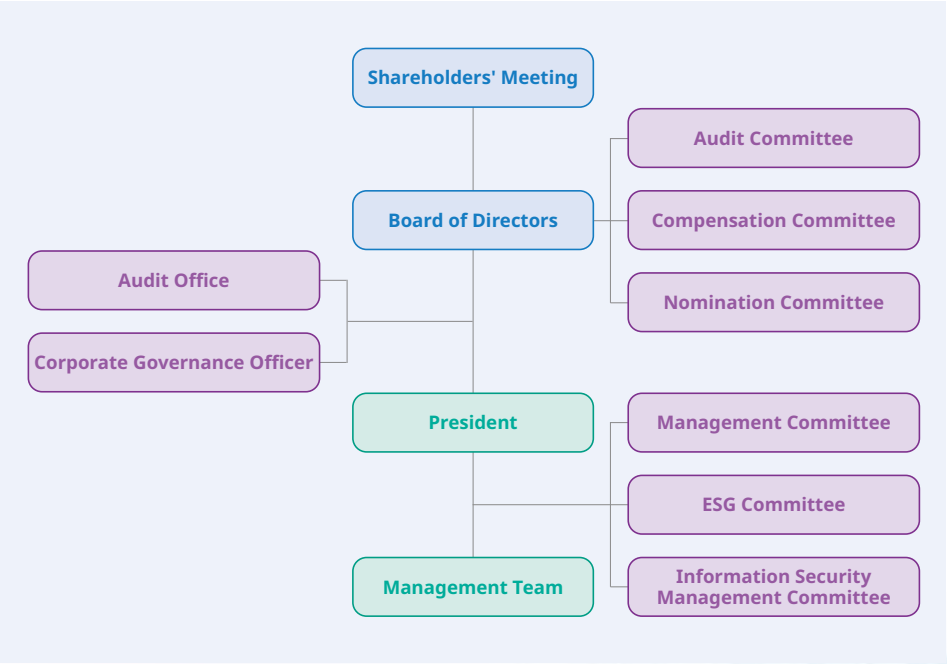
3.1 Corporate Governance GRI 2-9~2-20 GRI 405-1

3.1.1 Governance Organization

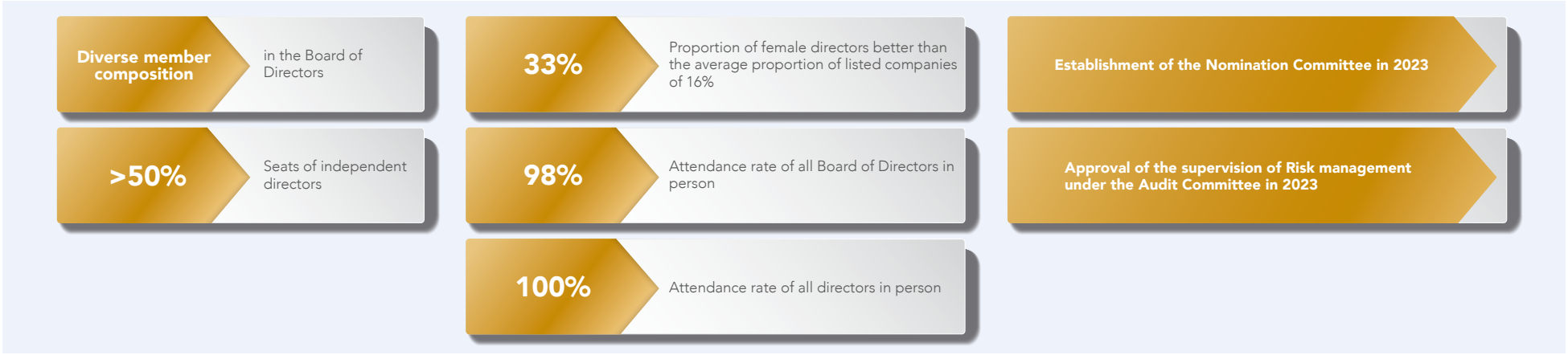
ChipMOS follows the "Articles of Incorporation" and "Corporate Governance Best Practice Principles" and relevant laws and regulations, formulates the Corporate Governance structure, establishes a good Corporate Governance system, abides by laws and regulations, and operates in good faith to ensure the steady operation and growth of the Company. ChipMOS strengthens the supervision and management of the Company's operation through the Board of Directors, strives to protect the rights and interests of shareholders and other stakeholders, actively communicates and interacts with stakeholders, continuously improves information transparency and implements sustainable corporate development, which are the main priorities for development promoted by Corporate Governance.

In 2024, according to the results of the 10th Corporate Governance evaluation announced by the Taiwan Stock Exchange, ChipMOS ranked Top 20% of TWSE listed companies and Top 20% of TWSE/TPEx listed companies in the electronic category with market value of NT$10 billion or more." ChipMOS will continue strengthening Corporate Governance management, including safeguarding shareholders' rights and interests, strengthening the operation of the Board of Directors, strengthening internal control Risk management, improving information transparency, and implementing sustainable development, so as to actively improve the level of Corporate Governance and allow stakeholders to understand the effectiveness of the implementation of various policies.

Corporate Governance Organizational Structure



3.1.2 Giving Full Play to the Functions of the Board of Directors



Board of Directors

The Board of Directors of ChipMOS is the Company's highest governance body and the center for major business decisions. It is responsible for guiding the Company's strategies, supervising the management and sustainable development of the Company. The Board exercises its authority by following the Articles of Incorporation and relevant regulations to ensure that the Company complies with the laws and regulations and is accountable to the Company and the shareholders' meeting. The highest governance body had a total of 10 communication of critical concerns in 2023, including: net-zero emission development, the status of Procedures for Ethical Management and Guidelines for Conduct, performance evaluation of the Board, qualification review of independent directors, result of risk identification and management, implementation of ESG goals (including communication with stakeholders), and intellectual property management.

The ChipMOS Board of Directors has 9 directors with a term of office of 3 years. The election method of the directors (including independent directors) adopts the candidate nomination system, and directors are elected from the candidate list at the general meeting through a fair, impartial and open election process. The Board of Directors has 5 independent directors, accounting for 56% of all directors, and follows relevant laws and regulations to judge and evaluate the independence of independent directors. 3 female directors (including 2 independent directors), accounting for 33% of all directors, better than the average proportion of female directors of the Boards of Directors of listed companies of 16%.

In order to maximize the value of the Company, we must fully grasp the operation information and conditions, so as to increase the operational efficiency and make decision-making more smoothly. The Chairman of the Company is also the President. The Company increased the number of independent directors to 5 and set up functional committees with independent directors as the members. Based on their independence and professional competence, independent directors advise the Board of Directors on decision-making and enhance the supervision and decision-making quality of the directors. More than half of the Company's directors do not concurrently serve as an employee or managerial officer of the Company.

ChipMOS has established a Code of Ethical Conduct for directors, managers and other employees to abide by. Any violations should be reported to independent directors or other appropriate supervisors for further handling. If a director or managerial officer is exempted from compliance, the exemption must be resolved by the Board of Directors and disclosed on the Market Observation Post System in a timely manner. In principle, the Board of Directors shall be convened no fewer than once per quarter. In case of emergency or at the request of more than half of the directors, the Chairman may convene it at any time. In 2023, the Board of Directors held 7 meetings. 98% of the directors attended the meeting in person, effectively fulfilling their supervision function. Its operation and implementation were not corrected by the competent authority in 2023.

Note 1: The term of the 10th Board of Directors is from 2021/7 to 2024/7, and the re-election of directors will be held at the shareholders' meeting on 2024/5. For the list of the members of the 11th Board of Directors, please refer to ChipMOS website.

The Board of Directors is mainly responsible for the deliberation and resolution related to operations, and the guidance and supervision of the management team

- **Deliberation on business policies and medium and long-term development plans**
- **Review and supervision of the implementation of annual business plans**
- **Deliberation on plans for surplus distribution or loss make-up**
- **Appointment of managers**
- **Supervision of the planning and implementation of the Company's sustainable development**
- **Convening of the shareholders' meeting and conducting of business reports and resolutions**
- **Other businesses that should be handled according to law**



*For more details, please refer to ChipMOS Articles of Incorporation

Implementation of diversification by the Board of Directors

In accordance with ChipMOS's "Corporate Governance Best Practice Principles," diversification should be taken into account for the composition of the Board of Directors. Directors concurrently serving as managers of the Company should not exceed one-third of the number of the directors. Appropriate diversified policies should be established for the operation, the operation type, and the development needs of the Board of Directors. For these, it is advisable to include but not limited to the standards for the following 2 aspects:

(1) Basic conditions and values: Gender and age; the percentage of female directors constitute one-third of the number of directors.
(2) Professional knowledge and skills: professional background, professional skills, and experience in the industry.

The ChipMOS Board of Directors members have diverse backgrounds and are composed of members with rich industrial operation experience and academic experience, including professional backgrounds in business management, electrical engineering, electronics, financial and accounting, law and etc. The ChipMOS Board of Directors has 9 directors, including 5 independent directors (accounting for 56% of all directors), and complies with relevant laws and regulations for the judgment and evaluation of the independence of independent directors. The average term of office of all directors is 7 years. Among them, the term of office of independent directors is less than 3 years for 3 seats, 3-9 years for 1 seat, and more than 9 years for 1 seat. The term of office of more than half of independent directors does not exceed 3 consecutive terms. ChipMOS has 2 directors that concurrently serve as managers of the Company, accounting for 22% of all directors, no more than one-third of the number of directors. In addition, ChipMOS pays attention to gender diversity in the composition of the Board of Directors. Among these 9 directors, there are 3 female directors, accounting for 33% of all directors. The Company's implementation of the Board of Directors member diversification policy and its implementation are also disclosed in ChipMOS Annual Report and on the ChipMOS website.

Specific Management Objectives and Achievement of the Diversification Policy

Management Objectives	Achievement
Independent Directors form the majority of all Directors.	✓
Number of female Directors reach one-third of all Directors.	
Number of Directors who concurrently serve as Company managerial officer do not exceed one-third of all Directors.	

Implementation of Diversity among the Board of Directors Members

				Age			Professional Knowledge and Skills							
Name	Position	Gender	Concurrently Serving as an Employee of the Company	51-60	61-70	71-80	Operation Management	Risk management/Crisis management	Industry Knowledge	Leadership/Decision making capacity	Sustainability	Accounting and financial analysis	Legal	Sales/ Marketing
Shih-Jye Cheng	Chairman	Male	✓		✓		✓	✓	✓	✓	✓	✓		✓
Kun-Yi Chien	Director	Male			✓		✓	✓	✓	✓	✓			
David Chang	Director	Male		✓			✓	✓	✓	✓	✓			✓
Silvia Su	Director	Female	✓	✓			✓	✓	✓	✓	✓	✓		
Chin-Shyh Ou	Independent Director	Male			✓		✓	✓	✓	✓	✓	✓		
Kuei-Ann Wen	Independent Director	Female			✓		✓	✓	✓	✓	✓			
Hui-Fen Chan	Independent Director	Female		✓			✓	✓	✓	✓	✓		✓	
Yeong-Her Wang	Independent Director	Male			✓		✓	✓	✓	✓	✓			
Hong-Tzer Yang	Independent Director	Male			✓		✓	✓	✓	✓	✓			

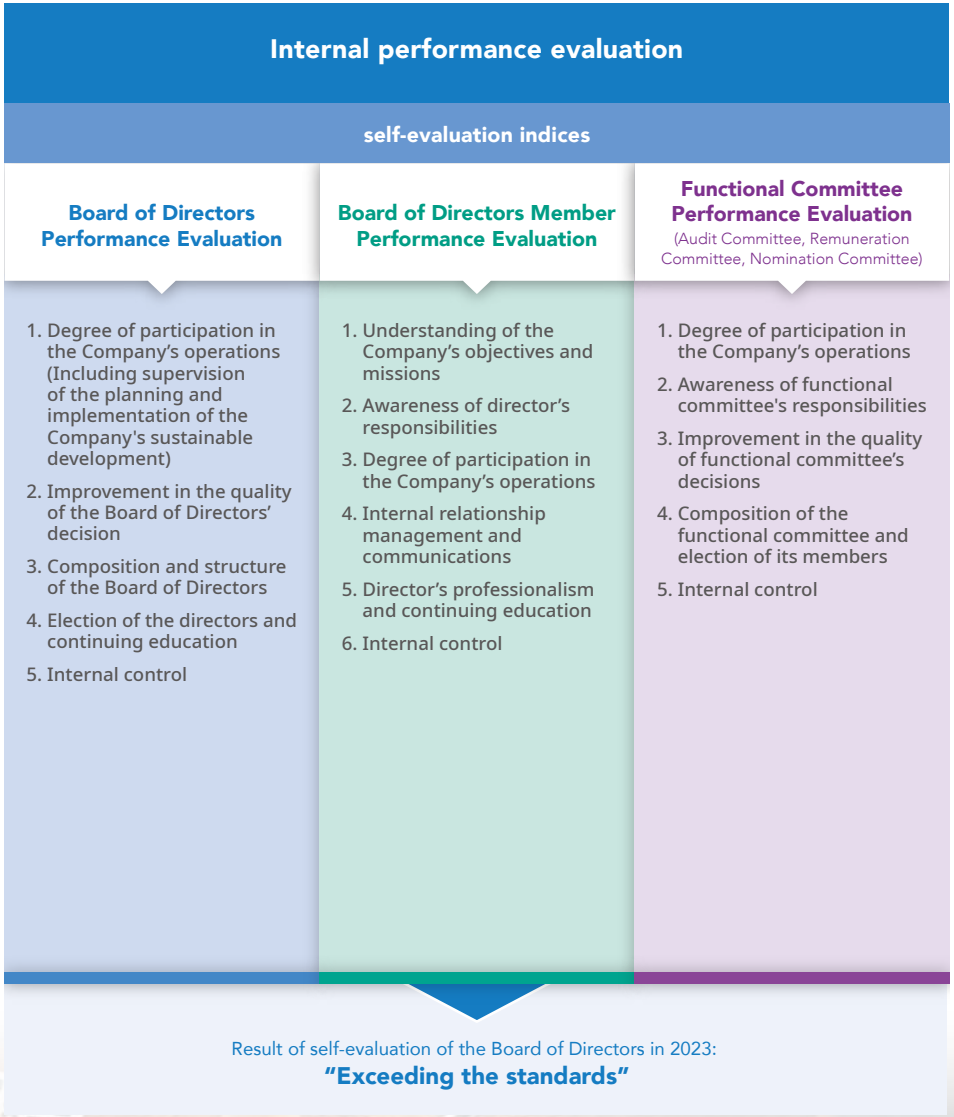
Note: Please refer to the ChipMOS Annual Report (3. Corporate Governance Report), ChipMOS' official website, or the Market Observation Post System for the introduction, attendance and continuing education of the members of the Board of Directors

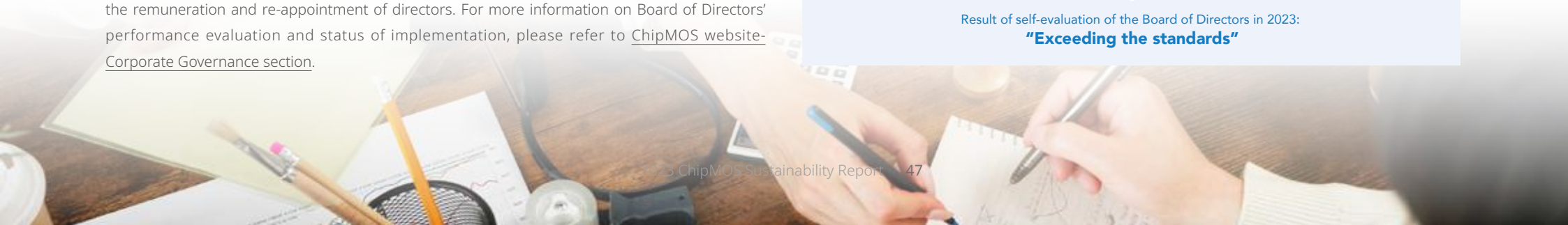
Board of Directors Members' Continuing Education

Every director at ChipMOS duly complies with legal requirements by engaging in continuous education on a yearly basis. In 2023, the total number of educational hours reached 90; the directors were engaged in continuous education for up to 90 hours in the most recent 2 years. Directors also actively participate in training courses focused on corporate social responsibility and sustainable development. Notably, the total annual hours dedicated to sustainability-related courses by directors have risen from 46 hours to 62 hours in the past two years. This commitment ensures that directors possess the necessary knowledge and skills to make informed decisions and provide effective oversight in areas encompassing the economy, environment, and society. The status of continuing education for Board of Directors members in 2023 can be found on ChipMOS website.

Board of Directors Performance Evaluation

To enhance Corporate Governance and improve the effectiveness and efficacy of the Board of Directors, ChipMOS conducts annual performance evaluation of the board as a whole, individual directors and functional committees in accordance with the "Rules for Performance Evaluations of the Board of Directors". In addition, a performance evaluation is conducted by an external professional independent institution or a team of external experts and scholars at least once every 3 years. The self-evaluation conducted by the Board of Directors in 2023 showed "exceeding the standards," which will be reported to the Board meeting in the first quarter of 2024 as a reference for continuous enhancement of the Board's operational effectiveness. In addition, we examine the extent to which the Board of Directors and individual board members have participated in sustainable development (ESG) issues through performance evaluation, regularly confirm the implementation status of sustainable development issues, and understand related risks and possible response strategies, so that the Board of Directors and board members can effectively understand and supervise the deliberation and decision-making of matters related to sustainable development. The results of the performance evaluation are used as a reference for the remuneration and re-appointment of directors. For more information on Board of Directors' performance evaluation and status of implementation, please refer to ChipMOS website-Corporate Governance section.



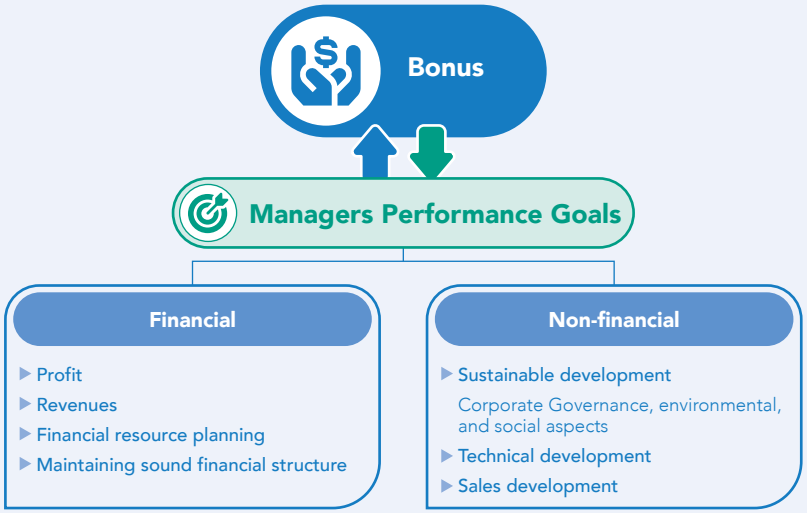


Audit Committee	Remuneration Committee	Nomination Committee
Organization		
• **Established on June 28, 2007.** • **The <Audit Committee Charter> was formulated with the approval of the Board of Directors.** • **Members of the Committee:** it is composed of all independent directors, and at least one person should have accounting or financial expertise. Chin-Shyh Ou, Independent Director (Convener) Kuei-Ann Wen, Independent Director Hui-Fen Chan, Independent Director Yeong-Her Wang, Independent Director Hong-Tzer Yang, Independent Director	• **The <Remuneration Committee Charter> was approved by resolution of the Board of Directors, and Established on March 29, 2012.** • **Members of the Committee:** 3 independent directors Yeong-Her Wang, Independent Director (Convener) Chin-Shyh Ou, Independent Director Kuei-Ann Wen, Independent Director	• **Established on November 2, 2023** • **The <Nomination Committee Charter> was formulated with the approval of the Board of Directors.** • **Members of the Committee:** 3 independent directors Yeong-Her Wang, Independent Director (Convener) Hui-Fen Chan, Independent Director Hong-Tzer Yang, Independent Director
Main Responsibilities		
• Assist the Board of Directors in performing supervision duties. • Exercise the functions and powers prescribed by the Company Act, the Securities and Exchange Act and relevant laws and regulations. • Supervise the effective implementation of internal control. • Review major asset or derivative transactions, capital loans, endorsements or guarantees, and matters involving the interests of the directors. • Appointment, dismissal, remuneration, independence and performance evaluation of the CPAs. • Appointment and removal of the Financial, Accounting or Internal Audit Officer. • Supervise and audit the proper expression of the Company's financial statements. • Supervise the Company's compliance with relevant laws and regulations and the management and control of existing or potential risks of the Company.	• Formulate and regularly review the performance goals of directors and managers and the policy, system, standard and structure of the remuneration to them objectively and in a professional manner, and make recommendations to the Board of Directors as a reference for it to make decision. • Regularly assess the achievement of performance goals set for the directors and managers and determine the contents and amount of their individual remuneration with reference to the results obtained in accordance with the performance assessment criteria, normal payment level of other companies in the industry, personal performance, and their correlation with the operating performance and future risk.	• Formulate standards for the professional knowledge, skills, experience, gender diversity, and independence of the Board of Directors members, and identify, review, and nominate director candidates accordingly. • Establish and develop the organizational structure of the Board of Directors and functional committees. • Establish and regularly review the succession plan for directors.
Implementation Status		
• Hold a meeting at least once a quarter and fully communicate with the Company's internal audit unit and CPAs. • 6 Audit Committee meetings were held in 2023. The average attendance rate of the independent directors was 97%. • The attendance of each independent director at the meeting is disclosed in the ChipMOS Annual Rpeort.	• Review the result of the performance evaluation of the Board of Directors and assess the of achievement status of the performance goals set for the directors and managers. • Determine the contents and amount of the incentive bonus with reference to the salary level of other companies in the industry. • 6 Remuneration Committee meetings were held in 2023. The average attendance rate of the independent directors was 94%. • The attendance of the 3 independent directors at the meeting is disclosed in the ChipMOS Annual Rpeort.	• One meeting was held in 2023, with 100% attendance of independent directors. • The attendance of each independent director at the meeting is disclosed in the ChipMOS Annual Rpeort.

Board of Directors and Link of Managers' Remuneration to ESG Performance

The Remuneration Committee and the Board of Directors regularly evaluate and review the performance and remuneration adequacy of directors and managers. In addition to factoring in industry salary levels, individual performance achievements, and contributions to the Company, they also take into account the overall Operational performance of the Company, future industry risks, and development trends to provide reasonable compensation. The Company's independent directors are paid monthly and do not participate in the distribution of annual directors' remuneration. The compensation for executives includes fixed pay and variable pay. The variable pay includes a "performance bonus plan" that is based on the Company's annual business performance, financial condition, and individual performance. The performance evaluation for executives takes into account not only job-related performance but also includes indicators related to financial performance, internal operations, technical research and development, and customer management.

In addition, the performance evaluation items of the managers include various indicators such as Corporate Governance, sustainable energy/resource utilization and management, talent cultivation, and social engagement. Variable remuneration is approved based on the Company's operating results and individual performance. Overall, the personal goals of executives are closely aligned with the Company's long-term and short-term business goals and shareholder interests, making sustainable business operations a common goal for the organization. The 2023 remuneration of directors and managers is reviewed by the Remuneration Committee and then submitted to the Board of Directors for approval. In addition, a "performance-linked remuneration claim policy" for senior executives has been established to improve Corporate Governance and financial soundness. For more information on relevant compensation and remuneration policies, please refer to ChipMOS 2023 Annual Report.



Corporate Governance Officer

ChipMOS has set up a Corporate Governance officer according to law. He/she is mainly responsible for handling matters related to Board of Directors and shareholders' meetings according to law, preparing minutes for the meetings, assisting directors in taking office and engaging in continuing education, providing directors with the materials needed to perform their duties, and assisting directors to comply with the relevant laws and regulations. Ms. Silvia Su, Vice President of the Finance & Accounting Management Center of the Company, serves as the Corporate Governance Officer, and her qualifications meet the requirements of "Corporate Governance Best Practice Principles". She has completed professional training hours every year according to the law. For information on the Corporate Governance operations and continuing education of the Corporate Governance Officer, please refer to ChipMOS website- Corporate Governance section.

Internal Audit

ChipMOS has established "Audit Office" as a special unit under the Board of Directors, which is responsible for inspecting the implementation of the Company's internal control system, and providing internal control consultation and improvement suggestions. The appointment and removal of the audit supervisor is approved by Audit Committee and the resolution of the Board of Directors. The performance assessment of the audit supervisor is determined by the Chairman, and the Remuneration Committee are proposed by the Remuneration Committee and decided by the Board of Directors. The appointment, assessment, and compensation of other internal auditor are approved by the Chairman upon the report of the audit manager.

The Audit Office reports the implementation of internal control to the Board of Directors and the Audit Committee at least once a quarter. In 2023, it reported 7 times to the Board of Directors and 6 times to the Audit Committee. It also discussed internal control and other issues of concern with independent directors through email, meeting/forum. One separate meeting was held in 2023. For the communication between independent directors and the internal Audit Director and accountants, please refer to ChipMOS website- Corporate Governance section.

3.2 Ethical Management

GRI 2-25 | GRI 2-26 | GRI 2-27 | GRI 205-1~205-3 | GRI 206-1 | SASB TC-SC-520a.1

3.2.1 Policies and Norms

ChipMOS is committed to adhering to the principles of "honesty and integrity" when engaging in all business activities, strictly abiding by government laws and regulations and implementing laws and regulations, and adhering to five aspects: Corporate Governance, securities laws and regulations and insider trading, protection and fair competition of intellectual property rights, environmental protection, safety and health laws and regulations, and labor laws and regulations. Through this, ChipMOS can maintain the Company's reputation, abide by business conduct and ethics, and engage in business activities based on the principles of fairness, honesty, trustworthiness and transparency, and implement the ethical management policy and actively prevent dishonest behavior.

In order to strengthen Corporate Governance and improve the internal control mechanism, the "Regulations Governing Professional Moral Conduct," “Code of Ethical Conduct,” and "Procedures for Ethical Management and Guidelines for Conduct" are formulated to declare and require all employees to follow the same, and promote the core values of honesty, integrity and responsibility to all employees through various specific actions.

3.2.2 Implementation

100%

- Complete anti-corruption risk assessment for all operating sites
- All the directors have signed the Ethical Management Policy Statement, and the senior executives have signed the Commitment to Regulations Governing Professional Moral Conduct.
- Ethical integrity, professional ethics and compliance with relevant regulations is promoted to all employees
- Each newcomer shall sign the Letter of Commitment to the Regulations Governing Professional Moral Conduct when coming on board

Reporting and Protection

- Formulate the protection system for whistleblowers of fraud, encourage employees to contact the Audit Committee or President anonymously if they find that there are unethical and improper behaviors in the Company, take appropriate protective measures to protect whistleblowers, and prohibit managers from taking adverse personnel punishment against former employees. If a whistleblower is punished by adverse personnel punishment, the Audit Committee may order the Company to take measures such as restoring their original position or providing compensation.
- Set up an "Audit Committee Opinion Box" (Audit_committee@chipmos.com) independent of the management team, so that employees, customers and third-party manufacturers can directly report to the Audit Committee and appeal and report illegal and improper events or damages to their own rights and interests. 2 whistle blowing events reported in 2023.
- In 2023, there were 0 corruption events, no legal anti-competitive behavior, antitrust and monopoly, and no violations of laws and regulations in social and economic fields.

Risk Assessment and Advocacy Actions

- According to the corruption risk assessment of all ChipMOS operating sites, no significant risks were found in 2023.
- All 9 directors have signed the Ethical Management Policy Statement, and all senior executives have signed the Commitment to Regulations Governing Professional Moral Conduct.
- The relevant policy documents are available on the Company's internal website for all employees to consult at any time.
- In 2023, all 736 newcomers have signed the Commitment to Regulations Governing Professional Moral Conduct
- Conducted relevant education and training on professional ethics and compliance with laws and regulations in the form of physical/online courses or e-mail:
  - The Company has issued 4 promotional letters to all employees
  - RBA Code of Conduct course had a total of 2607 participants and 521.4 person hours.
  - A total of 693 employees participated in the education and training for newcomers (including RBA courses), with a total of 774.9 person hours.

Joint Compliance with Suppliers

- The ChipMOS e-Commerce Platform establishes the terms and conditions of the Regulations Governing Professional Moral Conduct and the notice of reporting mailbox, so that suppliers can immediately know the above information to facilitate reporting.
- In order to implement the ethical management policy, when signing purchase contracts with suppliers, it is explicitly required to add the terms and conditions of the Regulations Governing Professional Moral Conducts, and inform that illegal and improper events of the Company's personnel are reported or sent to the reporting mailbox, and the legal effects of violations, thus preventing improper gifts or business entertainment from violating the requirements of the Regulations Governing Professional Moral Conduct, and to jointly abide by the responsibility for following the Regulations Governing Professional Moral Conduct with suppliers. The achievement rate of adding the provision of the Regulations Governing Professional Moral Conduct to procurement contracts in 2023 was 97%. We will continue promoting the provision of the Regulations Governing Professional Moral Conduct in procurement contracts in a way that allows for gradual implementation in collaboration with the suppliers.

Description of Administrative Fine in 2023

[Article 24, Paragraph 1 of the Labor Standards Act] A fine of NT$50,000

The Company has formulated attendance regulations for overtime and leave of absence in accordance with laws and regulations. Employees who work overtime should file an application for it. A fine was imposed this year due to violation of the Labor Standards Act in terms of working hours. Dissemination and other related improvement measures have been enhanced to avoid omission of reporting overtime work

3.3 Risk Management GRI 2-23 GRI 2-24

3.3.1 Risk Management Strategy

With the development of society and the progress of science and technology, facing the changes of the environment and climate, the opening of markets and the frequent occurrence of network attacks, the fluctuation degree of various changes in the operation process increased leading to greater risks for operations. The Company must face the necessity and urgency of Risk management. In view of this, ChipMOS has formulated the "Risk Management Policies and Procedures", which has been approved by the Board of Directors, to specify the scope and organization of the Company's Risk management, so as to strengthen Corporate Governance and establish an effective Risk management mechanism.

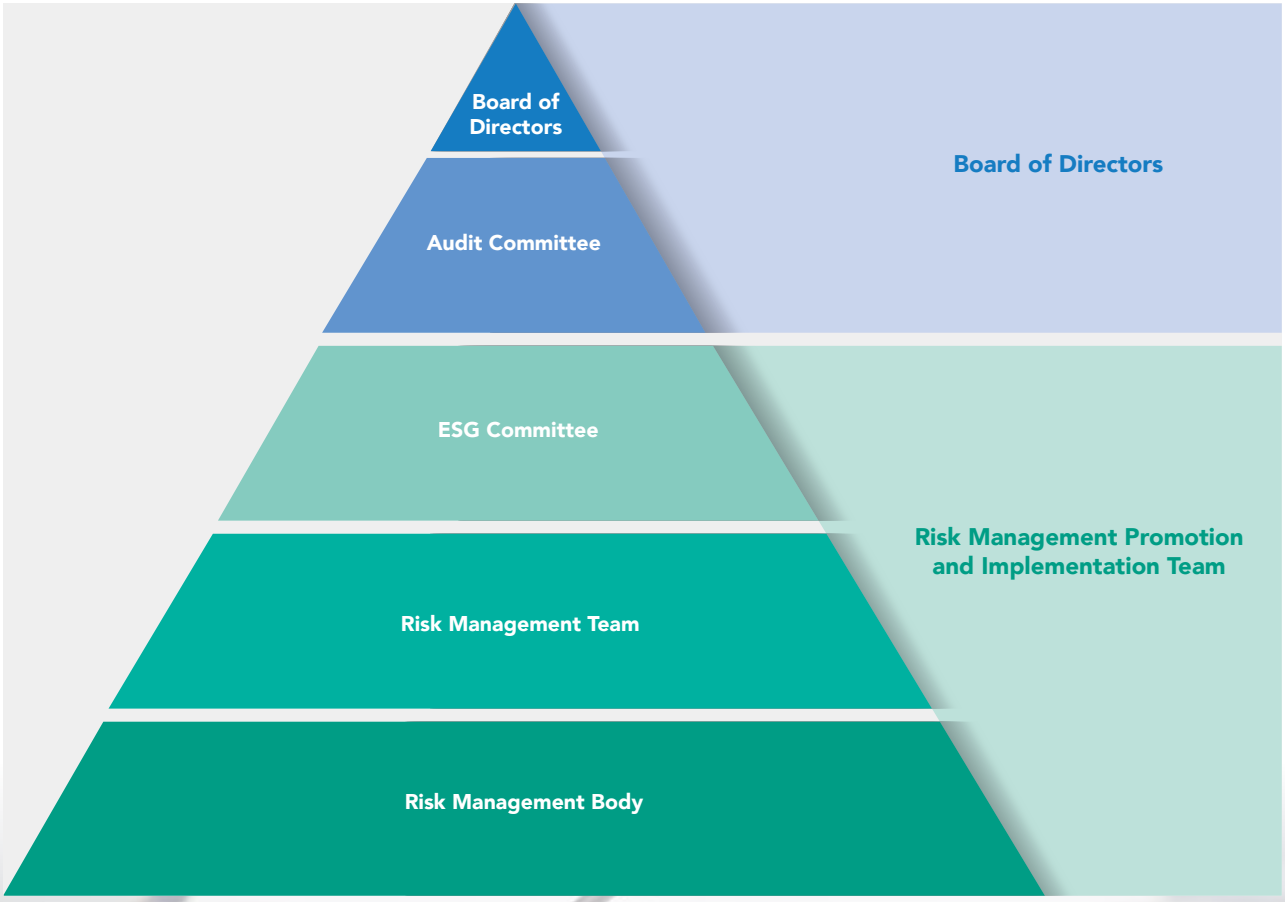
The Risk management scope of ChipMOS covers all kinds of risks faced in the process of operation activities, including operational risk, climate change risk, information security risk, financial risk, supply chain risk and legal compliance risk. For relevant ESG potential risk factors, ChipMOS regularly performs operational impact analysis and risk identification according to the frequency and significance of risks (e.g. the influence of finance, operations and reputation), control degree, etc., defines the priority and risk level of risk control through quantitative evaluation, and adopts corresponding Risk management strategies according to the risk level, so as to promote the steady and healthy operation and sustainable development of the Company.

In addition, the Company attaches great importance to daily risk reporting, such as setting up a whistleblowing section on professional moral conduct and ethical management on the official website to report any suspicious behavior or possible violation of ChipMOS's Regulations Governing Professional Moral Conduct or Procedures for Ethical Management and Guidelines for Conduct. The Company has formulated instructions on safety and health incidents and Contingency Event Procedure to govern the reporting process of personnel safety and health incidents in daily operations and the handling procedure of operational emergencies.



Risk Management Organization Structure

The Board of Directors of ChipMOS is the highest decision-making body for Risk management. It has formulated the Risk management policy and organizational structure. The Audit Committee supervises the operation of Risk management to ensure the effectiveness of the Risk management mechanism. ChipMOS has set up the Risk management team as the responsible unit, responsible for the implementation of Risk management, with the first level supervisor as the convener to promote the financial, strategic, operational and disaster aspects of various Risk management units, including operation and manufacturing, information technology, human resources, financial accounting, procurement materials, legal affairs, etc. Each Risk management unit assigns a department-level or higher executive, who annually conducts a quantitative assessment of potential risks based on identification, analysis, and evaluation processes. This assessment includes evaluating the frequency, impact, and control level of potential risks. The units also follow prescribed procedures and carry out necessary operations and Risk management tasks. The Audit Office shall audit business units on a regular basis to ensure proper implementation of risk control measures in accordance with the company's internal controls and audit plans, thus ensuring that the involved risks are within acceptable limits and continuously monitored.



Operation of Risk Management

A total of 50 potential risk factors were identified in 2023. On August 3, 2023, the ChipMOS Risk management team reported the risk environment, Risk management priorities, risk assessment and response measures faced by the Company in the Board of Directors meeting.

Risk Category		Potential Risk Factors	2023 Corresponding Material Topics	Control Strategies and Practices
Environment	Climate Change Risk	Renewable Energy Regulations (Use of Green Power)	Energy and resources efficiency	• We have set a target to install a green energy capacity of 6,990.4KW, in accordance with legal requirements. This project is expected to be completed by 2024 Note: Climate change risks are managed in accordance with the TCFD framework. For more information about risk identification, potential financial impact and control practices, see the chapter on Climate Change and Energy Management
		Carbon Neutrality (carbon tax)	Energy and resources efficiency	• Strive to reduce GHG emissions at the Company's organizational boundary to cope with the cost of carbon tax at home and abroad in the future
	Operational Risk	Interruption of Public Services	Energy and resources efficiency	• Through hazard risk and environmental identification, evaluate the risk factors in the process of business operations, grasp the risk impact, and effectively control the same. • Formulate the "Contingency Event Procedure" and "Emergency Response Working Instruction" to ensure the response mechanism and aftermath treatment of various emergencies (including fires/earthquakes/typhoons, etc.), maintain the safety of employees, reduce the losses related to the Company and customers, and prevent or reduce the impacts and influences on the environment.
Society	Operational Risk	Natural Disasters	Healthy and safe workplace	
		Talent Attraction	Talent development and training	• An effective talent acquisition system and internal talent pool will be established to provide a smooth channel for talent mobility • We will actively expand diverse recruitment channels, offer internship and short-term work opportunities, and industry-academia collaboration with educational institutions to strengthen the connection between academia and the workplace • We regularly participate in external salary surveys and provide a comprehensive and fair total rewards package to attract, motivate, and retain talented individuals
Governance	Legal Compliance Risk	Changes in Policies and Regulations	Corporate Governance	• Follow the laws and policies, implement the identification mechanism for enforcing laws and regulations, and take appropriate countermeasures. • Pay close attention to the changes of relevant laws at home and abroad at all times, and update relevant systems and regulations in accordance with the laws.
	Information Security Risk	Information System Abnormalities	Corporate Governance	• Carry out information security control and management of production machines, such as asset inventories, machine anti-virus operations, strengthening the awareness of information security protection of relevant personnel, and take relevant information security control measures to improve the capability of information security protection. • Regularly conduct disaster recovery drills for important system information, and take actions to maintain the Company's operations.
		External Threats	Corporate Governance	• Introduce an information security system to prevent external intrusion (such as firewall, intrusion prevention system) and electronic data monitoring system for external storage devices, to avoid data leaks or computer viruses. • For the information security protection of confidential documents, third-party security control software is adopted to protect and prevent the risk of leaks of customer and the Company's data.
	Supply Chain Risk	Supply Interruption	Sustainable supply chain, Product quality	• Focus on the establishment of long-term partnerships, and give priority to new suppliers with excellent reputations in relevant industries. • Perfect the supplier management mechanism, effectively grasping the stability of supplier supply. • For major key materials and equipment suppliers, maintain manufacturers (two manufacturers or in at least two regions) to avoid sudden risks such as manufacturers' own operations and regional natural disasters.
	Financial Risk	Interest Rate Fluctuation	Operational performance	• During fundraising, the main consideration covers the loan interest rate condition with better loan interest rate conditions in the market and less affected by the change of interest rate. • We conduct regular evaluations of loan interest rates and make necessary adjustments based on market average rates
		Exchange Rate Fluctuation	Operational performance	• Sales denominated in foreign currencies are mainly denominated in US dollars, while the payment of main raw materials and machinery and equipment is denominatedin US dollars or Japanese yen. Therefore, some receivables and payables denominated in foreign currencies can be offset against each other, resulting in a natural hedging effect. • We stay vigilant to changes in international exchange rates and actively gather relevant currency exchange information. This allows us to plan ahead and minimize any potential foreign exchange losses or gains that may affect our operational funds.

3.3.2 Continuous Operation Management

Continuous Operation Management Actions

ChipMOS formulates relevant measures for the Enterprise Risk Management (hereinafter referred to as ERM), including risk scenario drills and emergency response and recovery plans. In case of major incidents of events of concern in the current year, ChipMOS will give priority to the drills.

The pandemic prevention level was adjusted in 2023, and the Company's business operations gradually recovered from the pandemic. However, some operations have changed during the pandemic. In 2023, thus, in addition to natural disasters (such as earthquake), engineering accidents, or abnormal power supply of Taiwan Power Company, issues such as material shortage, transportation interruption, labor shortage due to epidemics were added as main drill items. We are committed to carrying out drills involving the business continuity plan to properly cope with accidents in production, equipment, material management, information system operation, and industrial safety caused by related risks, and implement related contingency mechanisms to ensure that countermeasures are available at any time to minimize losses and injuries.

- The disaster level assessment is held in the fourth quarter of each year.
- Control measures like drills and recovery control, etc. are performed for effective prevention.
- Drill items: to be conducted according to the annual disaster contents and major issues of social concern.

- Establish the emergency response team according to each operation center.
- For details, see the Operating Procedures
- Set clear objectives for affected projects.
  - Maximum allowable service interruption time.
  - Recovery time objective
  - Recovery point target



- Establish partnerships with strategic suppliers according to the Company's strategy, in order to stabilize the supply of materials.
- Maintain manufacturers (two manufacturers or in at least two regions)

- Master key flows and manufacturing processes through operation impact analysis

Emergency Support Measures

- Workplace
- Machine Contingency Planning

- Develop an IT operational impact analysis document that clearly defines the contingency measures for each IT in response to potential disruptions
- Implement annual disaster recovery drill plan to verify the feasibility of operational procedures during an emergency

Examples of Business Continuity Drills in 2023

For the risk scenario drill, ChipMOS has a "Contingency Event Procedure". The Risk management team holds a disaster level assessment in the fourth quarter of each year. The disaster risks encountered in the operation and management process over the years will be aggregated into 13 risk events, and the risk level will be determined as per the occurrence rate and impact severity according to the disaster risk assessment of the whole year or major or important events in the current year, based on which the annual major practice and assisted drill items are decided. The events with a risk level greater than 5 in the current year are taken as the main drill items. The rest are sub-drill items, which must be drilled at least once within 5 years.

Operating Unit	Drill Project	Drill Situation
APG	Fire	The idling of a ball mounting machine heater at the ball mounting station of Tainan fab. caused dense smoke. After immediate actions and evacuation of personnel, the fab management department replaced the filters and resumed the production within half the day.
WS	Typhoon/fire	Power supply was interrupted due to a severe typhoon that caused electrical cable breakage. A short circuit in the power circuit caused fire. Five batches of finished goods were burnt down and a warehouse staff was injured in the fire.
MS	Material shortage	Supplier A of trays notified the packaging material staff of the warehouse that its supply capacity decreased due to the impact of the pandemic (Covid-19 variant), and it would took at least two months for lead time for delivery of all trays. This LT would affect the TH production of the customer, but the customer urgently needed the production capacity, and the fab needed to come up with effective countermeasures to meet customer's needs!
LPC	Disruption of transportation	The drivers' strike in Taiwan caused transportation disruption, resulting in a delay of 3 days to deliver the laser head needed for the failed critical machine (SD station - SD002) to arrive at the fab.
LCDD	Earthquake	The Tainan fab. experienced a magnitude 4 earthquake, which damaged the electrical equipment of Taiwan Power Company and led to a disconnection in the power supply line. This power outage, accompanied by a voltage drop, caused all the critical machinery in the TA5F production area to halt operations. Subsequently, the cleanliness level in the clean room exceeded the allowable standards
WB	Machine failure/ facility system interruption/ power outage	The 161 KV power supply pylon for supply of power from Hsinchu to Liujia collapsed, causing power outage throughout the fab. The power outage lasted more than 21 hours. The UPS of the Electroplating machine was abnormal during the power supply process, resulting in failure of the critical machine.
MPG	Power outage/ fire/epidemic/ labor shortage	**Situation 1 (power outage + fire):** Power supply was interrupted due to a severe typhoon that caused electrical cable breakage. A short circuit in the power circuit caused fire. Five batches of finished goods were burnt down and a warehouse staff was injured in the fire. The power outage caused 38 machines unable to produce for more than 6 hours. **Situation 2 (epidemic + labor shortage):** An outbreak of a highly contagious epidemic occurred. Once a case is confirmed, the employee concerned must be quarantined. A total of 18 employees of the production unit were quarantined, resulting in its manpower being lower than the workforce readiness rate.
Response Measures	**1. Fire:** - Promote the concept of fire prevention to prevent fires from occurring, and implement contingency measures in the fab to minimize the range of fire impacts. - Evacuate people to the designated safe place in the event of a fire according to the disaster evacuation drill and contingency plan, and restore the fire protection system after the fire is extinguished - conduct first aid/send the injured to a hospital according to the health management instructions and take follow-up actions. **2. Material shortage:** Continue to pay attention to the latest information on the pandemic, the alert standard of the central government and the grading of the pandemic, adjust the pandemic prevention policies with the fab on a rolling basis, and activate the pandemic prevention mechanism when necessary. **3. Disruption of transportation:** - Transportation interruption due to human factors - arrange supplier support or on-site assistance for the installation and maintenance of parts to meet customer needs. **4. Earthquake:** Implement contingency measures within the fab to reduce the impact of the earthquake. After the earthquake ceases, immediately recall personnel to count the number of people at the maintenance station and confirm the condition of the personnel. **5. Machine failure:** Sign a service contract with the manufacturer for critical machines to protect our right of immediate maintenance.	

3.4 Information Security Management GRI 418-1



3.4.1 Information Security Governance

Information security policy and organization

To protect the information assets of ChipMOS, the Information Security Committee has formulated the information security management policy to clearly demonstrate the Company's determination to support information security and provide a standard for all employees to follow. An information security policy was established in 2014 after the Chairman affixed his signature to establish the overall direction of our information security management and provide a basis for the actions and information security activities of the organization in the future:

- **Protect the confidentiality of the Company's information assets and avoid unauthorized access or improper disclosure.**
- **Ensure the integrity of information operations and avoid improper tampering and destruction.**
- **Ensure that authorized users can use information assets when needed.**

Established an Information Security Body

In 2014, ChipMOS set up the Information Security Management Committee (headed by the President and all tier-1 managers at various BU as committee members) to be responsible for the formulation of information security policies, the supervision of the implementation of information security plans, the management review, coordination and communication of information security related matters, so as to ensure the effectiveness of the implementation of information security management system and improve the information security of the Company's operation. The Committee convenes an annual management review meeting once each year.

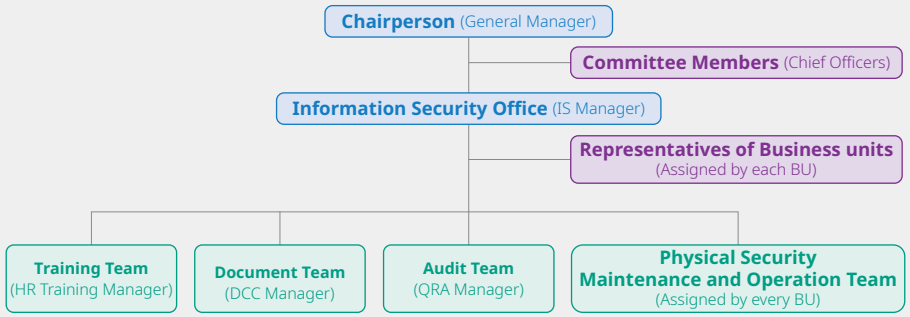
In 2022, the Information Security Office (hereinafter referred to as the Security Office) was established under the Information Security Committee. It designated personnel to engage in information security-related tasks and take the responsibility for information security affairs. Currently, there is one Information Security Officer and two dedicated information security staffs to plan the Company's information security system and information security protection network. The Security Office proactively adopt preventive and control measures to minimize the impact of information security incidents, ensure the maintenance of organizational operations, and quickly resume business activities.

In 2023, the Information Security Committee held one annual management review meeting to review the annual performance and the projects for the next year; a total of 10 information security team meetings were held, including tracking the progress of information security activities, and addressing and discussing internal and external information security issues.

Information Security Committee

Chair: President
Management representative: Information Security Office - Information Security Manager
Committee members: Tier-1 manager at all BUs
Main Responsibilities:

- Establish and review information security policies
- Supervise the implementation of information security plans
- Management review and coordinate communications on information security related issues



3.4.2 Risk Management

Facility and Physical Management

ChipMOS continue to reinforce our backup systems and upgrade both software and hardware capabilities and our IT system business continuity planning (BCP) to boost the Company' resilience against cybersecurity threats, thereby ensuring uninterrupted business operations. We have taken the following management measures:

Strengthen the data backup and restoration mechanism	Strengthen data backup space and data synchronization to restore operational data as quick as possible, e.g., system upgrade, including the database (DB) and non-database (OA) of all fabs.
Information security health diagnosis	From partial inspection to comprehensive identification of information security risks and vulnerabilities within the fab, external information security tools are used to check the current information security system architecture and defense level.
Computer, communication and consumables (3C) control measures	To effectively protect the Company's information security management, employees shall comply with the 3C management mechanism and use mobile media according to the control measures.
Identity authentication mechanism	To ensure the security of remote login, an identity authentication mechanism (2FA, two-factor authentication) is established to enhance data security.
Compliance with Information Security Laws and Regulations	1. As for regular review in 2023, there were the amendments to seven laws and regulations of the Criminal Code, Personal Data Protection Act, Copyright Act, Trade Secrets Act, Enforcement Rules of the Personal Data Protection Act, Taiwan Stock Exchange Corporation Procedures for Verification and Disclosure of Material Information of Companies with Listed Securities, and Information and Communication Security Control Guidelines for TWSE/TPEx-Listed Companies. 2. The "Information of Companies with Listed Securities, and Information and Communication Security Control Guidelines for TWSE/TPEx-Listed Companies" has been included for implementation. The third-party certification will be conducted in November 2024 to maintain the validity of the certificate.
Simulation of information and communication security crisis and disaster recovery drills	A total of 39 sessions were held in 2023, with a completion rate of 100% to improve the ability of IT personnel to take immediate response measures in the event of an information security incident and prevent information security hazards.
ISO 27001 certification	1. 2022 version of the international standard for upgrading of information security resilience 2. Professional consultants are hired for guidance, and internal ISMS regulations are revised to comply with the requirements under the new version of ISO 27001: 2022. The certificate is expected to be obtained in November 2024.

Personnel Information Security Management and Compliance

In terms of cultivating professional information security talents, the Company has formulated professional training programs for the personnel of the Information Security Office and joined external information security organizations, such as SP-ISAC (Science Park Information Sharing and Analysis Center), SECPAAS (Security Platform as a Service), NCHC (National Center for High-Performance Computing) for joint information security defense. By doing so, we master information security information and participate in various information security seminars and courses, continuously train the talents of latest technologies, improve their professional skills, and cultivate diverse cross-field talents.

The personnel of the Information Security Office have obtained the following professional licenses and are continuously carrying out training programs to enhance their skills.



Information Security Education and Training for Employees

According to the 2023 CIO Survey, viruses/spam (60.9%) and social engineering fraud (29.5%) were the most serious security threats. In view of this, information security education and training in four major areas were planned in 2023.

	Information Security Education and Training			
	Annual information security education and training for newcomers	**Social engineering dissemination**	**Information security education and training for employees**	**Phishing drill**
Frequency	As per the employee check-in schedule	No fewer than once per month	Annually	Once every two months
Content	Describe the information security policy, the Company's information security regulations, information security rewards and punishments, and 3C control measures	Promote common social engineering attack techniques to raise awareness among colleagues and prevent falling victim to such attacks	Audit illegal software usage, promote preventive measures against ransomware incidents, raise awareness on phishing scam emails, and establish regulations for USB drive usage control	Simulate sending targeted emails with specific subjects, including links or attachments, to measure click rates and test employees' awareness of information security

Achievements in 2023

- **4,081 employees completed relevant training**
- **22 sessions of social engineering dissemination were completed**
- **630 newcomers completed the information security education and training**
- **6 phishing drills**



3.4.3 Information Security Plan

Cybersecurity Control Plan

ChipMOS conducts cybersecurity control according to the "Cybersecurity Management Procedure". The network control, electronic transmission, and security monitoring, and so forth are all in the relevant scope. In response to the recent zero-day attack, the Company has established appropriate countermeasures and information security measures such as:

- **Active DDoS mitigation service**
- **Assessing the establishment of MDR threat detection and response service.**
- **Establishing WHAT's UP network management and monitoring service.**
- **Consulting external information security consultants and planning the establishment of an information security protection framework.**
- **Assessing the establishment of firewalls between fabs.**
- **Improving a three-tier architecture of inter-fab networks.**

For the standardization of the network architecture and the independence of the inter-fab networks without mutual interference; the third-party certificate (SSL certificate) and SFTP mechanism are used for electronic data transmission to prevent middlemen from extracting packets and stealing data.

3.4.4 Preventive Management

Supplier Management Plan

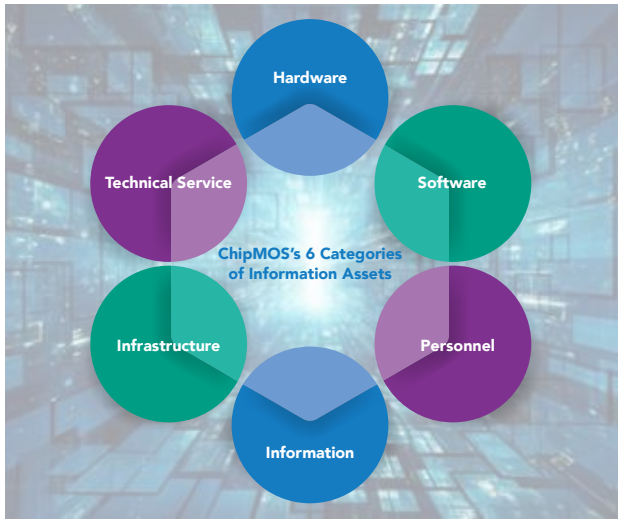
Regarding the information security of supplier relations, the Company has signed the "Supplier Nondisclosure Agreement" or "Maintenance Contract" with suppliers to ensure the control of teleworking and routine maintenance operations. The "Maintenance Contract" of the information contractor shall include the service planning, scope, accountability, and other protective measures.. In addition, the Company has introduced the 2FA mechanism (two-factor authentication) to form an "iron triangle" of authentication in conjunction with personal computers, mobile device security software, and password management programs so as to provide an additional protection, make it more difficult for hackers to perform unauthorized access operations, and strengthen the security of identity verification.

The threat of supply chain attacks is becoming more and more serious. We have established the "supplier information security risk assessment mechanism" for information security and service rating of information suppliers. The evaluation standard is whether the service provided by the suppliers meet the following 7 criteria and 25 sub-criteria. Those with a score of less than 80 points are considered for elimination:

Professional technical ability	4 sub-criteria	15 points
Quality assurance ability	3 sub-criteria	15 points
Information security and confidentiality protection ability	4 sub-criteria	15 points
On-time contract fulfillment ability	3 sub-criteria	10 points
Support and maintenance ability	3 sub-criteria	15 points
Provision of education and training	3 sub-criteria	15 points
Establishment and renewal of maintenance contracts	5 sub-criteria	15 points

Information Assets Management

Information assets are defined as an individuals or a record that has the same name or role, exhibits the same level of confidentiality, integrity, and availability, and is assigned with a unique asset name. Based on the value (confidentiality, integrity, and availability) of the information assets and its criticality to the organization, the Company establishes an information asset inventory and manages it by category. The Company has established information asset risk assessment standards to identify the information security risks caused by the vulnerabilities and threats of the information assets. We adopt countermeasures or control measures based on the risk assessment results to reduce the risk of damage to the information assets.



We execute risk assessment of annual information assets and information security every year, and prepare the "Information Security Asset Risk Assessment Table" based on the value of the information assets, threats, vulnerabilities, and impact". In addition to the "Risk Improvement Plan", we formulate and implement the risk response measures for high-risk information assets to reduce their risk and avoid affecting the continuous operation of the information system.

The purchase, deployment, scrapping, and use permission of the Company's internal computer equipment and related software are managed and controlled effectively by taking the following measures:

1. Newly acquired hardware assets are tested and accepted by the applicant
2. An information asset inventory system and information asset risk assessment are established
3. The changed/new hardware information assets are tested before going live to ensure that the functions meet the requirements and are compatible with the existing system.
4. When important information assets are changed, their availability and performance shall be considered, and the performance of various resources shall be confirmed to meet the current operational needs. Future Operational performance requirements shall also be estimated. Capacity management may include hard disk capacity, CPU performance, network bandwidth, etc.

Information Security Incident Reporting and Accident Management

As a member of the Taiwan Computer Emergency Response Team / Coordination Center (TWCERT/CC) to assist companies in providing consultation and coordination services when information security anomalies are discovered, and address and correct them in a timely and appropriate manner. These measures can prevent the occurrence of abnormal information security problems and thereby improve the level of information security. In addition, to ensure that information security incidents are promptly reported according to the procedure, and necessary contingency measures are taken and an incident learning mechanism is established to minimize the resultant damage, we conduct incident and accident management, cause analysis, corrective process, and preventive measures in accordance with the information security incident management procedure. Details are described below:

Grading of information security incidents

1. **Information security incident:** An identified status occurs in a system, service, or network, indicating a possible violation of the information security policy or a failure of protective measures, or a previously unknown situation that may be related to information security. For example, the network traffic increases greatly, the connection speed is slow, and there are abnormal connection records in the firewall logs, but the main functions of the information system are not reduced or lost.

2. **Information security incident:** A single or a series of unexpected information security incidents may constitute an information security incident. An information security incident is considered an information security accident if it causes leak of secrets or affects critical business operations, or is likely to cause damage to the confidentiality, integrity, and availability of the information assets. For example, the analysis and judgment indicate that a hacker sends a large number of specific packets to the web server, thereby causing the website paralyzed and reducing or losing some of the main functions of the information system.

There were no information security incidents in 2023

- No large-scale virus poisoning incidents occurred
- No ransomware attacks
- No leakage of confidential information
- No large-scale network disconnection in the five fab areas

Introduction of a Third-party Information Security Rating Mechanism

In addition to ISO 27001, we have introduced a third-party information security rating system:

01

Panorays third-party information security risk assessment module

This helps companies to accelerate the security assessment and improvement of supplier compliance. As of February 2024, ChipMOS received a score of 91 points and achieved LEVEL A in grading.

02

Security Scorecard

Information security Risk management system: Information security risk is monitored with the SecurityScorecard system. As of February 2024, ChipMOS received a score of 90 points and achieved the level of Grade A.



CHAPTER

4 Environmental Friendliness



Medium-and Long-term ESG Goals — Environmental

	2025(Mid-term)	2030(Long-term)	Outcomes for 2023
Energy-Green power plan (solar)	Renewable energy accounted for 1.7% of energy consumed	20% ↑	0.003%

ChipMOS Green Power Plan

2022	ChipMOS purchased 8 T-REC, which accounted for 0.002% of its total energy usage
2022	ChipMOS bought back the solar rooftop it offered on a lease, with a total installed capacity of 990.45KW at the fabs
2023	ChipMOS purchased 17 T-REC, which accounted for 0.003% of its total energy usage
2023	Leased land for the construction of solar power generation facility, with a total actually installed capacity of 2,860KW
2024	ChipMOS leased land for constructing its own solar system to expectedly increase the installed capacity by 3,140 kW, with total installed capacity of 6,990.45 kW
2024	Purchased 155 T-REC, estimated to account for 0.033% of its total energy usage
2025	The solar system will be converted to 6,990.45 kW for self-consumption, which is estimated to account for more than 0.9% of its total energy usage (Estimated construction capacity reaches 1.8% of its total energy usage)
2025-2030	The Company shall continue to increase the proportion of renewable energy through initiatives such as self-built solar power systems, purchasing renewable energy certificates, and exploring other green energy sources

*For more environmental goals relating to carbon reduction, please see Thematic Report 1 on Climate Resilience_Smart Energy Conservation Management and Chapter 2.3 on Sustainability Objective Management and SDGs

*For details on the concrete actions taken and outcomes on each issue, please refer to the contents of this chapter

Management Policy

Policy: Promote green production, improve resource utilization efficiency, strive for carbon-reduction and energy saving, conserve water resources, mitigate climate changes and lower environmental burdens

Commitment: Comply with environmental regulations, endeavor to improve environment management performance, achieve optimal balance between environmental responsibility and revenue growth and fulfill our responsibility of environmental protection

Resources: ESG Committee and Environmental Safety, Health and Energy Management Committee

Specific Actions

1. Introduction of TCFD for the identification of risks and opportunities for climate changes and water resources
2. GHG Inventory/Carbon Footprint/Water Footprint Inventory
3. Solar power construction/Green energy planning/Action plans for energy conservation and carbon reduction
4. Water-saving measures/Installation of process water recycling equipment
5. Source management/Recycling/Waste reduction management solutions

Evaluation Mechanism

- **Routine organization of energy management review meetings**
- **ISO 14001, ISO 50001, ISO 14064, ISO 46001 third-party verification**
- **RBA Audit, Customer audit, Internal audit**
- **Sustainability evaluation by investment institutions**

Collaborating and guiding our suppliers towards low-carbon transition



2023 Industrial Development Administration, MOEA Low-carbon Program for Big leads Small in Manufacturing Industries

In 2023, ChipMOS took the initiative to participate in MOEA Industrial Development Administration's subsidy program for the low-carbon and intelligent upgrading and transformation of the manufacturing industry. Our plan is to promote the transition to low-carbonization by adopting a "big leads small" approach. From 2023 to 2024, we will function as the hub of relevant activities and drive 12 supply chain manufacturers (categories including raw material, machinery and equipment/jig/component, and fab facilities) to swiftly adopt low-carbon technologies, equipment, and management practices. This transformation will enhance our organizational resilience, improve overall industry competitiveness, and together, we will create sustainable value.

Energy Saving Solutions 59 Items

Estimated Total Carbon Reduction 5,480 tCO_2e/year

Guidance and provision of resources for follow-up implementation

Nexus Fab. ChipMOS

Strategic approach Reduction of equipment energy and resources, smart energy saving, and optimization of operating conditions.

Energy Saving and Carbon Reduction	Investment Amount	Annual Energy Saving	Carbon Reduction
33 items	NT$94.32 million	10,543 MWh	5,219 tCO_2e/Year

Satellite Factory 12 Suppliers

Strategic approach Basic energy saving measures, enhanced carbon inventory/self-directed carbon management, and engineering optimization and improvement.

Energy Saving and Carbon Reduction	Investment Amount	Annual Energy Saving	Carbon Reduction
26 items	NT$1.20 million	527 MWh	261 tCO_2e/Year

Sharing of experience in supplier participation projects

Guo-Hsien Wang President /
Ming Kun Technologies Co., Ltd.

It is not easy for SMEs to improve their carbon management capabilities on their own. They did not quite understand international certification, such as 14064 Carbon Inventory, 14067 Carbon Footprint, and 50001 Energy Management. Through the incentives such as customer requirements, suppliers can have more favorable motivations to promote carbon reduction and enjoy benefit together. This way, they can contribute to the earth and leave a better place for the next generation.

Nai-Chuan Yang Production Manager /
Kaiyo Advanced Materials Technology Corp.

We are very grateful to ChipMOS for inviting us to join the "Big Leads Small" team of low-carbon transformation. After being invited to join in 2023, we learned the energy saving improvement experience that ChipMOS shared with us, participated in the carbon inventory guidance and diagnosis seminar of the Institute for Information Industry, and received on-site diagnosis and improvement suggestions of expert teams. With these resources and methods, the guidance and assistance of the leading manufacturers can greatly reduce the time for self-exploration, despite the lack of manpower and resources, and thereby promote carbon reduction activities more quickly and effectively.

* Further Reading: Business Today - The Key for Upgrading and Transformation of the Manufacturing Industry - Big Leads Small, Smart Taiwan, and Moving Forward with Low Carbon Emissions.

4.1 Climate Governance GRI 307-1

Global warming and climate change have been already the phenomena that global enterprises must face up to. ChipMOS continues following the international agreements of "The Paris Agreement" and our environmental policy, and makes concerted efforts to control global warming, reduce GHG emissions and improve the adaptability of climate change.

Facing the extreme climate disasters brought about by intensified warming with the pressure of global transformation continuing to ferment, ChipMOS actively seek decarbonization strategies, continue to incorporate climate change into Corporate Governance, improve the supervision mechanism of executive management, practicing green production and planning a number of energy conservation and carbon reduction projects. Through measures such as carbon and water footprint inventories for our products and material flow cost accounting, we hope to achieve reduction of consumption and carbon emission. Meanwhile, we will continue educate employees to enhance their awareness of environmental protection, and also extend to vendors and stakeholders to collaborate to become a green friendly enterprise.

In 2023, ChipMOS had no pollution incidents and no major violations of environmental laws. ChipMOS's environmental sustainability activities continue to be recognized by the outside world, including the Net Zero Benchmark Award, High Performance Green Purchasing Enterprise, Environment-Friendly Enterprise Fleet, and Air Quality Purification Area Performance Recognition Organization, encouraging ChipMOS to continue investing in environmental and earth protection.

*For more ChipMOS environmental recognitions, please refer to Appendix 8.

Overview of ChipMOS' Climate Governance Actions



Pillars of ChipMOS Net-zero Emissions Strategy



History of Green Operation and Environmental Friendliness

Environmental Management (ISO 14001)

- 2004 Obtained the certificate for the first time
- 2015 Passed the ISO 14001 2015 version

Greenhouse Gas Inventory (ISO 14064 1)

- 2009 Tainan fab. started voluntary inventory and passed third-party verification.
- 2013 Conduct inventory and verification for six fabs of the parent company
- 2021 Passed the ISO14064 1 2018 version
- **2023** Conduct full inventory and verification of the parent and subsidiary companies

Carbon Footprint (ISO 14067)

- 2013 Passed the TSOPII and LCD Driver IC verification
- 2014 Passed the au bumped wafer verification
- 2015 Passed BGA and QFN verification
- 2022 Passed TSOP, RDL, and WLCSP verification
- **2023** Passed COF and COG verification
- **2024** Launched a series of product verification plans based on customer needs.

Water Footprint (ISO 14046)

- 2014 LCD Driver IC
- 2015 BGA, QFN, and au bumped wafer

Water Efficiency Management Systems (ISO 46001)

- **2023** Introduced the management system
- **2024** Third-party verification

Material Flow Cost Accounting (ISO 14051)

- 2016 Passed QFN verification
- 2017 Passed FBGA verification
- 2018 Invited by the Industrial Development Bureau, MOEA, for "Material Flow Cost Accounting Learning Workshop" and "Taiwan-Japan Exchange Conference"

Green Factory (Clean Production Assessment System for Green Buildings)

- 2014 Tainan fab. was the first corporate in the domestic packaging and testing industry obtaining the green factory label from the Industrial Development Bureau, MOEA.
- 2015 Invited by the Industrial Development Bureau, MOEA, and Southern Taiwan Science Park Bureau for the "Green Factory Learning Activity"
- 2017 Tainan fab. passed the renewal assessment of "Green Factory Lavel"
- 2017 Hsinchu fab. passed the application for the "Green Building Qualification Grade"
- 2022 Tainan fab and Hsinchu fabs passed the renewal assessment for the "Green Building Silver Grade and Qualification Grade"
- 2022 Tainan fab. and Hsinchu fab. obtained the green factory label from the Industrial Development Bureau, MOEA.
- 2022 Invited by the Industrial Development Bureau, MOEA, for the "Publication of Achievements and Experience Sharing for the 10th Anniversary of Green Factory"
- **2023** Invited by the Industrial Development Bureau, MOEA, for the "Green Factory Learning Activity"

Energy Management (ISO 50001)

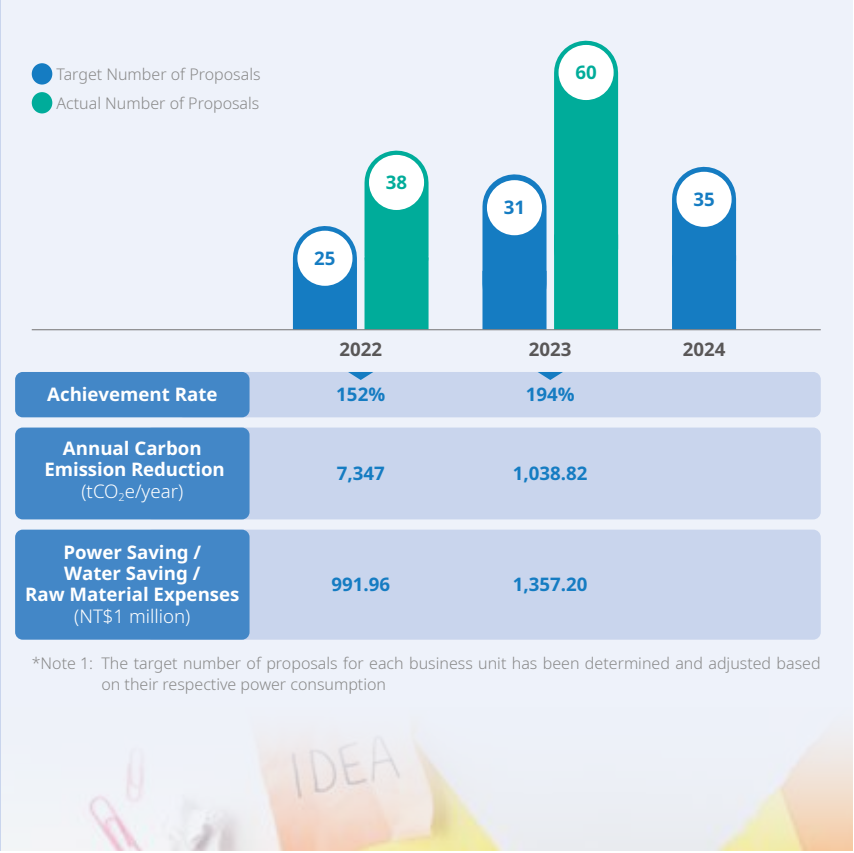
- 2012 Built rooftop solar panels and signed a contract with Taipower to supply green power
- 2014 Tainan fab. passed the verification for the first time.
- 2016 Invited by the Industrial Development Bureau, MOEA, for "Energy Management Demonstration, Learning and Experience Sharing" and "Exclusive Interview with CommonWealth Magazine"
- 2017 Hsinchu fab. passed the verification for the first time.
- 2019 Invited by the Industrial Development Bureau, MOEA, for "Business Today Exclusive Interviews with Outstanding Manufacturers"
- 2021 Completed the construction of 4 solar power systems (a total of 990.45KW for all the fabs)
- 2022 Planned to build a 6MW solar power system with 2, 4.5MW finished in Y2023 and 1.5MW finished in Y2024
- **2023** Invited by the Industrial Development Bureau, MOEA, for "Business Today Exclusive Interviews for Energy Management Outcomes"
- **2024** Gradually increase the percentage of renewable energy by means of "dedicated solar power facilities for self-generation and self-consumption or purchase of green power certificates" depending on customers' needs for green power production.

Promote higher environmental protection awareness for all staffs and spearhead our low-carbon corporate culture

Incentives to promote environmental friendliness, energy saving and carbon reduction proposals through ID Box

In an effort to implement energy conservation and carbon reduction policies while encouraging total participation from employees, ChipMOS has made use of the existing ID BOX proposal platform since 2022 and added a new proposition category of "Environmental Friendliness, Energy Saving and Carbon Reduction" along with specific number of proposals for all business units as annual targets. At the same time, the Company has also introduced a reward mechanism for such proposals as a way to incentivize employees to come up with creative and novel ways of carbon reduction. These proposals are to be reviewed and followed-up quarterly during the Environmental Safety, Health and Energy Management Committee meetings.





	2022	2023
Achievement Rate	152%	194%
Annual Carbon Emission Reduction (tCO_2e/year)	7,347	1,038.82
Power Saving / Water Saving / Raw Material Expenses (NT$1 million)	991.96	1,357.20

*Note 1: The target number of proposals for each business unit has been determined and adjusted based on their respective power consumption

Organize environment Related Courses to Heighten Employees' Climate Awareness

In an effort to disseminate relevant concepts on climate change and the latest international trends in net-zero emissions, ChipMOS has held the following environment-related trainings in 2023, including: ISO 45001 and ISO 14001 evaluation personnel training, ISO14064-1 greenhouse gas inventory and internal auditor training, ISO46001 water usage review and internal auditor training, ISO50001 water usage identification and internal auditor training, ISO50001 training of personnel involving significant energy use, environmental education training and so forth. A total of 21 sessions were held for549 participants. On top of that, the Company has also promoted awareness for issues such as energy conservation, carbon reduction and climate changes through a variety ways to acclimatize employees to these issues in their day-to-day lives and stay abreast with the latest information and trends. In 2023, ChipMOS used ChipMOS Learning e-Paper along with climate change issues to publish 4 promotional articles.

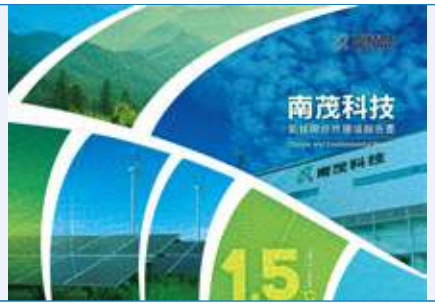


4.2 Climate Change and Energy Management

4.2.1 TCFD Imported

Climate change has become a common challenge for global enterprises to promote sustainable development. To control the global warming within no more than 2℃ and affect the opportunities and risks implied in enterprise capacity expansion and market opportunities are the challenges that enterprises must face up to and prepare in advance. ChipMOS is well aware of the importance of corporate action and shoulders the heavy responsibility of environmental protection. We refer to the framework of the Task Force on Climate-related Financial Disclosures (TCFD) issued by the Financial Stability Board (FSB), identify the management of ChipMOS climate change risks and opportunities, and further have a comprehensive understanding of the impact of climate change.

In addition, under the framework of Climate-related Financial Disclosures (TCFD), we have further introduced Taskforce on Nature-related Financial Disclosures (TNFD) and adopted the draft framework beta v0.4 released in March 2023 for the identification and management of nature-related risks, and to assess the reliance on and impact on natural capital of the organization's operating bases and suppliers. Moreover, through the analysis of biodiversity significance and contingency measures, we will more concretely present the management of climate and natural environmental issues in ChipMOS.



ChipMOS Climate and Environmental Report
https://www.chipmos.com/english/csr/report.aspx

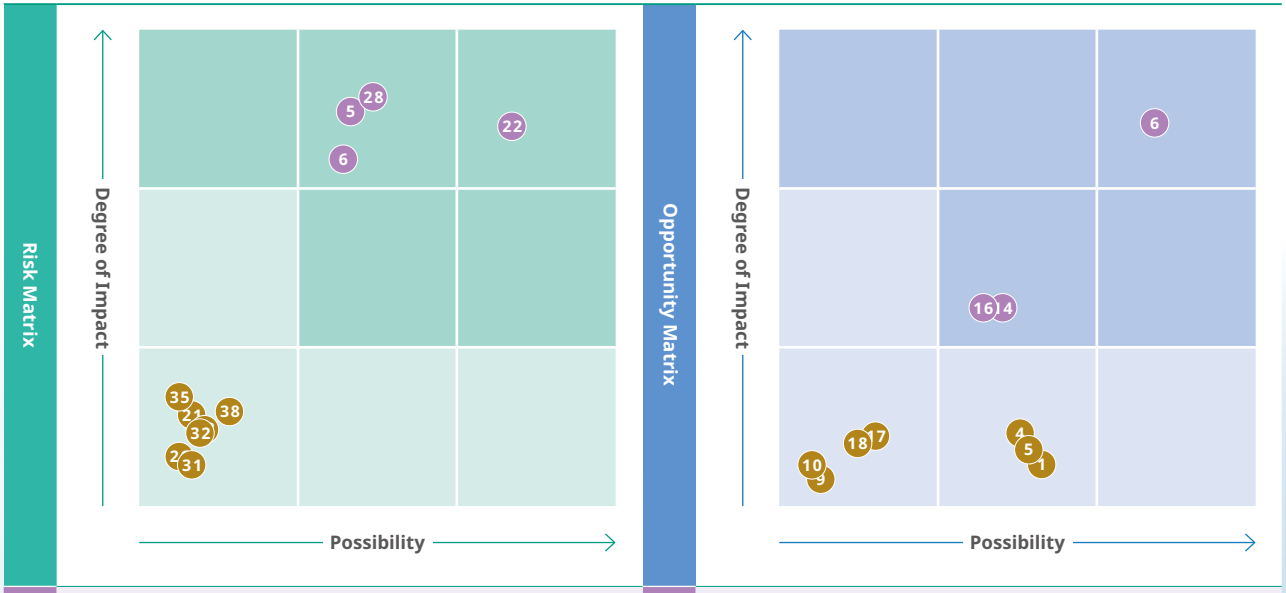
TCFD Framework

Governance	**Governance Supervision** • Quarterly Board of Directors' meetings to evaluate corporate performance and discuss ESG issues **Senior Management** • The Executive Vice President is responsible for supervising climate-related issues. **ESG Committee** • The ESG Committee under the supervision of the Board of Directors is the highest level organization in ChipMOS in response to climate change • The Chairman of the Board of Directors serves as the Chairman of the Committee and regularly reports the implementation status and results to the Board of Directors **Environmental Safety, Health and Energy Management Committee** • It is the main authority responsible for promoting and implementing climate risk response actions • Quarterly report to the Board of Directors on climate-related issues and the implementation status
Strategy	• ChipMOS defines short-term, medium-term and long-term (to 2030) climate related risks and opportunities according to the existing internal target management schedule • Assess the potential impact of climate risk factors on the Company's strategic, operational and financial planning
Risk Management	• ESG Committee members jointly identified climate change risks and opportunities according to the TCFD Framework at the seminar • According to the results of climate risk identification, formulate countermeasures and key development plans • Climate change issues will be included as a part of Risk management, and control strategies and specific practices will be formulated accordingly
Indicators and Objectives	**Effectively reduce carbon footprints** • Since 2009, starting from Tainan fab., ISO 14064-1 GHG emissions inventory has been introduced; from 2013, it has been expanded to the Scope I and II GHG inventory to all fabs every year, and has been verified by a third party. In 2020, the calculation of category III was added, accurately controlling greenhouse gas emissions and conducting the key management. • Since 2012, conducted product carbon footprint check for series of products to effectively master product carbon emission data **Efficient Use of Energy** • Actively invest in the use of renewable energy, import high-efficiency and energy-saving equipment, water resource recycling, material source management and waste reduction, formulate annual implementation objectives, and have the senior executives regularly inspect the implementation results

4.2.2 Identification of Climate Risk / Opportunity

In 2023, the members of the ESG Committee jointly reviewed, discussed and determined the maintenance of the climate change risks and opportunities that were identified in 2021. By adopting TCFD as the guiding principle, the risk topics cover transitional risks and entity risks, with a summary of risk categories including regulations and policies, market/ technology and disruption of operations. For carbon-related risks, there are a total of 48 items, four of which have been identified as major carbon risks, seven as moderate carbon risks. We have also identified 21 carbon opportunities, three of which are major opportunities and seven are moderate opportunities. In total, there are 69 risks and opportunities. We rank the risks and opportunities according to the possible time of risk impact (short-term, medium-term and long-term), impact degree factors (finance, operation / manpower, law and goodwill), and finally identify four major carbon risks and three major carbon opportunities, for total seven major risks and opportunities, assess the potential financial impact, and develop relevant countermeasures and countermeasures, so as to mitigate the impacts of climate risks and grasp future business opportunities.

Climate Change Risks and Opportunities



Major Carbon Risks

- 5 Customer Behavior Change
- 6 Demand for Low-carbon Products and Services
- 22 Renewable Energy Regulations
- 28 Carbon Tax

Major Carbon Opportunities

- 6 Energy Efficiency Improvement
- 14 Customer Behavior Change
- 16 Low Carbon Energy

Non-major Carbon Risks

- 21 Fuel Tax / Energy Tax
- 23 General Environmental Regulations
- 26 Voluntary Agreement
- 31 Lack of Regulation or Legality
- 32 Total Volume Control / Emission Trading
- 35 Extreme Rainfall and Drought
- 38 Average Temperature Change

Non-major Carbon Opportunities

- 1 Alternative or Diversified Resources
- 4 Recycled Materials
- 5 Production process
- 9 Low Carbon Products or Services
- 10 Commissioning and Solutions
- 17 Participation in Renewable Energy Projects
- 18 Policy Incentives

Major Carbon Risks	Risk Description	Impact to Value Chain	Time of Occurrence	Potential Financial Impact	Management Practices
Renewable Energy Regulations	**International or domestic regulations on renewable energy may affect the current and future energy sources, composition, price, etc.**	Within the Organization	Middle Term	Increase in Capital Expenditure	Solar energy installations (including lease-out of roofs for solar power generation and buyback) are expected to reach 6,990.45 KW in 2024, with a capital expenditure of approximately NT$391,415,700: 1. Lease and Buyback: In 2021, the roofs were leased to install 990.45KW, and were bought back in 2022. 2. Leas land and Build on Its Own: The contract was completed in 2022, and 2,860 kW have been obtained as of. 2023. 3,140 kW is expected to be obtained in 2024.
Carbon Tax	**Tax system formulated by international or domestic governments, related to GHG emissions or climate change.**	Within the Organization	Middle Term	Increase in Indirect Costs	1. Strive to reduce GHG emissions at the Company's organizational boundary to cope with the cost of carbon tax (fee) at home and abroad in the future 2. 98-99% of the GHG emissions in the fab come from electricity. Improve energy efficiency through energy-saving solutions or implement greenhouse gas reduction measures such as process improvement to reduce carbon emissions effectively. 3. Plan for investment in renewable energy equipment, increase the use of renewable energy, and reduce Scope 2 indirect carbon emissions from purchased electricity. 4. Plan to obtain "reduction credits" (carbon credits) to deduct Scope 1 direct emissions and Scope 2 indirect carbon emissions from use of purchased electricity. 5. Develop low-carbon products and reduce GHG emissions.
Customer Behavior Change	**Because of the rising global or regional awareness of sustainability, customers have different considerations when choosing products or services than before.**	Within the Organization Customers	Middle Term	Decrease of operational income	The customer requests to draw up a green power use and carbon neutralization assessment plan. 1. First, conduct the carbon footprint verification and establish the verification scope 2. Formulate carbon reduction targets 3. Set up carbon neutrality targets
Demand for Low-carbon Products and Services	**Due to the climate change factors, the products and services currently provided are high energy consumption or high carbon emission, which do not meet the market demand and may be eliminated.**	Within the Organization Customers	Middle Term	Decrease of operational income	1. Strive to reduce GHG emissions on the organizational boundary of the Company. 2. 98-99% of GHG emissions in the fab. are used for electricity. Efforts are made to invest in energy-saving schemes and renewable energy equipment to improve the use of renewable energy and reduce carbon emissions. 3. Develop low-carbon products (together with relevant material evaluation units) to reduce GHG emissions.

Major Carbon Opportunities	Opportunity Description	Impact to Value Chain	Time of Occurrence	Potential Financial Impact	Management Practices
Energy Efficiency Improvement	**Reduce the impact of energy price fluctuation and reduce the risk caused by excessive energy and resource consumption to the environment.**	Within the Organization	Middle Term	Decrease of Operating Costs	1. Introduce EMS (Energy Management System) to understand the actual consumption and operation efficiency of various equipment. 2. Improve efficiency and reduce energy consumption by collecting and analyzing energy consumption and operational efficiency data and developing equipment replacement/parameter adjustment plans.
Customer Behavior Change	**When customer behavior changes, different considerations will be given to the selection of products or the provision of services.**	Customers	Long term	Emerging Market Development	Formulate a green power utilization and carbon neutrality assessment plan through voluntary energy saving and carbon reduction and customer's requirements, and take relevant follow-up actions: 1. Conduct carbon footprint verification and the scope of the verification 2. Formulate carbon reduction targets 3. Set up carbon neutrality targets 4. Implement energy saving and carbon reduction projects.
Low Carbon Energy	**Reduce dependence on fossil fuels and gradually replace them with renewable or low-carbon or green energy.**	Within the Organization	Middle Term	Carbon Assets Management	Complete the construction of the solar power system on leased land before the end of 2024. The total expenditure in 2022 was NT$191.4 million and the expenditure in 2023 was NT$31.15 million. The expenditure in 2024 will be NT$55.76 million and the expenditure for 2024-2025 will be NTD 69.69 million as expected. The renewable energy will expectedly occupy 1.7% of the total power consumption in 2025.

4.2.3 Greenhouse Gas Inventory

GRI 305-1 GRI 305-2 GRI 305-4 GRI 305-5 GRI 305-7 SASB TC-SC-110a.1 SASB TC-SC-110a.2

Highest supervisory unit
The Board of Directors

Main Authority and Responsibility Function
Environmental Safety, Health and Energy Management Committee

Since 2009, all fabs have conducted annual independent checks and passed third-party verification

- **Check Basis:** international standard ISO 14064-1
- **Contents of the Check:**

Scope 1 (Category 1): Direct GHG emissions
Scope 2 (Category 2): Indirect energy emissions
Scope 3 (Category 3~6): Other indirect GHG emissions

Control and roadmap planning

- Responsible personnel for Greenhouse Gas Check report quarterly to the Board of Directors, who in turn follow-up on the year's progress and ensure that relevant checks are up to speed
- The Company shall complete all checks and verifications for its subsidiaries for 2023 by 2024 Q2 to ensure consistent scope of coverage with the Consolidated Financial Statement

ChipMOS actively responds to the global trend of carbon reduction, brings mitigation and adaptation of climate change into important issues in operation management, and sets the Environmental Safety, Health and Energy Management Committee as the authority and responsibility function to promote carbon management issues. Since 2009, each fab has independently implemented check, established a GHG emission check, and identified key GHG emissions sources in the production process for management. We conduct verification every year in accordance with ISO 14064-1 to ensure data quality and provide credible carbon management information to stakeholders. In 2020, the planned implementation was transformed into ISO14064-1:2018, which would more accurately and deeply control the carbon emission management inside and outside the organization.

In 2023, the Company's GHG emissions (Category 1 + Category 2) were about 235,901.50 tonnes of CO_2e; relevant analyses showed that out of ChipMOS' total GHG emissions, 98.08% are Category 2 emissions generated by purchased power, Category 1 emissions reached 1.92% of the total emissions mainly due to safety and protection of the high-voltage equipment at Hukou fab. And the use of 907.2 tCO_2e of sulfur hexafluoride (SF_6). No perfluorinated compounds (PFCs) were used by the fabs. In light of ChipMOS' emission structure, an energy-saving team has been established internally, to actively conduct energy-saving and carbon reduction management programs for various energy-consuming equipment. In addition to meeting the 1% energy saving requirement of the Bureau of Energy every year, the Company also replaced outdated equipment and adjust control parameters, to improve energy efficiency.

The Company has completed the Greenhouse Gas Check and verification for subsidiaries since 2023 in preparation for pertinent legal requirements

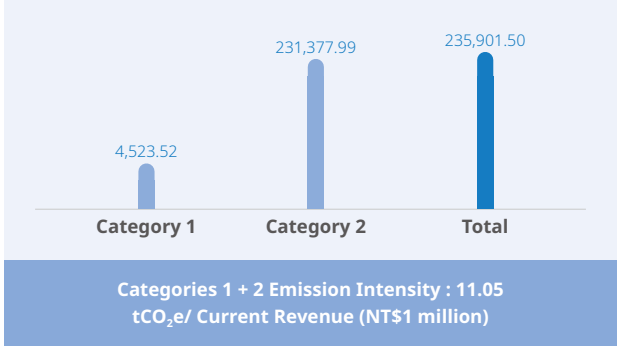
Per Financial Supervisory Commission's official launch of the "Sustainable Development Action Plans for TWSE- and TPEx-Listed Companies" in 2022 and the U.S. SEC's rule changes that require companies to disclose their GHG emissions along with climate-related risks and their actual or likely material impacts on the business in conjunction with MOE's 2022 announcement" to include ChipMOS in the second batch of companies that are expected to register their GHG emissions", the Company has proactively implemented the following response measures:

1. ChipMOS shall complete the 2023 Greenhouse Gas Inventory and verifications for all fabs it operates along with its Shanghai and U.S. subsidiaries in March and April 2024 so that the scope of coverage will be consistent with its Financial Report.
2. For Hsinchu fab., Zhubei fab., Hukou fab., Tainan fab. and Tainan fab. 2 with GHG emissions exceeding 25,000 tCO2e each year, ChipMOS shall complete their verifications and register relevant outcomes for 2023 on the MOE platform before the end of April 2024 (self-inventory data) and the end of October in the same year) data after verification).
3. In addition to including Scope 3 - "Capital Goods" in the inventory from 2023, Scope 3 - "Investments" will be added to inventory from 2024 to respond to and comply with IFRS requirements.

   ChipMOS has a capital of NT$5 billion to NT$10 billion. We are a listed company and shall publish the annual report and annual financial report in 2028 at the same time when publishing the 2027 documents. ChipMOS has taken proactive response measures in advance to incorporate Scope 3 - "Capital Goods" and "investments" are in the inventory.

Emissions and Intensity of Categories 1 and 2 for 2023

Unit: tonnes of CO_2e

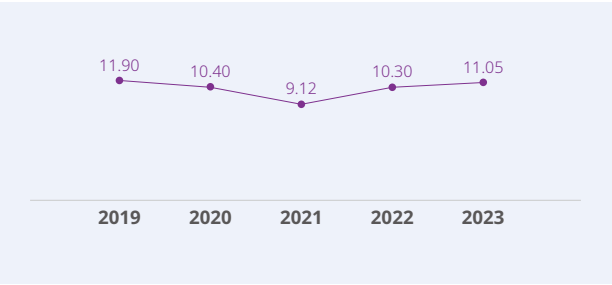


Categories 1 + 2 Emission Intensity : 11.05 tCO_2e/ Current Revenue (NT$1 million)

Note 1: The power emission coefficient - 0.495 KgCO2e/ kWh announced by the Bureau of Energy in 2022 is taken as the calculation basis for 2023.
Note 2: The cope of the inventory shall cover all of ChipMOS' facilities in Taiwan, as well as its Shanghai and U.S. subsidiaries

Intensity of Categories 1 and 2 (Taiwan fabs only)

Unit: tonnes of CO_2e/ Current Revenue (NT$1 million)



Emissions of Categories 1 and 2 (Taiwan fabs only)

Unit: tonnes of CO_2e

	2019	2020	2021	2022	2023
Category 1	2,447.61	1,988.64	1,538.44	4,281.35	4,515.16
Category 2	239,476.16	237,416.00	248,244.64	238,001.55	231,364.85
Total	241,923.77	239,404.64	249,783.08	242,282.90	235,880.01

Note 1: GWP: Global warming potential (citing IPCC: the 6th announcement in 2021)

ChipMOS regularly conducts Greenhouse Gas Inventory and continuous reduction within the organizational boundaries every year. Since 2021, we have taken the initiative to add Category 3 and Category 4 verification in accordance with ISO 14064-1:2018. The projects concerned include: indirect GHG emissions generated by transportation (including "upstream / downstream transportation and distribution of goods", "business travel activities") and indirect GHG emissions generated by products used by the organization (including "purchased goods" and "solid / liquid waste disposal activities"), so as to find out the best feasible carbon reduction focus and actively invest in reducing GHG emissions.

Category 3 and Category 5 Emissions for 2023

Category		Calculation Boundaries and Assumptions	Emissions (tonnes of CO_2e)
Category 3	Upstream transportation and distribution	Inventory all GHG emissions generated during transportation for all raw materials and consumables purchased in the year	12.06
	Downstream transportation and distribution	Inventory all GHG emissions generated during transportation of products and tally the volume of gasoline and diesel fuels used by relevant vehicles	169.13
	Employee commuting	Employee commuting encompasses means of transportation such as driving a car, riding a motorcycle or taking public transportation	2,345.57
	Business travel	Business travel shall cover all means of land/sea/air transportations (such as taking the high-speed railway for domestic business trips)	127.31
Category 4	Purchased goods	1. Raw materials and consumables purchased for production-related purposes at the fabs	48,784.02
		2. Emissions from the generation (by electricity or fuel) of externally purchased energy that do not fall under Categories 1 and 2	
	Capital Goods	Inventory of buildings - engineering, machinery and equipment (including molds) purchased in the year	20,754.79
	Disposal of solid and liquid wastes	Waste disposal inventory, such as the volume of annual waste disposal (i.e. domestic garbage, recycled items and so forth)	975.80
	Use of assets	Inventory the annual Category I and II greenhouse gas emissions generated by the leased assets of other operators, such as electricity, gasoline and diesel at the lease location.	89.43
Category 5	Investment	Emissions from investments	3,494.66
Total			**76,752.78**

Note 1: GWP: Global warming potential (citing IPCC: the 6th announcement in 2021)
Note 2: The cope of the inventory shall cover all of ChipMOS' facilities in Taiwan, as well as its Shanghai and U.S. subsidiaries
Note 3: In response to IFRS requirements, the calculation of the capital goods was changed in 2023 to include capital expenditures on buildings - engineering, machinery and equipment (including molds) in the Company's parent company only financial statements and auditor's report, resulting in an increase in the 2022 GHG emissions.
Note 4: In 2023, in response to IFRS requirements, investment projects were included in the calculation of GHG emissions and thus Category 5: emissions from investments was added.

Base Year for Greenhouse Gas Calculation

Unit: tonnes of CO_2e

Category	Type of Fab	Hsinchu fab.	Zhubei fab.	Zhubei fab. 2	Hukou fab.	Tainan fab.	Tainan fab. 2	Shanghai Subsidiary	U.S. Subsidiary
Category 1 ~ Category 5	Base Year	2023							
	Total Emissions in the Base Year(tonnes of CO_2e)	62,930.66	50,743.15	13,909.77	34,326.69	97,950.30	52,730.17	12.10	51.44
	Base Year Setting Description	In response to the change in the calculation method of the capital goods and the carbon emissions generated by new investments, the Base Year is set back to 2023							

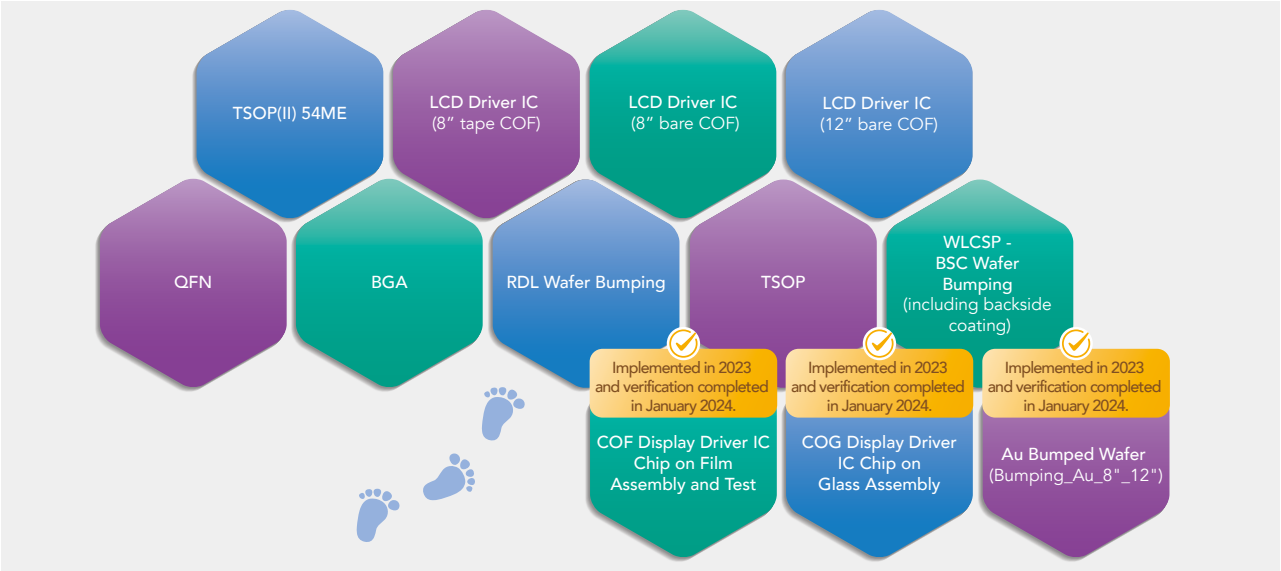


ISO 14067/PAS 2050 Product Carbon Footprint

In an effort to consolidate a foundation for the promotion of green products, green processes and green design, ChipMOS has proactively responded to the requirements of customers' carbon management plans. Apart from the carbon emission disclosure plan that covers GHG emissions, the Company has implemented carbon footprint inventory for specific product series starting from 2012 and continued to plan for the inventory of other products. In addition, the results of our carbon inventory have been verified by authorized third parties in accordance with ISO 14067/PAS 2050 standards to ensure the delivery of reliable carbon emission data to our customers. As of 2023, the Company has completed the carbon footprint inventory for 12 product series.

Being an assembly and packaging OEM service provider, ChipMOS has inventoried its carbon footprint as a service provider and analyzed the volume of GHG emissions during each phase of its product lifecycles in order to achieve precise control over the exact hot spot of carbon reduction in its value chain. This would allow the Company to collaborate with its supply chain and external partners towards the goal of carbon reduction. Here at ChipMOS, the effort of carbon reduction not only runs from top-down but is also implemented duly from bottom to the top, starting from our entry-level employees working in unison, involving everyone to facilitate carbon management in our day-to-day management. By starting from our own operations and main line of business, we endeavor to inspire all employees to inculcate the spirit of carbon reduction.

As of the end of 2023, we have completed the carbon footprint inventory for 12 product series



4.2.4 Energy Management and Efficiency

GRI 302-1 GRI 302-3 GRI 302-4 SASB TC-SC-130a.1

Highlight of Energy Saving Performance for 2023

- In 2023, the Energy saving rate reached 2.77 %. Combining energy saving with production equipment, the number of energy-saving solutions increased by 96% compared to 2022, and the power saving rate increased by 137 %.
- Improved energy efficiency and implemented energy conservation and carbon reduction by 6,568 tonnes of CO_2e.
- Smart energy saving might reduce the energy consumption of the equipment, with power saving up to 1.97 %.

Power Saving Target for 2024

- We intend to implement 41 energy-saving plans in to achieve an Energy saving rate at 3.02%

Objectives and Effectiveness of Annual Energy saving rate

	2021	2022	2023	2024
Objectives	1%	1.02%	1.58%	3.02%
Outcomes	1.5%	1.17%	2.77%	-
Number of energy-saving solutions	25	24	47	41 (Estimated)
Total emissions (tCO_2e)	3,485	2,871	6,568	-



Since 2012, we have systematically launched energy-saving actions, continuously introduced energy-saving technologies and equipment, and voluntarily introduced ISO management system. In 2020, we promoted use of renewable energy more actively, built solar power facilities, and continued increasing the proportion of the renewable energy usage. In 2023, we introduced the EMS (Energy Management System) [Note 1] to reduce unnecessary energy consumption, improved and integrated the production equipment to save energy, and optimized energy supply by inventorying the facilities with significant energy consumption, integrating front-end and back-end energy management, and connecting systems in series.

Data shows that purchased electricity accounted for more than 99% of the total energy consumption in 2023, including 0.003% of purchased T-REC. (Estimated to account for 0.033% in 2024, increasing the amount of purchased green energy by about 10 times.) In 2023, the total consumption of purchased electricity was 1,682,716.1 GJ, followed by natural gas with a total consumption of 10,099.28 GJ, and diesel with a total consumption of 117.44 GJ.

Note 1: About EMS (Energy Management System)
The EMS is equipped with graphical instruments to clearly understand the energy consumption of each system at a glance. It can consolidate power consumption information of various systems for integration, analysis, and monitoring. Through the big baseline data, we can clearly understand the energy consumption status of the equipment and more accurate energy-saving targets can be found in an easier way to effectively improve the energy management efficiency of ChipMOS.

Energy Use

Type of Energy	2019	2020	2021	2022	2023	Unit
Purchased Power[Note 1]	449,151	466,290	494,358	480,854.06	467,421.14	Megawatt Hour
	1,616,605.52	1,678,642.23	1,779,688.97	1,731,074.61	1,682,716.1	Gigajoule (GJ)
Purchased green energy	-	-	-	10	15,66	Megawatt Hour
	-	-	-	36	56.36	Gigajoule (GJ)
Gasoline[Note 2]	7,675.96	7,546.80	6,515.31	7,079.6	8,155.6	Liter
	250.51	246.29	212.63	230.79	266.16	Gigajoule (GJ)
Diesel Oil[Note 3]	201,578.31	37,256.34	5,704.10	6,679.20	5,981.4	Liter
	7,084.59	1,309.40	200.47	234.44	210.22	Gigajoule (GJ)
Natural Gas[Note 4]	286,487.61	261,786.10	244,115.50	258,064.70	268,860.0	CBM
		9,786.39	9,192.41	9,703.23	10,124.19	Gigajoule (GJ)
Total (Total consumption of energy)	1,634,728.56	1,689,984.31	1,789,294.48	1,741,243.08	1,693,373.04	Gigajoule (GJ)
Energy Intensity[Note 5]	80.38	73.44	65.30	74.04	79.29	Gigajoule (GJ) / Current Annual Revenue (NT$1M)
Purchased Power/Total (Total consumption of energy)	98.89	99.33	99.46	99.42	99.37	%

Note 1: Electricity calorific value is converted as 1 kWh = 0.0036 gigajoules
Note 2: Gasoline calorific value is converted as 1 liter = 0.0326 gigajoules
Note 3: Diesel calorific value is converted as 1 liter = 0.0351 gigajoules
Note 4: The calorific value of natural gas is converted as 1 cubic meter = 0.0376 gigajoules
Note 5: Energy Intensity = absolute energy consumption (purchased power + gasoline + diesel + natural gas) / consolidated revenue of current year (NT$1M)

In 2023, the energy-saving team collaborated with different departments to continuously enhance energy-saving and carbon reduction actions, including 4 major energy-saving categories: energy and resources reduction of equipment, smart energy saving, lighting energy saving, and optimization of operating conditions. The scope of energy saving was expanded to include the production equipment of the fab and comprehensively covered the Company's equipment. The specific measures include: intelligent control of the chilled water system, replacement of the chiller system, replacement of lamps with LED lamps, and optimization of semiconductor equipment, and reduction of CDA. All the personnel of the Company participated in the energy saving actions and implemented these effectively in the operations to make the best contribution to the environmental protection.

Major Energy Saving Actions in 2023

Energy Saving Category	Number of Projects	Investment (NT$ thousand)	Annual Benefits Note 1 (NT$ thousand)	Annual Power Saved (Megawatt Hour)	Annual Energy Saved(MJ)	Carbon Reduction Note 2 (MT CO_2e)	ROI Note 3	Energy Saving Rate Note 4
Equipment Energy Resource Reduction	24	26,874	18,406	5,002	18,005,419	2,471	1.5	1.04%
Smart Energy Saving	6	28,677	16,402	4,457	16,045,241	2,202	1.7	0.93%
Lighting Energy Saving	6	7,800	4,844	1,316	4,739,082	650	1.6	0.28%
Optimization of Operating Conditions	11	11,240	9,279	2,522	9,077,618	1,246	1.2	0.52%
Total	47	74,590	48,931	13,296	47,867,360	6,568	1.52	2.77%

Note 1: Calculation method of annual benefits: annual power saved *1 kWh electricity charge – NT$3.68
Note 2: Carbon Reduction is calculated as 0.494kgCO2e/ kWh based on the emission coefficient announced by the Energy Administration in 2024
Note 3: ROI calculation method: input amount / annual benefits
Note 4: Energy saving rate = power saved in 2023 / total power consumption in 2022 (subject to the calculation method of the Energy Administration)

01 Highlight Sharing

Introduce and Optimize the Chiller System; Intelligent Control

The energy-saving benefit reached 2.48 million kWh in 2023, which significantly reduced energy consumption and effectively improved energy efficiency.

Smart energy saving has been introduced in stages at ChipMOS. Hsinchu fab. implemented intelligent control for the operation of the chiller system during the period from 2022 to 2023. The personnel of the fab and the equipment supplier conducted discussion and testing and transformed professional and practical experience into the most suitable energy-saving parameters, and the optimized control was achieved through intelligent control and empirical parameters. The Smart energy saving has been introduced to all the fabs of ChipMOS.

Detailed Assessment to Establish a Clear Implementation Plan

To optimize the operational benefits of the chiller system, efforts were made in 3 major directions: the chiller water unit, the chiller system, and the cooling system.

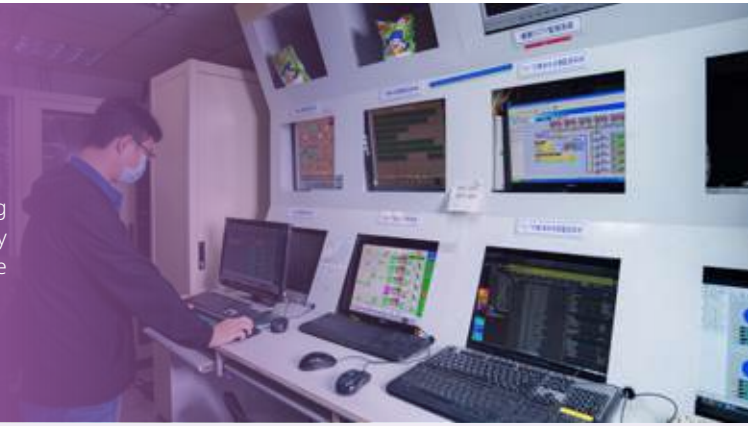
Comprehensive Planning of Implementation Details

Introduce external manufacturers and professional technologies, prioritize frequency conversion of air conditioner pumps for energy saving, and ice water temperature and pressure difference monitoring for clean rooms, with the specific target of saving power by 1.8 million kWh per year; carry out planning of implementation details, including equipment location and circulation., wiring diagram, and equipment inventory table.

Implementation and Follow-up

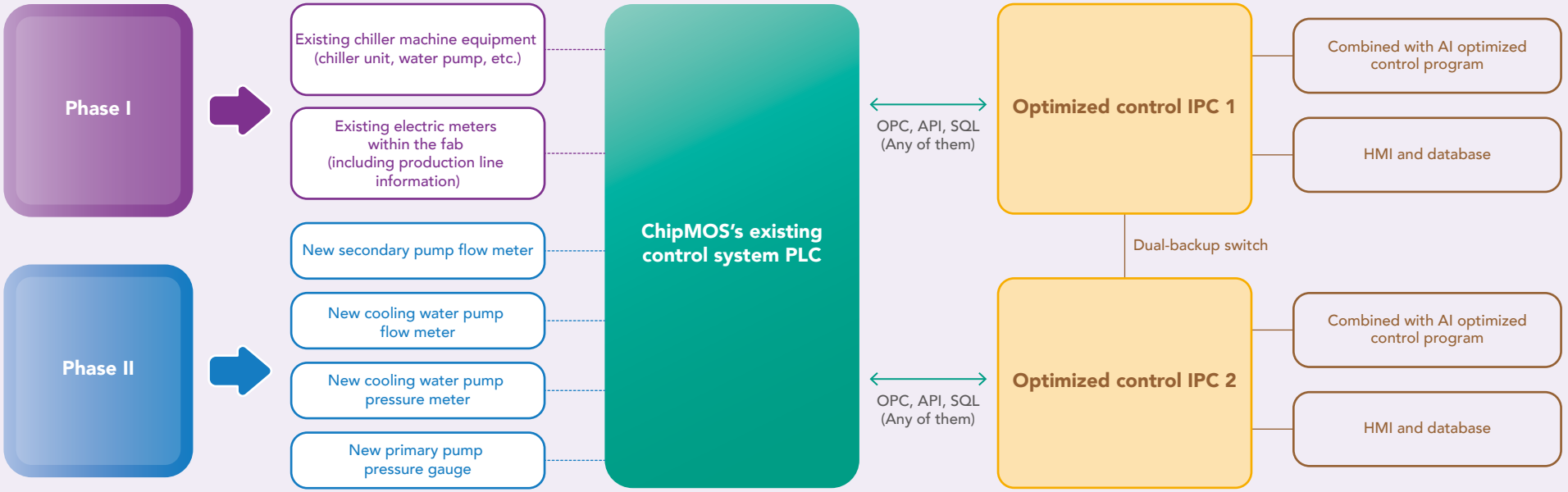
1. Implementation progress: Confirm the milestone control of the project and relevant schedule, and give feedback periodically for review and adjustment to reduce the impact during the construction process and maximize the energy-saving benefits.
2. Benefit tracking: Conduct comprehensive data analysis to ensure effective management, maintenance, and repair

02 Highlight Sharing



[NCKU x ChipMOS] Optimized Control of Chiller Machine

In 2023, ChipMOS and the Department of Electrical Engineering of National Cheng Kung University jointly exchange experiences, hoping that through the exchange of expertise of AI technology of NCKU and ChipMOS practical experience, the alliance will create a synergy effect. The NCKU professor gave the suggestions to the operation mode of the chiller system in Tainan fab. It is estimated that if the relevant AI settings are introduced in the future will achieve an annual saving of 4.22 million kWh.



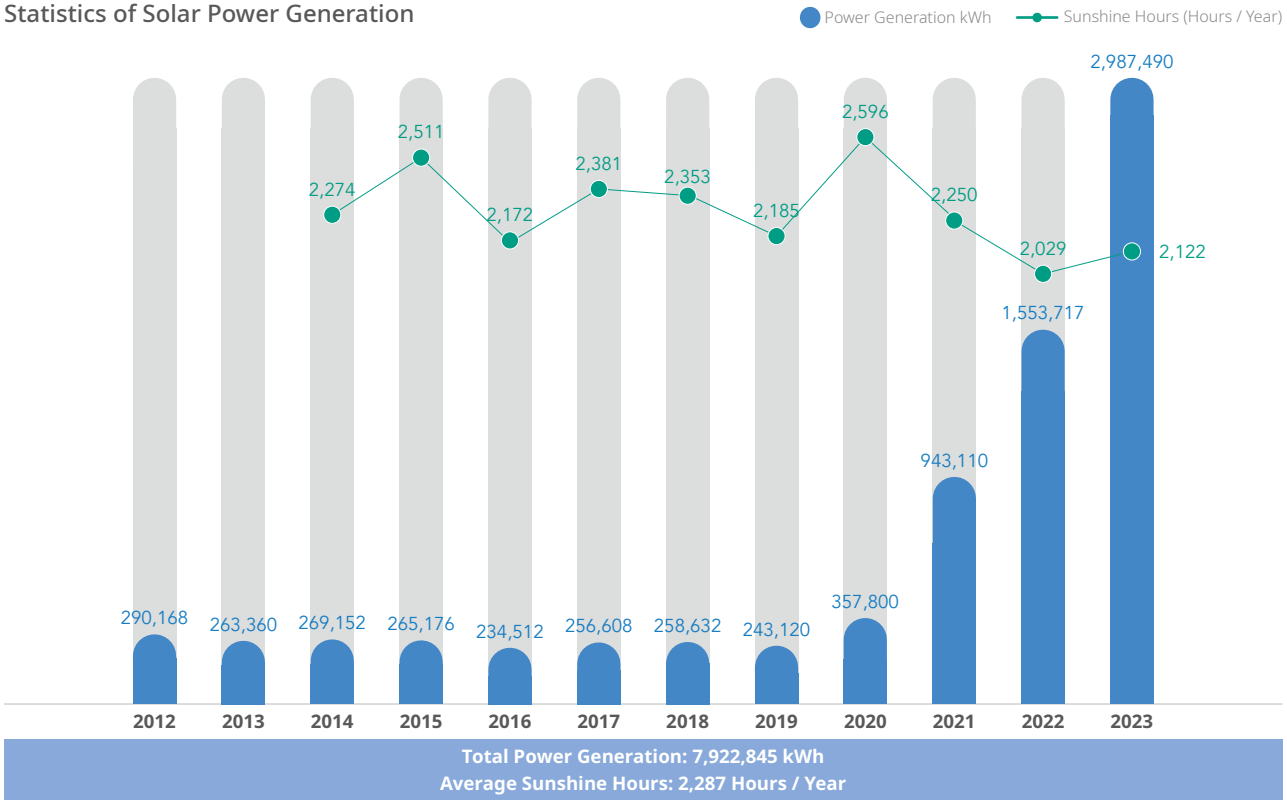
Data source: Professor Hong-Tzer Yang, Department of Electrical Engineering, National Cheng Kung University

Green Energy Planning

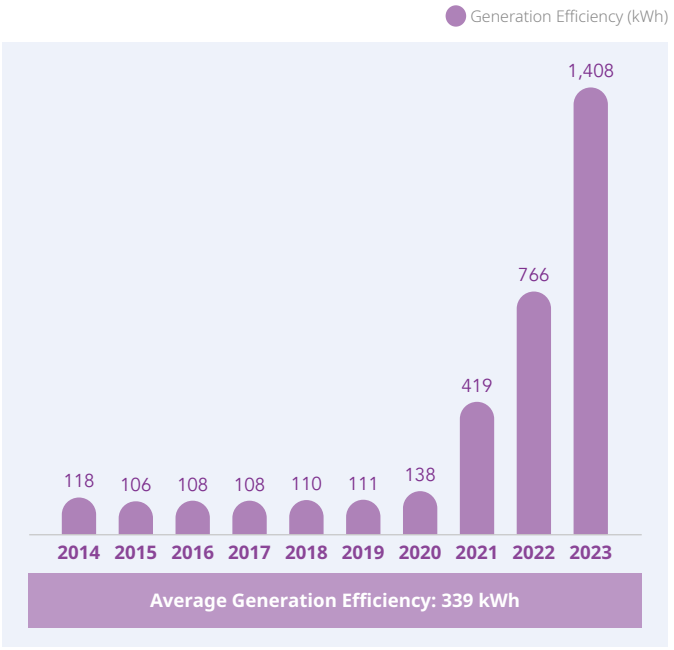
The outsourced power used in the manufacturing process is the most important source of our overall carbon footprint. Therefore, we are committed to reducing the generation of outsourced power and continue to invest in renewable energy. To support the government's energy transition policy, in 2012, ChipMOS installed the solar energy panels on the roofs of Tainan fab., and signed the contract with Taipower for green power supply; subsequently, in 2019, the 2nd solar power generation system was built. In 2021, the whole fab. was set up in a unified plan to expand the use of renewable energy in the northern fab. In 2021, 4 additional solar power generation systems were completed on the roofs of our fabs, with the capability up to 990.45KW (Hsinchu fab., Hukou fab., Zhubei fab. 2 and Tainan fab.), and the Company obtained leased land at the end of 2022 to build 2 sets of solar power systems of 932.66 kW. Over the past 12 years, the accumulated solar power generation has reached up to 7,922,845 kWh, which can satisfy the monthly electricity consumption of nearly 23,371 households.

To actively achieve the carbon reduction goal, ChipMOS' next stage of development planning focuses on the self-generation and self-consumption of solar energy. We achieved the target of building 3.85MW renewable energy at the end of 2023. By 2024, the Company intends to obtain an additional 3.14 MW of solar power capacity, bringing the total installed capacity to 6,990.45 kW. It is projected that by 2025, renewable energy will account for approximately 1.7% of our total electricity consumption. Once the in-house solar energy facility planning is complete, for the mid-and long term, the Company will assess the possibility of purchasing and developing other green energy sources, to realize the more ambitious reduction goal.

Statistics of Solar Power Generation



Statistics of Solar Power Generation Efficiency



Note 1: Calculated based on the average monthly power consumption of 339 kWh per household in 2022 announced by Taipower (data taken from the official website of Taipower)

Note 2: The source of sunshine hours is the website of the Central Weather Administration, Ministry of Transportation and Communications. The statistical period was January - December 2023. The statistical data of sunshine hours were the average hours of Hsinchu (1849 hours/year), Taichung (2080 hours/year), and Tainan (2437 hours/year).

Note 3: The calculation method of power generation efficiency is annual total power generation hours/annual average sunshine hours.

4.2.5 Gas Emission Control

Air pollution has adverse effects on climate, ecosystem, air quality, biological habitat, agriculture and human and animal health. ChipMOS actively invests resources to strengthen air pollution equipment, and achieves the effect of improving air quality through resource injection. Meanwhile, the emission data related to air pollution shall be regularly detected in accordance with various control standards of local regulations on gas emission.

In view of the characteristics of the product production process, ChipMOS only produces a small amount of volatile organic compounds (VOCs), sulfur oxides (SOx), nitrogen oxides (NOx) and particles at Zhubei and Tainan fabs; other fabs have no controlled stationery pollution sources requiring inspection. In 2017, Zhubei and Tainan fabs adopted the Regenerative Thermal Oxidizer (RTO Furnace), and obtained the air pollution operation permit from the Environmental Protection Bureau, with the VOCs detection results of meeting the regulatory emission standards. Through the treatment of energy-saving and environmental friendly VOCs control equipment, the emission concentration was lower than the regulatory limit. Sampling inspection shall be carried out every year according to the permit requirements. In 2023, the removal efficiency of Zhubei fab. came to 90.9%, and 91.2% for Tainan fab. The sampling results met the air pollution discharge standards.

Air Pollution Control Equipment Uses Recycled Activated Carbon

For the air pollution control and adsorption equipment at Zhubei fab. and Tainan fab. that meet the operating conditions and regulatory emission standards, we prioritize the purchase of the **activated carbon consumables** recognized by the Ministry of Economic Affairs as advanced recycled products to a total of **15.5** tons per year. We are dedicated to increasing the reuse proportion of waste resources, reducing environmental pollution to, and action in a way more friendly to the environment.



*For more information, please refer to 4.5.3 Proper Disposal of Wastes - Promoting Circular Economy - Turning Wastes into Resources

Unit: MT

	Fab	Discharge Port	2019	2020	2021	2022	2023	Allowable Value of Local Competent Authority
VOCs Emission	Zhubei fab.	P101	-	-	-	-	0.796	Reduction rate ≥ 90% or concentration ≤ 14ppm (35.89 ton/year)
		P104					0.394	
		P106	-	-	-	-	0.357	
		P105	1.314	2.102	1.840	2.024	1.989	
	Tainan fab.	P103	1.226	1.314	1.051	1.314	0.350	Reduction rate ≥ 90% or concentration ≤ 14ppm (1.94 ton/year)
		P106	0.263	0.438	0.438	0.438	0.616	
	Total		3.416	2.803	3.854	3.329	4.502	-
Sox	Zhubei fab.	P105	5.256	5.256	1.577	3.215	3.215	≤100 ppm (7.13 ton/year)
	Tainan fab.	P103	-	-	-	-	-	2.039 ton/year
		P106	1.051	1.051	1.051	1.051	0.611	
	Total		6.307	6.307	2.628	4.266	3.826	-
Nitrogen Oxides (NOx)	Zhubei fab.	P105	3.767	3.767	3.416	3.451	3.451	≤150 ppm (10.968 ton/year)
	Tainan fab.	P103	-	-	-	-	-	0.68 ton/year
		P106	0.175	0.175	0.175	0.175	0.382	
	Total		3.942	3.942	3.591	3.626	3.833	-
Particle	Zhubei fab.	P105	0.613	0.613	0.613	0.570	0.570	≤50 mg/Nm^3 (0.88 ton/year)
	Tainan fab.	P103	-	-	-	-	-	0.408 ton/year
		P106	0.066	0.066	0.066	0.066	0.382	
	Total		0.679	0.679	0.679	0.636	0.952	-

Note: According to the regulations, Zhubei fab. conducts the testing of SOX, NOX and particles before extension. So the testing data for the year of 2022 are used for 2023.

4.3 Maintaining Biodiversity

In the process of sustainable environmental development, ChipMOS actively takes energy saving and carbon reduction measures to mitigate climate change. At the same time, we are well aware that the ecosystem of biodiversity is an important foundation for people's survival and development. Therefore, ChipMOS takes concrete actions to protect aquatic and terrestrial ecosystems for maintenance of their stability and balance.

Biodiversity and No Gross Deforestation policy

In addition to complying with local and foreign regulatory requirements, ChipMOS strive to reduce the environmental impact of our operations. By formulating clear policies and linking to the SDGs, we guide ourselves and the supply chain to achieve the goals of biodiversity and forest conservation and maintenance. To build employees' knowledge of biodiversity and its importance and impact, the Company will organize biodiversity courses in April 2024. While raising employees' awareness, they can maintain and conserve biodiversity at work and in life.

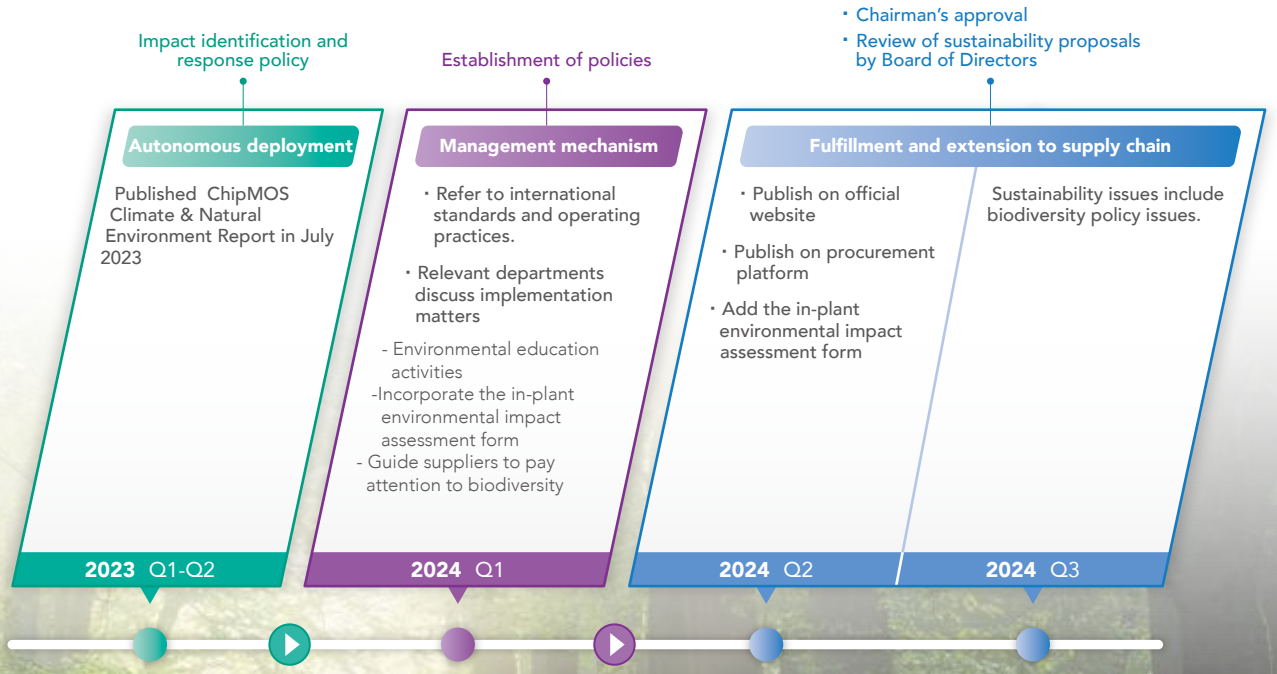

ChipMOS TECHNOLOGIES INC.
Biodiversity and No Deforestation Policy

For the Biodiversity and No Deforestation Policy, please refer to ChipMOS website- ESG section.

Biodiversity planning and promotion

In 2023, ChipMOS taken proactive measures by deploying the draft framework beta v0.4 released by TNFD in March 2023 for the identification and management of nature-related risks.

The Company has conducted assessments of its organizational operations, operational sites, and suppliers' dependencies on and impacts to natural capital. Furthermore, ChipMOS has also published its TNFD report and engaged in stakeholder communication. Similar to TCFD, the TNFD framework also revolves around four pillars and establishes disclosure requirements in the areas of governance, strategy, risk and impact management, and indicator targets.



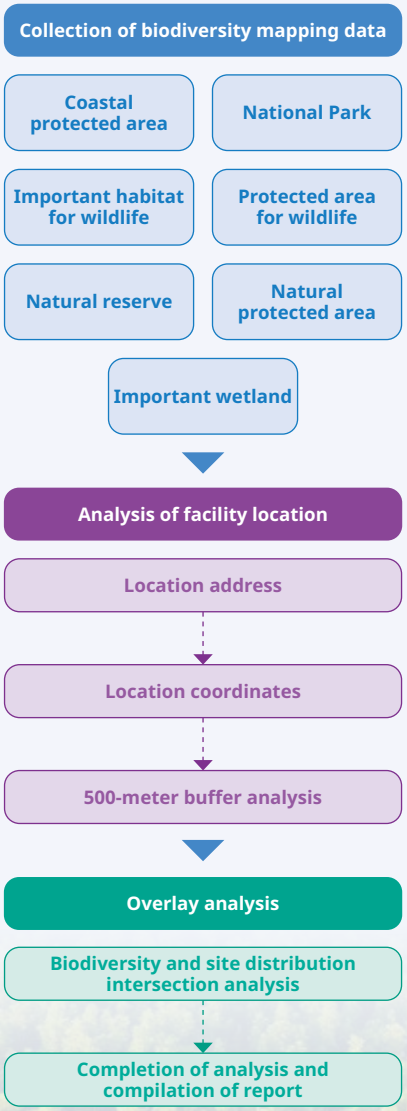
Self-operation and natural risks of suppliers

TNFD has retained the 11 key disclosure elements from TCFD and introduced additional requirements in the strategy pillar, specifically the inclusion of "coverage of priority areas," and in the risk and impact management pillar, the addition of "coverage of stakeholder engagement" in the disclosure requirements. ChipMOS has followed the LEAP methodology recommended by the taskforce to develop disclosure content that aligns with the framework requirements. This involved several steps, including biodiversity significance analysis, scope assessment, positioning of natural interfaces, assessment of priority nature-related dependencies and impacts, evaluation of significant risks and opportunities, and response and management. By completing these steps, the Company shall deliver disclosure content that is in accordance with the framework requirements.

By distributing questionnaires within the organization and to the suppliers and conducting statistical analysis of the valid questionnaires, ChipMOS analyzed the extent of the organization's and suppliers' reliance on ecosystem services, as well as the assessment results of their impact on nature. For the analysis results, please refer to ChipMOS Climate and Environmental Report.

Site analysis

Based on the 283 locations analyzed by ChipMOS for climate change risks and biodiversity impacts (including 15 owned assets and 268 supplier sites), potential pollution and noise impacts have been identified at these sites. The analysis involves conducting a fixed-range environmental analysis, overlaying biodiversity mapping data. However, there may be cases where the impacts extend beyond physical boundaries such as embankments and rivers, requiring further assessment of the extent of impact. Out of the total of 283 locations, there are 8 sites (all supplier sites) that have potential biodiversity impacts. These sites are located in various cities: 5 in New Taipei City, 1 in Taoyuan City, 1 in Hsinchu City, and 1 in Tainan City. The affected areas include important wetlands (such as those in the Danshui River Basin, Taoyuan Irrigation Channel, Xiangshan, and Sicao), a national park (Taijiang), wildlife protected areas, and important wildlife habitats. These 8 sites are mainly suppliers' office locations, to which ChipMOS and the suppliers still attach great importance. Both carefully conduct impact assessment of operational actions and are committed to avoiding and minimizing potential impacts on biodiversity.



4.4 Water Resources Management

GRI 303-1~303-5

4.4.1 Identification of Water Risks and Opportunities

The concept of abundant water resources in Taiwan is deeply rooted in the mind of many people. However, due to the extreme changes in the global climate, the current status and the concept are gradually running counter to each other. Water risk has become an important global issue. Water resources are one of the 17 core goals of the UN Sustainable Development Goals (SDGs). Cherishing and making good use of water resources are the policy that ChipMOS has been actively promoting, and it is also an important part of the sustainable development of the Company. To reduce the risk of water scarcity and support the SDGs, ChipMOS intends to introduce ISO 46001 Water Efficiency Management Systems in a rolling manner between 2023-2024 in the hopes of establishing water use standards, performance indicators and goals, action plans, routine evaluation and audit mechanisms through systematized management so as to bolster the overall water efficiency of the Company and identify water-related risks and opportunities.

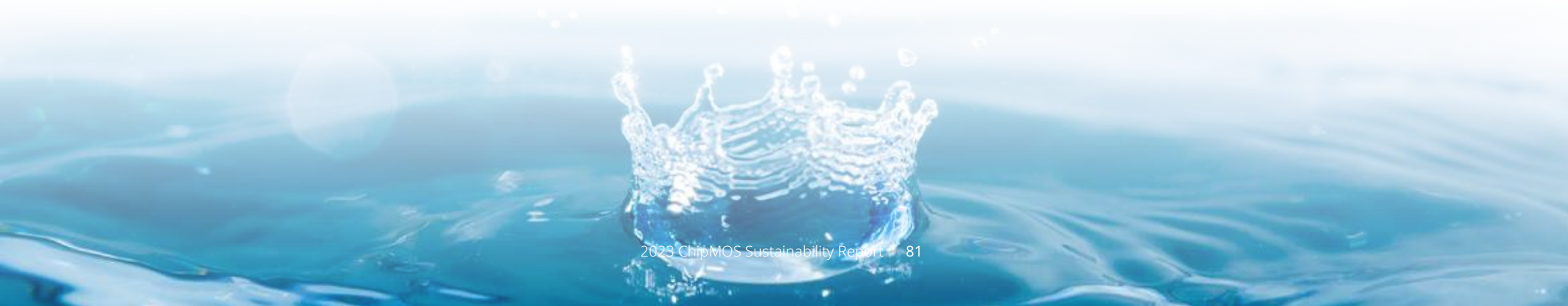
In 2023, ChipMOS' ESG Committee members jointly discussed, reviewed and maintained the outcome of the 2021 water risks and opportunity identification: There were a total of 51 water risks, including 2 major water risks and 9 moderate water risks; a total of 19 water opportunities, including 3 major and 2 moderate opportunities. These add up to a total of 70 risk and opportunity items.

Water Risks and Opportunities



Source of Risk	Risk Description	Impact to Value Chain	Time of Occurrence	Potential Financial Impact	Management Practices
Water supply interruption	**The water supply interruption caused by natural or other human factors has affected the operation of the Company or its vendors.**	Within the Organization Suppliers	Short term / long term	1. Increase of direct cost (short term) 2. Decrease of operational income (short term) 3. Operation disfunction of the Company (long term)	1. Built the anti-drought wells for 1,080 CMD as required by law in 2021, and conducted periodical testing and maintenance. 2. Entering contracts with water truck provider in advance for the dry seasons, to meet the water consumption required by the fabs. 3. Improving wastewater recycling rate and increasing the reuse frequency of recycled water.
Extreme Water Shortage	**Extreme water shortage caused by natural or other human factors, with the severity increasing with time.**	Within the Organization	Long term	1. Decrease of operational income 2. Operation disfunction of the Company	

Source of Opportunity	Opportunity Description	Impact to Value Chain	Time of Occurrence	Potential Financial Impact	Management Practices
Water efficiency	**Increase of water resources and operational efficiency.**	Within the Organization	Middle Term	Decrease of Operating Costs	1. Continued to invest in process water recycling equipment. 2. Use recycled water for scrubbers, cooling towers and other fab facilities 3. Use recycled water for toilet flushing 4. Use recycled water as a source for watering
Wastewater reclamation	**Recycling of process wastewater and rainwater to increase the efficiency of water resources utilization.**	Within the Organization	Middle Term	Decrease of Operating Costs	1. Continued to invest in process water recycling equipment. 2. Additional installation of rainwater recycling systems 3. Source diversion and recycling of wastewater 4. Increase of wastewater recycling efficiency
Adaptability	**Reduction of the impact of climate change and the risk of water shortage.**	Within the Organization	Middle Term	Adaptation to climate change	1. Hukou fab. built the anti-drought wells for 1,080 CMD as required by law. 2. Construction of additional water recycling facilities. 3. Improvement of wastewater recycling rate and increase of water resource efficiency.



4.4.2 Water Resources Risk Management

ChipMOS actively implements the ISO 46001 water efficiency management system to establish systematic data on the change of water flow and water volume. and use big data to analyze possible water risks within the fab. The Aqueduct Water Risk Atlas of the World Resources Institute (WRI) is used to identify the risk level of water supply in the area where the fab is located; through the analysis of internal and external information, it is more helpful for ChipMOS to perform Risk management of water resources. Currently, all fabs of ChipMOS are in the low or mid-low area of water resource pressure. However, in response to the risks gradually brought about by climate change, we still adopt enhancement of water saving as our main water use strategy. According to the data of water resources access sources and total water intake, the water impact of the Tainan fab. came to 0.186%, which is relatively higher compared to other facilities in terms of the impact on water source areas. This is primarily due to the larger water demand resulting from the packaging process characterized by the fab's products.

We continue to strive for water-saving targets. By additional installation of rainwater recycling systems, we enhance the water recovering efficiency and reuse recycled water for toilet flushing and watering to reduce water withdrawal and mitigate the impact on water resources. The total water withdrawal in 2023 was 1,608.698 million liters, a decrease of approximately 158.433 million liters compared to 2022. This is mainly due to the 2% improvement in the process wastewater recycling rate of the Tainan fab.'s and the 86% achievement of the annual average recycling rate there, resulting in a relatively lower water withdrawal.

2023 ChipMOS Water Source Impact and Risk Level

Fab	Source of Water Resources	Water Risk Level[Note 1]	Regional Water Consumption[Note 2] (10,000 tons / day)	ChipMOS Water Consumption[Note 3] (10,000 tons / day)	Influence of Water Usage[Note 4]
Hsinchu fab.	Baoshan Reservoir Baoer Reservoir Yongheshan Reservoir	Moderate-Low	58	0.04058	0.070%
Zhubei fab.				0.00211	0.004%
Zhubei fab. 2				0.00834	0.014%
Hukou fab.				0.02306	0.040%
Tainan fab.	Zengwun Reservoir Wushantou Reservoir Nanhua Reservoir	Moderate-Low	97.6	0.18130	0.186%
Tainan fab. 2				0.03512	0.036%

Note 1: The water risk level is based on "the Aqueduct Water Risk Atlas" of the World Resources Research Institute.
Note 2: Based on the total daily consumption of tap water in the region of the tap water company.
Note 3: Average daily tap water consumption of each fab in 2023.
Note 4: Water Usage Impact = water consumption of each fab of ChipMOS / regional water consumption

Water Intake

Unit: Million Liters

Fab	Water Source	2019	2020	2021	2022	2023
Hsinchu fab.	Tap Water	147.703	153.452	157.199	153.583	148.683
Zhubei fab.	Tap Water	63.995	65.170	12.253	10.116	7.678
Zhubei fab.	Ground Water	446.141	554.929	650.131	577.122	550.268
Zhubei fab. 2	Tap Water	28.256	30.031	32.304	32.468	30.351
Hukou fab.	Tap Water	81.931	81.437	86.886	94.511	83.951
Tainan fab.	Tap Water	943.653	994.405	769.073	792.815	659.946
Tainan fab. 2	Tap Water	56.376	69.829	90.669	106.516	127.821
Total		1,768.055	1,949.253	1,798.515	1,767.131	1,608.698

Note 1: Groundwater (well water) is mainly used in the processes of Zhubei fab. ChipMOS obtains the legal water right certificate issued by Hsinchu County Government every year.
Note 2: Million liters = thousand cubic meters

Water Alert and Response

With reference to the data of the AQUEDUCT Water Risk Atlas data of the World Resources Institute (WRI), we identify the water stress of ChipMOS' main fabs (Hsinchu and Tainan) as medium to low risk level. Considering the risk of extreme climate change, we use digitized real-time information of water conditions to monitor the water supply situation 24 hours a day, track and observe the reservoir water storage capacity for each fab, and keep abreast of water conditions with reference to the relevant meteorological information of the Central Weather Administration. In addition to the early source water waring, we monitor the water supply equipment of each fab in a real-time manner. If the water storage volume of the tap water tank falls below the warning value, we immediately make sure whether the source water and water supply equipment are normal to facilitate subsequent response measures.

In response to the water shortage crisis, the Company has implemented three major contingency measures

01

Set water storage alert threshold; each fab has to check that water storage is kept at >95% each day

02

Enter into contracts with water truck provider in advance to ensure water consumption required by the fabs

03

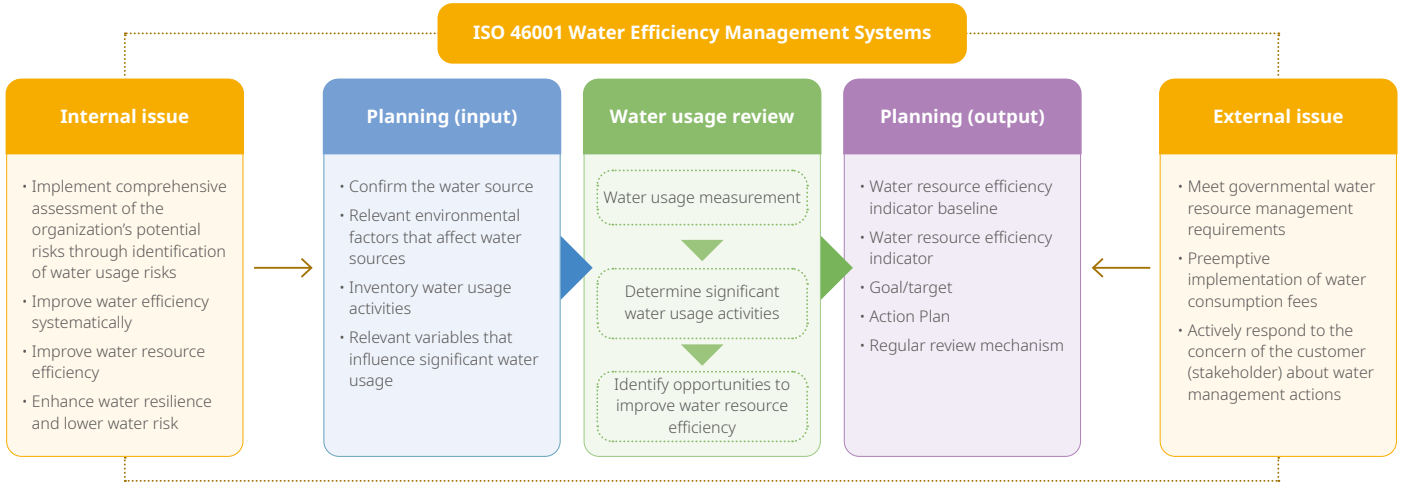
Implement short-, medium- and long-term water saving plans within the fab, such as setting up a rainwater recycling system, increasing the wastewater recycling rate, recovering condensate water from air conditioners, and using recycled water from scrubbers and cooling towers.



Introduction of ISO 46001 Water Efficiency Management Systems

Zhubei fab. and the Tainan fab. [Note 1] introduced the ISO 46001 Water Resource Efficiency Management Systems in 2023. Through systematic management, they conduct investigation of current water usage status, identify significant water consumption equipment, set up performance indicators and baselines, identify water saving potential, and launch feasible water saving measures and improvement countermeasures. Specific measures in the water saving measure plane include water systems, air conditioning systems, and water consumption of process equipment to maximize water use efficiency.

Note 1: Considering the production process characteristics of the products, Zhubei fab. and the Tainan fab. have high water demand and complex processes, so the implementation of the ISO 46001 management system is prioritized.



Zhubei fab.

- **Analysis of major water-consuming equipment**
  - ✓ **Accounted for 78.5% of its total water consumption.**
  - ✓ Pure water production equipment, cooling tower, au Electroplating machine, and au etching machine
- **Improvement of water use efficiency**
  - ✓ The construction of the process wastewater recycling system was completed in November 2022
  - ✓ The average recycled water volume in 2023 reached 354CMD
- **Water saving management plan**
  - ✓ 2023-2024: Rainwater recovery, gold-containing wastewater recovery, and iron sand filter tower backwash wastewater recovery plans
- **2024 water use target**
  - ✓ **Recycling rate increased from 62.83% to 64.3%**



Tainan fab.

- **Analysis of major water-consuming equipment**
  - ✓ **Accounted for 75.2% of its total water consumption.**
  - ✓ RO system equipment, cooling water tower, process recycling equipment and cutting machine
- **Improvement of water use efficiency**
  - ✓ After being discharged from the process equipment, wastewater is recycled with the recycling system. Implementation is as follows:
    - Regular replacement of the membrane in the wastewater reclamation system
    - Optimization of operating parameters
  - ✓ CASSETTE wastewater in Building TC is filtered and reused.
- **Water saving management plan**
  - ✓ 2023-2024:
    - Estimated water saving through rainwater recycling projects is 580M^3
    - Improve the process to save 365 tons of water for the pure water consumption of the iron ring cleaning machines in the Electroplating area
- **2024 water use target**
  - ✓ **Tainan fab. - water recycling rate > 85%**
  - ✓ **all fabs. > 80%**



4.4.3 Recycling of Process Water

Over the past 16 years, the accumulated recovered water has reached 12,547.111 million liters, equivalent to nearly 5,019 international standard swimming pools saved.

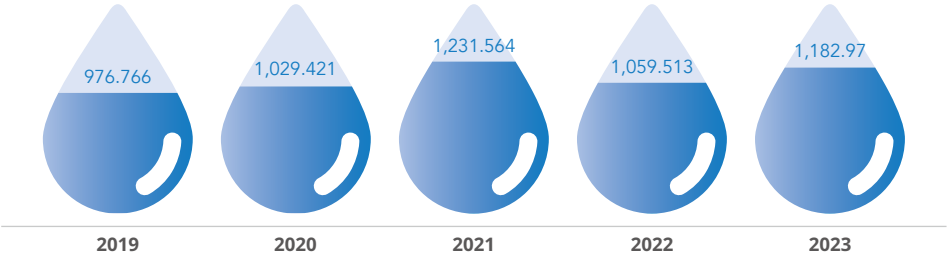
Since Tainan fab. is the main water consumption factory of ChipMOS and has higher impact on the water source area than other fabs, it has been investing in the construction of grinding and cutting process water recycling equipment since 2008. Through collaboration with equipment suppliers and external organizations, the plant utilizes ultrafiltration membranes to filter and recycle process water for reuse in the manufacturing processes. In 2023, the water efficiency reached to a level at which 1 drop of water was used 2.4 times[Note 1]. In 2023, the reclaimed process water at Tainan fab. reached 134.68% of the tap water consumption. The water saved through the process water recycling equipment effectively facilitated the reduction of the impact on the water source area by 0.03%[Note 2] and minimized the impact on the environment.

In 2023, ChipMOS installed the process water recycling equipment in Zhubei fab., with a recycled water volume of 122.02 million liters. Over the past 16 years, the accumulated recovered water has reached 12,547.111 million liters, equivalent to nearly 5,019 international standard swimming pools saved[Note 3].

Note 1: Calculated with reference to the water use efficiency of the industry: (tap water consumption + reclaimed water volume)/ tap water consumption = the number of water use per drop of water
Note 2: Through the use of process water recycling equipment, Tainan fab. has improved its water efficiency and reduced water intake, resulting in a decrease in water impact on the water source area from 0.214% to 0.186%
Note 3: Calculated based on 2.5 million liters of an international standard swimming pool (data sourced from International Swimming Federation, which was renamed to World Aquatics (FINA) in 2023) https://www.worldaquatics.com/

Process Water Recovery at All Fabs.

Unit: Million Liters



Note: Million liters = thousand cubic meters

During the production and operation in the fab, the consumption of water resources will be affected by many factors, such as the volatilization of air conditioning water, irrigation water, and drinking water. A total of 627.005 million liters of tap water was consumed in 2023, increasing by 16.75% compared with that in 2022. The increase in water consumption is primarily attributed to the expansion in production area.

Water Consumption at All Fabs.

Unit: Million Liters

2019	2020	2021	2022	2023
467.192	524.246	490.699	537.070	627.005

Note 1: Water consumption = Volume of water withdrawn - Volume of water discharged
Note 2: Million liters = thousand cubic meters

ISO 14046 Water Footprint

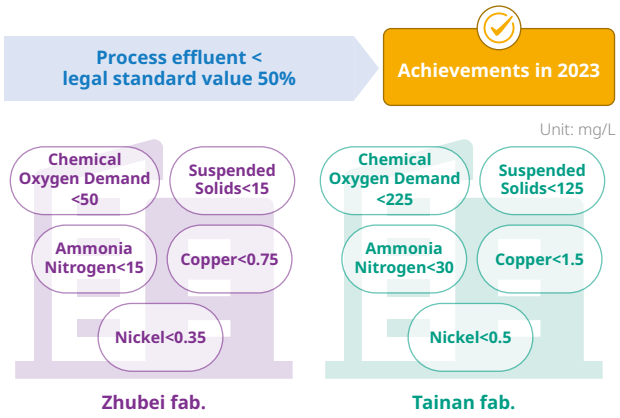
About water resources management, in addition to saving water and recycling water, we also improve the water resource efficiency of the supply chain through the water footprint check mechanism. Moreover, we conduct a check in accordance with ISO 14046 and undergo third-party verification, in order to improve the reliability of data. Since 2014, ChipMOS has completed the ISO 14046 water footprint verification of its products, and has passed the third-party certification, so as to effectively master the water resource status of production and provide customers with reference. The products that completed their check include: LCD Driver IC (bare crystal flip chip), LCD driver IC (COF), 8 "and 12" au bumped wafer, ball grid array package (BGA), quad flat non-lead package (QFN), etc.

4.4.4 Wastewater Treatment and Discharge

The most direct impact of climate change on water resources is the change of rainfall patterns and even extreme weather events, such as droughts, floods, and melting glaciers. Therefore, ChipMOS has spared no effort in protection of water sources. We use continuous monitoring equipment 24 hours a day, conduct water quality testing and personnel environmental education and training to effectively implement water resource management and ensure that discharged water complies with relevant laws and regulations.

Under strict control and thorough environmental education and training of ChipMOS, the wastewater discharged at each production site meets the effluent standards required by applicable laws and regulations. We regularly commission an external qualified testing organization to conduct inspection and conduct inspection and testing every day. Hsinchu fab. and Zhubei fab. 2 and Hukou fab. have no process wastewater. Hsinchu and Tainan fabs are located in the Science Park, and Hukou fab. is located in the industrial zone, where the wastewater is discharged after unified treatment by the park sewage treatment plant and the industrial zone sewage treatment center. Zhubei fab. is also treated by the wastewater treatment plant. After confirming to meet the discharge water standard, the waste water is discharged to the receiving water body approved by the Environmental Protection Authority.

In addition, Zhubei and Tainan fabs set up on-line monitoring of effluent quality to ensure that aquatic environment and ecology are protected. Related targets are set and controlled strictly. In 2023, a total of 981.693 million liters of wastewater were discharged, indicating a decrease of 20.19% compared to 2022. This is mainly due to the optimization and stabilization of wastewater treatment technology in Tainan fab. As a result, the average process wastewater recycling rate in 2023 reached 86.02 %, showing a significantly reduction of wastewater discharge.



Discharge Capacity

Unit: Million Liters

Fab/Project	2019	2020	2021	2022	2023	Treatment Method	Final Discharge Destination
Hsinchu fab.	118.162	122.762	125.759	122.866	118.946	Unified Treatment in the Park Area	Kehyea River
Zhubei fab.	492.003	603.619	639.643	543.148	419.899	Self-discharge Outside the Fab	Douzipu River
Zhubei fab. 2	5.651	6.006	6.461	6.494	6.070	Self-discharge Outside the Fab	Fengshan River
Hukou fab.	23.468	23.626	23.919	23.112	23.890	Unified Treatment in the Industrial Zone	Qiedong River
Tainan fab.	650.401	654.333	493.844	512.071	388.874	Unified Treatment in the Park Area	Dazhou Drainage Line
Tainan fab. 2	11.177	14.662	18.190	22.370	24.013	Unified Treatment in the Park Area	Dazhou Drainage Line
Total	1,300.863	1,425.007	1,307.816	1,230.061	981.693	-	-

Note 1: Hsinchu fab., Zhubei fab. 2, Hukou fab. have no process wastewater, and only domestic sewage is discharged.
Note 2: Million liters = thousand cubic meters

Discharge water detection by water quality

Fab/ Project	According to the applicable standards	pH Value		Chemical Oxygen Demand (COD) (mg/L)		Suspended Solids (SS) (mg/L)		Ammonia Nitrogen (NH_3-N) (mg/L)		Copper (Cu) (mg/L)		Nickle (Ni) (mg/L)	
		Regulatory Limit	Actual Detection Value	Regulatory Limit	Actual Detection Value	Regulatory Limit	Actual Detection Value	Regulatory Limit	Actual Detection Value	Regulatory Limit	Actual Detection Value	Regulatory Limit	Actual Detection Value
Zhubei fab.	Discharge Water Standard	6-9	7.5-7.6	100	16-21.9	30	1.4-4.2	30	3.72-3.8	1.5	0.014-0.018	0.7	0.065-0.141
Tainan fab.	Permissible Standard for Sewage Sewers in the Southern Taiwan Science Park, Ministry of Science and Technology	5-10	6.1-7.3	450	36.4-76.8	250	38.2-48.8	60	4.8-10.7	3	0.346-0.882	1	0.030-0.042
Tainan fab. 2		5-10	7.9-8.5	450	34.3-49.8	250	1.5-8.3	250	1.34-35.2	3	0.028-0.121	1	ND

Note 1: The water quality inspection items that ChipMOS gives priority to are mainly the process water in Zhubei and Tainan fabs, such as waste water from Electroplating, etching, grinding and other processes, and waste water generated from the use of organic, ammonia, Electroplating solution and other raw materials.
Note 2: Hsinchu fab., Zhubei fab. 2, and Hukou fab. are the testing fabs, so there is no test data for the process discharge water.
Note 3: The actual test value is the minimum to maximum values of the test results filed to the competent authority. ND indicates below detection limit.

4.5 Recycling

GRI 301-1 GRI 301-3 GRI 306-1~306-5

4.5.1 Reduction of Material at the Source

ChipMOS provides complete semiconductor back-end process services. The main raw materials for Assembling, testing and materials include Solder Ball, Lead Frame, Substrate, Molding Compound and etc. We continue refining the production process, strive to improve the source, reduce waste, and understand the use of various materials by analyzing the annual material consumption rate. We have also continued optimizing the use of Substrates and Lead Frames during production lines to reduce the consumption of invalid materials. Through the consolidation and utilization of materials, the switching consumption of molding Compound was reduced, and the major raw material consumption was greatly improved.

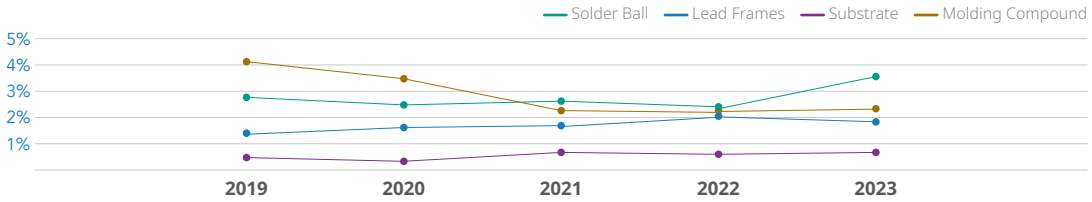
As for the consumption rate of major raw materials, the Compound has been continuously improved and decreased year by year in the past 5 years, and we have continued to optimize the remaining raw materials for improved utilization efficiency and been dedicated to achieving the target loss value. The target values of raw material consumption for 2023 are: Solder Ball (3%); Lead Frame (2.7%), Substrate (0.7%), Compound (4%); the target values of consumption are adjusted based on the planned product mixes to be produced for the year. The decreased demand in response to the economic boom in 2023, customers' increasing needs for small-batch production, and the increase in new product verification needs in 2024 led to an increase in the actual use of Solder Balls and Substrates for BGA series products, so the consumption rate did not meet the requirement.

Quantities of Raw Material Consumed

Recyclable ■ Non-recyclable

Category	2019		2020		2021		2022		2023	
	Use Volume (Ton)	Consumption Rate (%)	Use Volume (Ton)	Consumption Rate (%)	Use Volume (Ton)	Consumption Rate (%)	Use Volume (Ton)	Consumption Rate (%)	Use Volume (Ton)	Consumption Rate (%)
Solder Ball ■	15.8	2.97	21.5	2.79	21.4	2.84	19.5	2.68	12.1	3.71
Lead Frames ■	28.2	1.61	28.9	1.66	39.8	1.72	25.5	2.20	22.4	1.77
Substrate ●	131.8	0.58	171.7	0.52	180.0	0.67	157.8	0.61	97.7	0.63
Molding Compound ●	322	4.08	352	3.45	429	2.36	294	2.38	216	2.37

2019-2023 Raw Material Consumption Rate



Note 1: Consumption Rate = (actual use volume – BOM standard use volume) / BOM standard use volume x100%
Note 2: BOM= Bill of Materials

4.5.2 Recycling of Packaging Materials

ChipMOS provides professional and vertically integrated Assembly and testing services. During the transportation of customers' supplied chips and IC products, we need to use wafer boxes and trays as the carrying tools, in combination with cartons and sponge buffer materials to achieve the effects of product protection. In order to reduce waste generation and reduce environmental load, we recycle and reuse reusable packaging materials.

During the IC testing and production, good products, secondary products and poor products are classified according to the product yield. In addition to using trays for loading, Velcro tapes (good products) used to fix the material trays will be replaced with PP tape for shipping and recycling after all test processes are completed. The secondary products and poor products are partially retested or scrapped according to the customer's instructions. The trays originally loaded are 100% recycled, screened according to the material specifications and standards, and then reused in the production process. Statistics of Main Packaging Materials for Recycling from 2019 to 2023 listed below:

Packaging Material Recovery

Item (Unit)		2019	2020	2021	2022	2023
Tray (Pcs)	Purchase Volume	1,054,500	1,198,050	1,235,250	740,080	653,980
	Reused Volume	1,584,081	1,411,776	1,849,440	1,257,518	951,206
	Reused Rate (%)	150%	118%	150%	170%	145%
Carton (MT)	Purchase Volume	20.8	22.5	24.3	22.1	18.53
	Reused Volume	22.1	24.5	26.8	25.2	21.84
	Reused Rate (%)	106%	109%	110%	114%	118%
Rubber Band (kg)	Purchase Volume	2,122	2,297	2,229	1,903	1,439
	Reused Volume	1,877	2,065	2,030	1,768	1,339
	Reused Rate (%)	88%	90%	91%	93%	93%
Wafer Box (MT)	Purchase Volume	0	0	0	0	0
	Reused Volume	113.7	137.4	139.1	120.2	122.0

Note 1: Main packaging materials are recycled and reused in ChipMOS fabs.
Note 2: Reused Rate = Reused Volume / Purchase Volume (%)
Note 3: The statistical value of cartons is corresponding to large cartons used by wafer for shipment, and the corrugated core paper is made of 100% recycled waste paper.
Note 4: The main source of the wafer boxes is the original box used for the purchase of products supplied by customers and the recycling after the chips are cut off the assembly line. ChipMOS has specially assigned persons clean to remove the labels and dirt on the boxes and then recycle the same for shipment. Therefore, there is no purchase volume.
Note 5: The purchased rubber bands are used for some of the customers' poor products, which shall be returned together with the finished products, so they cannot be recycled in the fab. The customers whose defective products are handled by ChipMOS can obtain rubber bands and trays for recycling after scrapping.
Note 6: The size of a tray is 32.3cm*13.5cm*0.5cm (± 0.2cm), and the total volume of the procurement in 2023 was about 142.58 cubic meters.

Case Study

Collaborate with major customers in 2023-2024 to promote circulation and recycling of packaging materials

In order to make the best use of resources and improve the efficiency of packaging materials, we review more types of packaging materials for their reduction based on the principles of Reduce, Reuse, and Recycle. In 2023-2024, we proactively communicate and discuss with the two major customers of our testing products about the possibility of reducing the weight of packaging materials and recycling them for reuse, including assessing the specifications of alternative solutions, material evaluation, and improvement of packaging material processes to reduce carbon and waste and improve the recycling value of resources.



Cross-department collaboration to jointly define recycling standards

2024-2025 goals ▶
Continue to work with customers to reduce carbon emissions
- Extend success models to other customer products
- Develop better measures for other types of packaging materials

ChipMOS Warehouse Unit / ChipMOS Quality Unit / ChipMOS Engineering Unit / ChipMOS Customers

	Customer A	Customer B
Packaging material type	Inner box (carton) for purchased semi-finished goods	Inner box (carton) for the tray (including bubble wrap)
Original practice	Single use	Single use
New practice	**Reuse** Reuse inner boxes and use them for shipment of customers' semi-finished goods/shipment of cartoned finished goods	**Reusable packaging material: [Transportation box]** Purchase transportation boxes to replace inner boxes for the tray. The transportation boxes are sorted and returned to ChipMOS and reused for shipment after cleaning.
Anticipated benefits	Officially launched in January 2024 **Carbon reduction** About **19%** of the total purchased cartons (40,000 inner boxes (cartons))	Officially launched in January 2024 **Carbon reduction** **100%** replacement of purchased cartons (30,000 inner boxes (cartons)) **Buffer material reduction** About **15%** of the total purchased bubble wraps (30,000 pieces of bubble wraps)

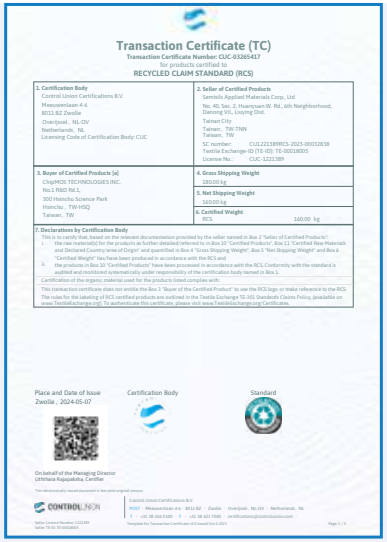
Carbon reduction of 16 tCO_2e

4.5.3 Proper Disposal of Wastes

SASB TC-SC-150a.1

Promoting Circular Economy - Turning Wastes into Resources

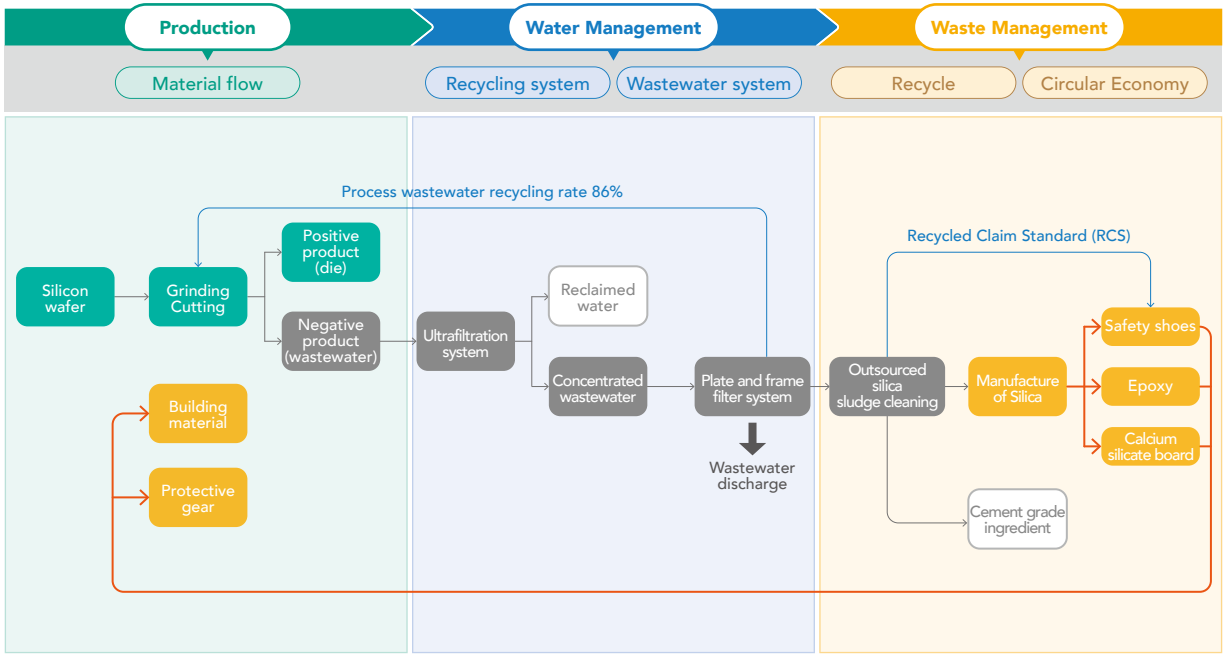
ChipMOS has promoted the waste reduction plan year by year, and together with the functions like process, fab affairs, etc., extended the concepts of "Life Cycle" and "Source Management", and sought for reduction and recycling plans from the process and machine production process, and driven the circular economy in the fab, and made full use of resources through reduction, reuse, recycling and other ways, while taking into account economic development and environmental protection. In addition, the fab promotes "ISO14051 Material Flow Cost Accounting", in order to master various information as the basis for management improvement, so that waste can become a resource in the circular economy, and then improve the value of resource reuse.


Transaction Certificate (TC)
Transaction Certificate Number CUC-03265417
for products certified to
RECYCLED CLAIM STANDARD (RCS)

Transaction Certificate

Case 01 Circular economy of silica sludge

Based on the cost analysis concept of material flow, we divide the manufacturing process into several nodes and conduct multi-level analysis at each node to create negative product circularity value.



Inorganic sludge introduced into the circular economy and remanufactured into "epoxy, calcium silicate board, and safety shoes " for internal use in the fab.

At the end of 2023, the cutting and grinding wastewater of Tainan fab. was treated with the recycling system and the concentrated wastewater was treated through chemical coagulation and sedimentation and plate-frame filtration to form silica sludge. By the end of June 2024, the silica sludge resources will be regenerated into raw silicon materials for remanufacture of "epoxy, calcium silicate board, and safety shoes". These will be returned to the fab for use as green building materials and protective gears. We obtained the Recycled Claim Standard (RCS) certificate in May 2024. In addition to reducing environmental impact and waste disposal costs, we have successfully created an ecological chain of circular economy to achieve the goal of sustainable operations and a win-win situation for the Company's economy and environmental protection.



100% recycling and reuse of inorganic sludge

Since the sludge in the Zhubei fab. does not contain silicon, we commission authorized disposal service providers to perform physical and thermal processes for 100% recycling of inorganic sludge, creating an end-product that can be used as raw material, material, fuel, construction filling, land improvement or an additive in mixed concrete, civil engineering mix material or low-strength pre-mixed concrete.

Case 02 Recycling and reuse of waste molding Compound

As of 2023, as much as 90.6% of ChipMOS' molding Compound have already been recycled into plastic brick products

In the past, the disposal methods for "waste molding Compound" at our fabs have been landfilling and incineration. However, since 2018, we have been actively seeking ways to improve the reuse of waste molding Compounds and have started to engage authorized waste management service providers to convert the waste into usable plastic brick products. They are mostly sold to stone providers for applications such as pedestrian paths or used as a construction material by private construction companies.



Case 03 Recycling and reuse of waste wooden pallets and Styrofoam

- The waste wooden pallets left from the transportation of materials in the fab are recycled by qualified recycling operators to make second-hand pallets, wooden boxes and handicrafts. The remaining broken wooden boards and scraps are pulverized, screened and then used as fuel for the boiler. The recycling rate of waste wooden pallets in 2023 was **35.22%**. It is planned to increase the acquisition channels of qualified providers in 2024 to further increase the recycling rate of waste wooden pallets.
- After being recovered by qualified recycling service providers within the fab, the waste Styrofoam is pulverized or hot-melted into compressed and hot-melt blocks, which are then processed and reduced to PS secondary plastic granules. After adding the color masterbatches, they can be recycled into plastic products, such as plastic rulers, flower pots, clothes hangers, pencil cases, and plastic clips. They can also be used as an additive for lightweight foamed eco-friendly building materials in favor of the circular economy. In 2023, the recycling weight of waste Styrofoam was **12.66** tons.



Case 04 Air pollution control equipment uses recycled activated carbon

For the activated carbon consumables used for air pollution control and adsorption equipment at Tainan and Zhubei fabs, we purchase the recycled activated carbon that has been certified by the Ministry of Economic Affairs as a recycled green product to the amount of **15.5** tons per year. A certain percentage of recycled activated carbon is used as materials and its production process is energy-saving, resource-efficient, and less polluting in favor of social benefits or reduction of social costs. We prioritize recycled green products provided that the operating conditions are met, hoping to increase the proportion of recycled resources from waste and effectively reduce GHG emissions.



Committed to Reducing Plastic Particulate Pollution

The management of waste plastics at ChipMOS mainly includes recycling, physical treatment, and incineration. In 2023, the plastic recycling rate was 45.47%. In addition to improving the approaches of reuse, ChipMOS will actively support the government's circular economy policy. For this, we have planned to recycle waste PP plastic materials through recycling service providers, and then turn them into recycled plastic granules. These are then processed by the FIBC bag manufacturer into FIBC bag and returned to the fabs to achieve the goal of resource recycling and reuse. At the same time, we educate employees to reduce the use of disposable plastic packaging materials or supplies through environmental education and training or dissemination.

Waste Management

In order to ensure that the wastes generated under the operation of ChipMOS comply with the environmental, safety and health treatment procedures, in addition to its own operation activities, ChipMOS also inspects the waste related impacts caused by upstream / downstream activities of the value chain, and comprehensively grasps the impact on the environment. Based on the ISO 14001 Environmental Management System, ChipMOS conducts environmental impact assessment and response management every year from the perspective of product life cycle, including raw material supply, in-fab production and manufacturing, and waste disposal.

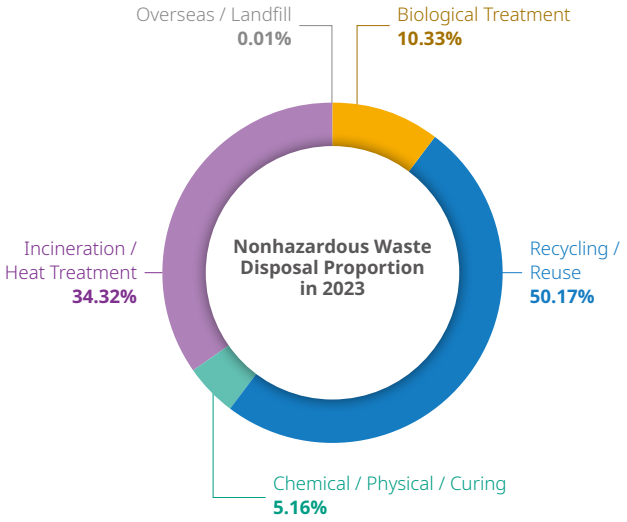
The wastes generated in the upstream and downstream stages of ChipMOS have relatively low environmental impacts. For the upstream (raw material stage), ChipMOS adopts green materials to make the products free of environmentally harmful substances (refer to 4.6 Green Products for details); for the downstream (waste treatment), ChipMOS entrusts qualified manufacturers to handle it according to law and conducts regular audit and supervision. The hazardous waste generated by the production and manufacturing in the fab has relatively high environmental impacts. We further develop risk / opportunity and action measures or target management schemes to minimize the impacts on the environment.

Under the source management, waste reduction, and improvement of resource reuse rate, waste statistics show that the percentage of incineration treatment has been on a downward trend in the past 3 years, from 51.44% in 2021 to 44.60% in 2023, and the reuse rate remained over 35%; in the past 5 years, the intensity of our non-hazardous wastes has shown gradual decrease over the years, while the intensity for hazardous waste remained at below 0.08.

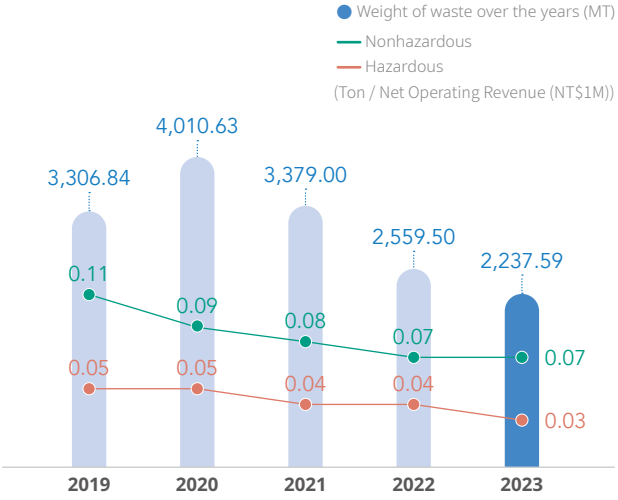
Methods of Waste Disposal in 2023

Classification	Biological Treatment	Recycling / Reuse	Chemical / Physical / Curing	Incineration / Heat Treatment	Landfill	Total (ton)	Reuse Rate (%)
Nonhazardous	157.04	762.63	78.51	521.8	0.21	1,520.19	50.17%
Hazardous	0.00	77.51	163.79	476.10	0.00	717.40	10.8%
Total (ton)	157.04	840.14	242.30	997.9	0.21	2,237.59	-
Waste Proportion (%)	7.02%	37.54%	10.83%	44.60%	0.01%	100%	37.54%

Note 1: The waste disposal conforms to the "Waste Disposal Law" and the qualified scavenger / processor is entrusted to dispose of the waste off the site. ChipMOS regularly audits the joint declaration, monitoring system and final disposal flow of the scavenger / processor.
Note 2: Overseas / Burying:
(1) Burying (nonhazardous): waste dust/ash shall be buried.
(2) Overseas treatment (hazardous): parts and components (waste printed circuit boards) and waste electronic parts and components' leftover products and defective products (IC/Wafer). The export of wastes shall be subject to the application for the Consent of Export of Goods, Post Export Shipping Order, Network Copy, and Receiving Records of the treatment plant in accordance with the Basel Convention.
Note 3: The scopes of waste statistics in the table covers all fabs of ChipMOS (Hsinchu fab./Zhubei fab./Zhubei fab. 2/Hukou fab./Tainan fab./Tainan fab. 2)
Note 4: The recycling and reuse in the above table are consistent with the definition of recycling in the GRI Standards, and there are no items for recycling preparation referred to in the GRI Standards.



Weight and proportion of waste over the years



Featured Cases of Waste Reduction and Improvement in 2023

Recycling of 12" wafer cassettes

Subject Matter	Results
In 2023, more than 432 12" wafer cassettes were recycled.	**5,796** 12" wafer cassettes were recycled and reused.

E-Run Card input by SWR Info

Subject Matter	Results
APG Assembling SWR paper weight reduced by 70%	Reduce the waste of APG packaging production SWR, resulting in a **70%** reduction in paper; reduced paper costs of **NT$163,800** as improvement benefit

Reduction of waste paper generation amount

Subject Matter	Results
Reduce waste paper generation amount by 1% annually.	Use cover trays to replace white paper cards to reduce waste paper generation amount by **1%** annually.

Reduction of waste cutter

Subject Matter	Results
Reduce the use of cutters to a total of 90 pieces per month	Reduce the use of cutters of 3" metal blades and 2" resin blades to a total of **192** pieces per month

Reduction of waste dry battery generation amount

Subject Matter	Results
A total of 46 AVI/TP machines were equipped with light sources to reduce the use of dry batteries by 90%.	A total of 46 AVI/TP machines were equipped with fixed light sources to replace flashlight batteries, saving **90%** of monthly battery consumption and expenses.

Increase of the reuse rate of waste wooden pallets.

Subject Matter	Results
Assess and sign a contract with a recycling service provider of waste wooden pallets	Increase of one recycling service provider of waste wooden pallets

Active carbon filters reduction plan for PL71/PL72 Cup Electroplating machines

Subject Matter	Results
21 pieces/month → 5 pieces/month	In response to the waste reduction policy, the filter material consumption of the Cup Electroplating machines was reduced to the amount of **4.2** times as assessed. The waste filters of the Cup Electroplating machines were also reduced for the environment.

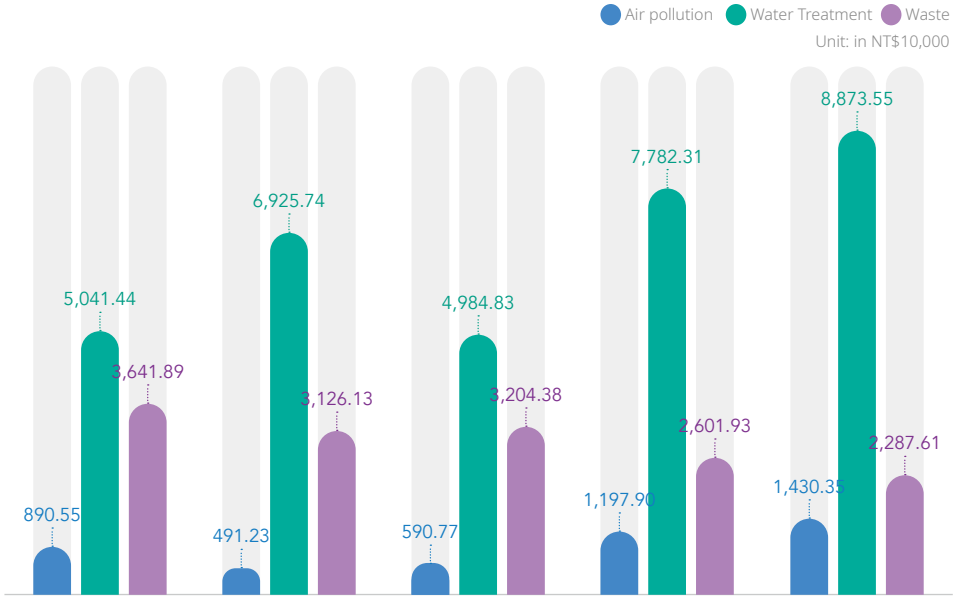
Note: This Form describes the waste reduction plan proposed by relevant production units of the Company and the actual achievements.

4.5.4 Environmental Protection Expenditure and Investment

Regular tracking and analysis of the environmental protection expenditure help us to evaluate the implementation efficiency of environmental measures and internal cost-benefit analysis. ChipMOS annually compiles the environmental protection cost to invest in the software and hardware equipment related to the environment, including improving and upgrading air pollution control, water treatment and waste treatment, and committing to reducing environmental impact.

Environmental protection expenditure and investment in 2023, including environmental protection operation, environmental protection prevention (control) equipment and maintenance expenditure, came to a total cost of approximately NT$125,915,100.

Environmental Protection Expenditure and Investment



	2019	2020	2021	2022	2023
Total	9,573.88	10,543.1	8,779.98	11,582.15	12,591.51

Note 1: In 2023, the Zhubei fab. added a rainwater recycling system, a resin tower wastewater recycling system for gold recycling, and a rinse wastewater recycling system for the iron removal tower of the pure water system. Therefore, the water treatment cost is relatively high.

Note 2: The air pollution expenses increased due to the optimization and improvement of the inverter system for the air pollution exhaust facilities of the Zhubei fab. in 2023.

Note 3: Figures presented in this table are reported as pre-tax amounts

4.6 Green Products

SASB TC-SC-440a.1

4.6.1 Policies, Commitments and Objectives

In order to protect manufacturers, users and the earth's environment, ChipMOS sets strict standards for raw materials used in products. These standards are stricter than the provisions of pertinent domestic laws. With the goal of complying with international standards, ChipMOS also conducts annual appraisal through a third-party impartial organization to ensure the effectiveness of ChipMOS' hazardous substance management mechanism and that all its products are safe and harmless for the planet and all its inhabitants. ChipMOS introduces green materials to make its products free of environmental hazardous substances and enhance their green competitiveness. We promise to:

- **Comply with relevant environmental laws, regulations and customer requirements, and provide green products that meet the requirements of environmental management substances.**
- **Establish the hazardous substances management system, and promote hazardous substances free consciousness for ChipMOS employees.**

In accordance with the green product policy, the achievement performance of the annual objectives shall be counted at the end of each year, and the management items and objectives for the next year shall be discussed and formulated at the beginning of the next year. The target performance of green products is regularly reported to the management during management review meetings to ensure consistent and effective management. In view of the goal of safe material management, we set that in the next 3 years, there will be no more than 0 customer complaints of abnormal product hazardous substances, and the compliance of material management regulations will be fully in line with international regulations. In 2023, ChipMOS received zero customer complaints relating to hazardous substances in products, thus meeting our goal.

4.6.2 GPM Green Product Management System

To ensure that the products provided to customers comply with laws and regulations related to green products, we attach great importance to the control of raw materials at the source.

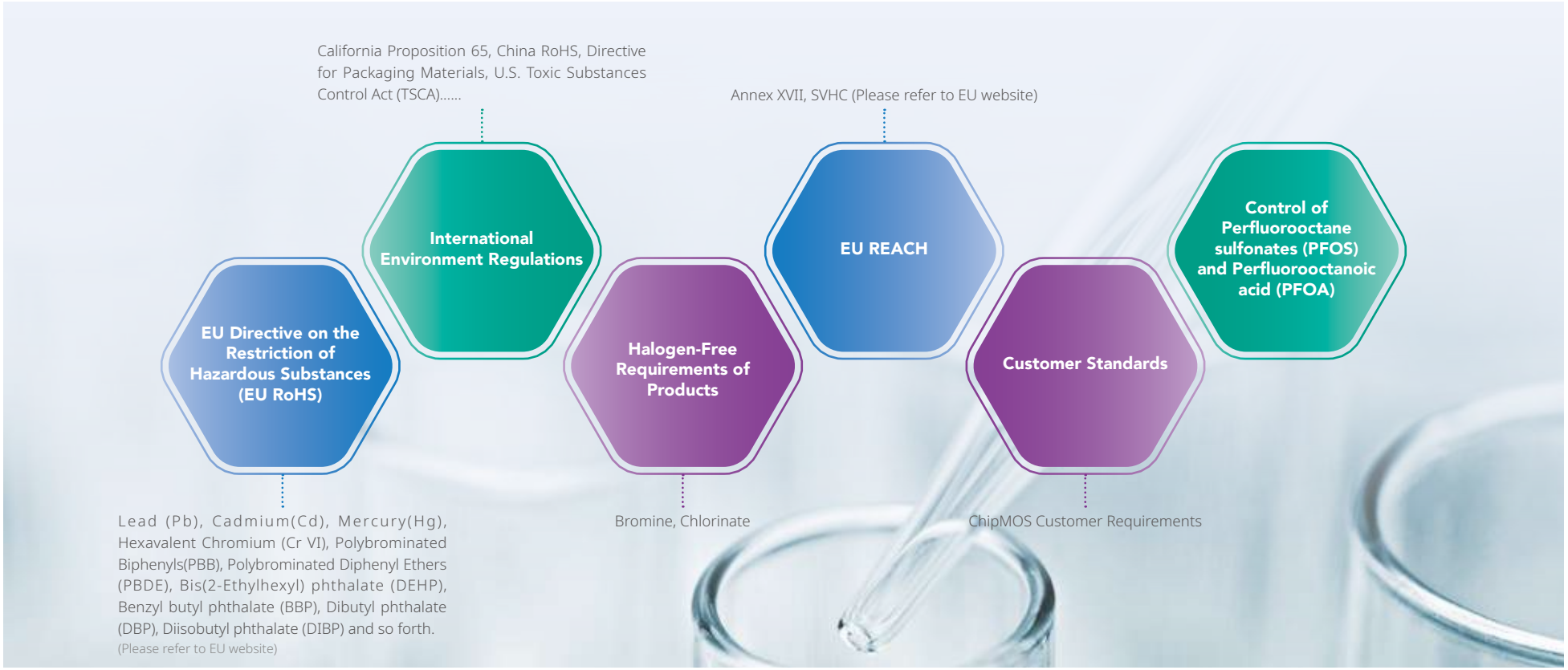
By establishing our Green Product Management System (GPM), we are able to effectively manage the composition and analysis report of the vendors' materials, continuously adjust the internal relevant purchase requisition and acceptance process, and integrate the data with the green product management system into the automatic inspection mechanism to ensure that the raw materials that do not meet the green product requirements will not be purchased or accepted.



4.6.3 Safety Material Management Process

ChipMOS defines the control items of prohibited and restricted hazardous substances according to the regulations on hazardous substances of customers and the requirements of relevant international environmental protection laws and regulations, and then controls them through the Advanced Product Quality Planning (APQP), new product introduction, process change and vendor management of hazardous substance control. We also conduct routine monitoring, including internal audit, third-party verification/audit, incoming material inspection, sampling inspection for incoming material and shipping of end products using X-ray fluorescence (XRF) along with effective green management during relevant manufacturing processes. In the event of any noncompliance or anomaly, the issue shall be handled in accordance with our hazardous substance anomaly handling procedure. In addition, the vendors shall submit the questionnaire of relevant hazardous substances, Material Composition Declaration (MCD), Guarantee letter and other relevant verification materials through ChipMOS GPM system.

Control Scope of Hazardous Substances



Response to the French Circular Economy Act and Check All Packaging Material Suppliers.

ChipMOS has banned huiles minerales[Note 1] from being used on packaging and in printed matters distributed to the public since 2023 in response to the French Circular Economy Act. MOAH and MOSH are listed as the specific substance under control, we voluntarily checked the packaging material suppliers of all the fabs and followed the control limit requirements and schedule specified in the French Act[Note 2]. The result showed that only 1 supplier used 20%~25% mineral oil in its ink label. With our assistance and guidance, the supplier implemented technology conversion for the ink. ChipMOS worked with the supplier to complete the full conversion of ink labels on January 1, 2024 and ensure that the ink used in our labels is completely meet the limit requirements of the 2025 standard.



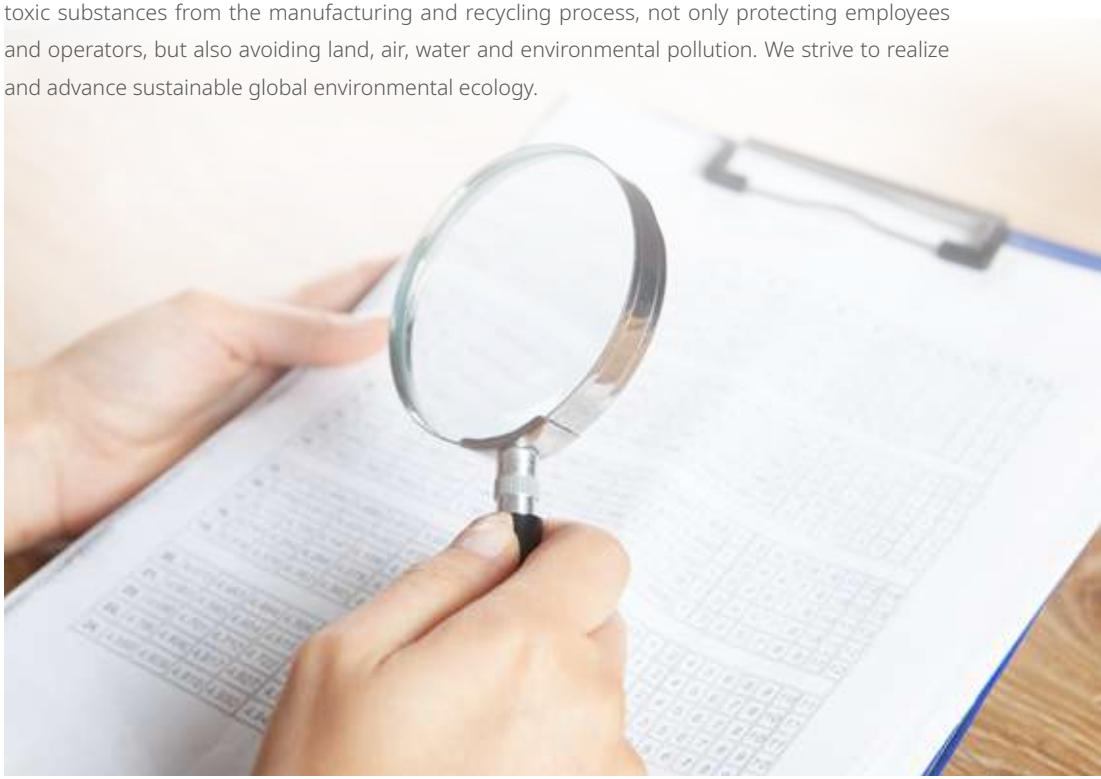
Note 1: The French Circular Economy Act approves the promulgation of the decree on April 13, 2022 (Arrêté du 13 avril 2022), which clarifies the specific substances of mineral oil that are prohibited from being used on packaging and in printed matters distributed to the public. Mineral oils (huiles minerales) refer to oil products produced from raw materials extracted from petroleum hydrocarbons and used in the manufacture of inks. The decree seeks to reduce specific substances contained in the mineral oil used on packaging and in printed matters distributed to the public, because they can interfere with recycling and pose a risk to human health. (French Mineral Oil Act: https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000045733481)

Note 2: Mineral oil control limit requirements and schedule of the French Circular Economy Act:
From January 1, 2023, MOAH consisting of 1~7 aromatic rings <1% (10,000ppm);
From January 1, 2025, MOAH consisting of 1~7 aromatic rings <0.1% (1,000ppm);
From January 1, 2025, MOAH consisting of 3~7 aromatic rings <1ppm;
From January 1, 2025, MOSH consisting of 16~35 carbon atoms <0.10%(1,000ppm);
reporting is required when addition for other purposes and applications is needed.

4.6.4 IECQ QC 080000 Third Party Verification

The materials, products, packaging, parts and components (collectively referred to as "products") produced by ChipMOS and related vendors and outsourcers shall comply with the RoHS directives, ChipMOS specifications for prohibition / restriction of hazardous substances and customer requirements. We endeavor to pay attention to the latest update of international regulations on hazardous substances in products at all times to ensure continuous compliance.

ChipMOS Taiwan fabs has obtained third-party verification according to the IECQ QC 080000:2017 Management System standards for the following facilities: Hsinchu fab., Zhubei fab., Hukou fab., Zhubei fab. 2 and Tainan fab. (Tainan fab. 2 included). These efforts also enabled us to eliminate toxic substances from the manufacturing and recycling process, not only protecting employees and operators, but also avoiding land, air, water and environmental pollution. We strive to realize and advance sustainable global environmental ecology.



CHAPTER

5

Customer Service and Sustainable Supply Chain



Highlight of the Year's Notable Achievements

Customers' Recognitions in 2023

Major customer granted the following awards to ChipMOS in 2023 to recognize technologies, quality and service capabilities the Company offers and it inspires us to keep striving for greater heights so that we can remain as a trustworthy long-term partner for our customers.

- Best Testing Supplier
- Outstanding Supplier
- Engineering Support Award
- Best Partner Award

Summary of Recognition

Technical capability

Actively support the introduction of new products and promote automation of factory information flows.

Service capability

Actively responded to customers' needs, such as offering immediate testing progress information to customers.

Product quality

The main supplier of driver products, with excellent Product quality and timely delivery.

Engineering support

Support customers in multiple engineering items, actively handle the engineering matters and reflect the progress in real time.

Management Policy

Policy	To perceive our customers and suppliers as long-term collaboration partners and adhere to the spirit of serving customers and continual improvement as we provide comprehensive product services; to abide by the RBA Code of Conduct as the guideline for our supplier management policy so that we can grow and achieve sustainable management
Commitment	We commit to deliver competitive products and services to customers to accommodate their needs in a prompt and timely manner; we shall establish comprehensive supplier management and guide our suppliers to abide by the RBA Code of Conduct so as to achieve ESG sustainable actions
Resources	• ESG Committee • Supplier Management Committee

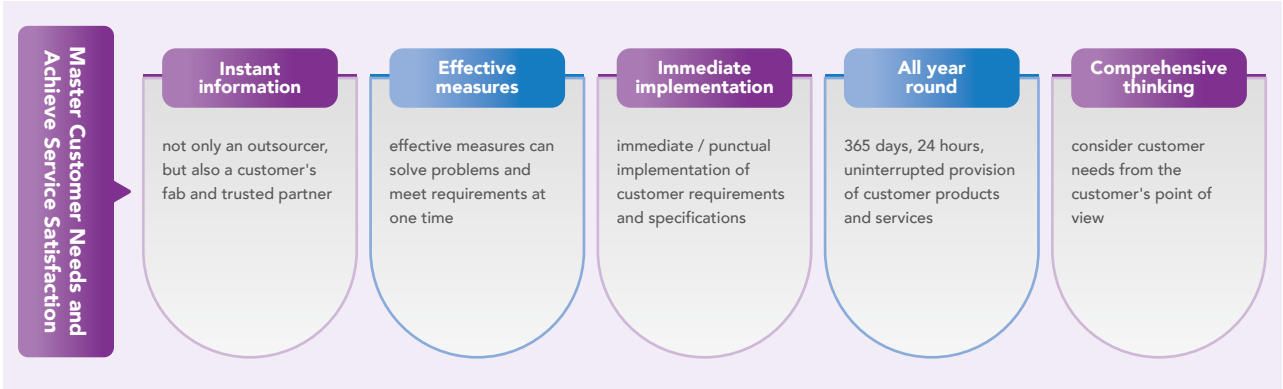
Specific Actions

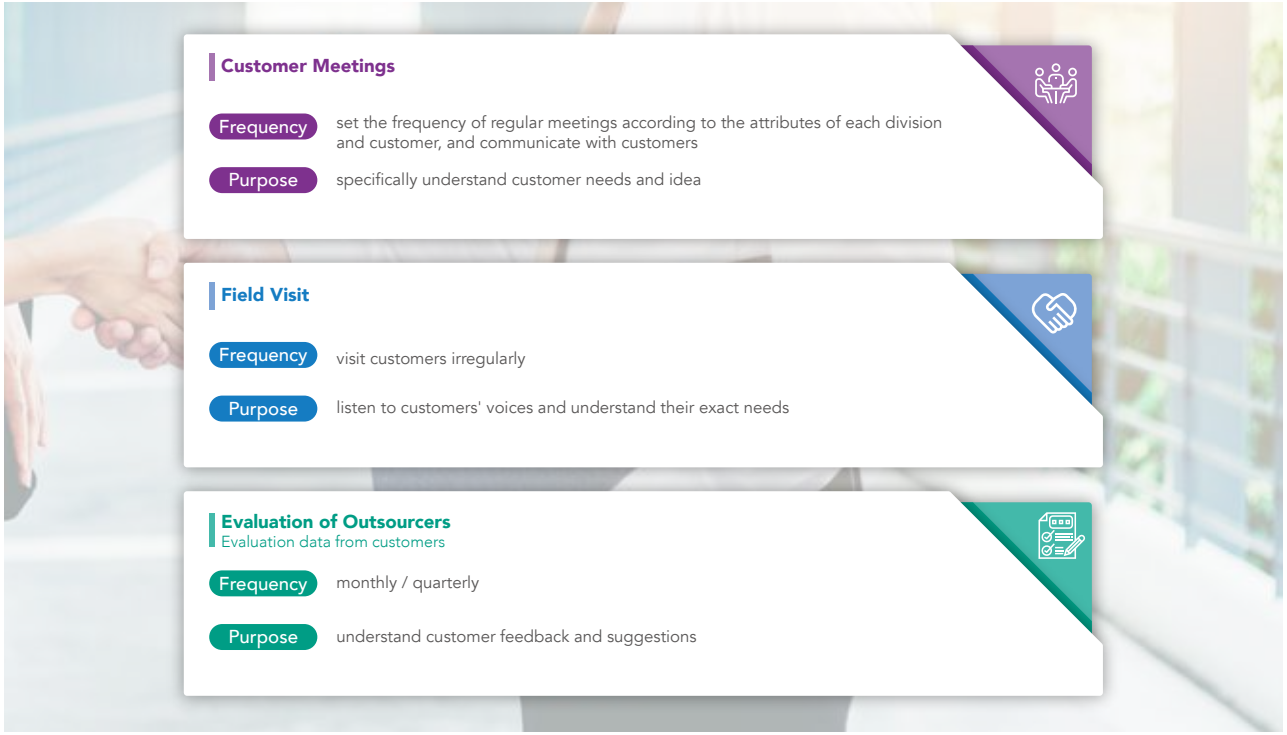
1. Customer Problem Handling Mechanism
2. Fab-wide Continuous Improvement Proposal Activities
3. Selection of New Suppliers
4. Supplier Evaluation, Audit, Continuous Coaching Improvement
5. Drive suppliers to procure 100% of non-conflict materials

Evaluation Mechanism

- Customer Satisfaction Survey
- Supplier RBA Audit, Customer audit
- Declaration and Reporting of Conflict Minerals
- Sustainability evaluation by investment institutions

5.1 Customer Service GRI 418-1





5.1.1 Multi-dimensional Communication Pipelines, Ensuring Real-Time and Accurate Reply

ChipMOS attaches importance to customer feedback and suggestions, and provides multiple channels to receive customer feedback as an important basis for internal growth and refinement. Keep a smooth communication channel with customers, listen to customers' voices and exact needs, take immediate inspection, evaluation and analysis for customers' opinions and suggestions, and provide customers with specific improvement plans. The customer satisfaction survey in 2023 was 4.3 points (out of 5 points), and each evaluation item reached the overall target satisfaction level of 3.5 points or more. The results of the customer satisfaction survey in the past 3 years have all met the target. In the spirit of sustainable development, we will actively understand customer needs to improve customer satisfaction. We will also gradually increase the target score for the medium and long term in view of the customer satisfaction goal, so as to achieve the sustainable operation and growth of the Company.



Customer Satisfaction Survey

It was actively sent by ChipMOS, mainly by the top 3 customers of each division. In 2023, 14 copies were distributed and 14 copies were returned.

Frequency	annually
Contents	"Quality Level", "Technical Capability", "Hazardous Substance Management", "Lead Time Achievement" and "Service Satisfaction".
Purpose	fully understand the customer's satisfaction in respect of various operations
Response Mode	divide the feedback results into short-term and long-term improvement items: **Short-term improvement items:** Submit to the monthly production meeting, where the responsible unit proposes improvement plans based on customer feedback and the items that have a score of less than 3 points. **Long-term improvement projects:** Relevant plans are put forward and tracked in regular weekly and monthly meetings with customers, in order to truly handle and master customer needs.

Customer Satisfaction Survey Results in Recent 5 Years

Item / Year	2019	2020	2021	2022	2023
Quality performance	3.97	4.15	3.99	4.01	4.36
Technology	3.95	4.24	3.99	4.02	4.37
Hazardous Substance Free performance	4.41	4.53	4.60	4.65	4.62
Delivery performance	4.00	4.06	3.92	4.03	4.14
Service performance	4.04	4.18	4.17	4.17	4.36
Overall Performance	3.81	4.12	4.02	4.04	4.19

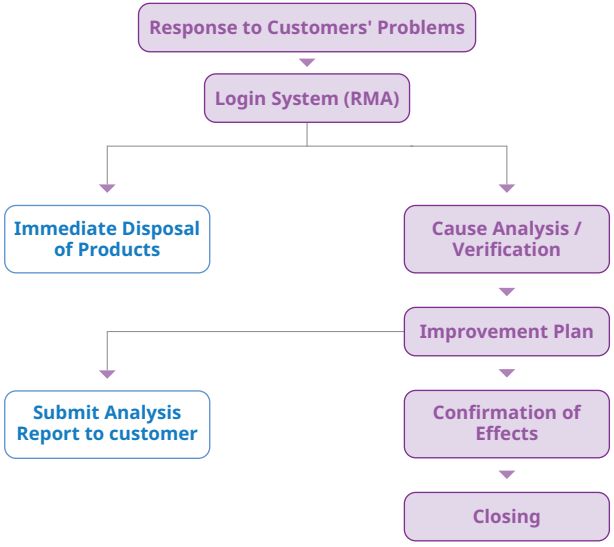
5.1.2 Perfect Customer Problem Handling Mechanism

In order to effectively deal with customer complaints, ChipMOS has established a clear customer complaint handling process for the feedback of abnormal customer quality. The quality service function serves as the main responsible unit between the customer and the fab. When the quality service window of ChipMOS receives the customer's quality problem feedback, it will immediately log in to the system and conduct impact batch investigation, then implement isolation and marking, and further convey the customer information to the relevant responsible units for the real cause investigation and verification. Put forward improvement measures according to the special needs of customers or standard 8D analysis methods, and track the implementation results of follow-up improvement measures. For customer complaints, the investigation of abnormal causes must be completed within 5 days after the formal registration of the case. Effective countermeasures must be put forward, so as to carefully and timely solve customer problems.

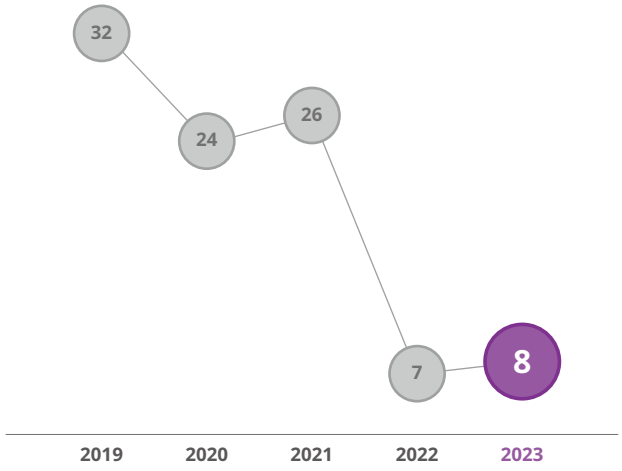
Other non-quality oriented opinions are effectively communicated through the diversified communication channels provided by the Company, in order to meet customer needs and comprehensively improve customer satisfaction in respect of Product quality, yield, technology, delivery date and service.

ChipMOS is committed to improving customer satisfaction performance. With the diversification of products and the growth of shipment volume year by year, we continue improving Product quality, actively strengthen internal education and training, and improve Customer service processing capacity. As a result, the customer complaints are declining year by year, the closing rate is also reaching 100%. ChipMOS also actively investigates the real causes of customer complaints, strengthens preventive measures to thoroughly solve customer complaints, consolidates customer cooperation and trust, and creates win-win results.

Customer Problem Handling Procedure



Number of Customer Complaints in Recent 5 Years



5.1.3 Customer Privacy and Information Protection

ChipMOS attaches importance to customer privacy and intellectual property rights. Any information related to customers is treated as confidential documents for control. We have set up an electronic data leakage protection system to protect customer data. All customer confidential documents are protected by the Trust View. All internal documents of the Company have been written in the form of customer codes to avoid exposing customer names. Through quarterly vulnerability scanning, we can effectively deal with high-risk events. ,

In addition, ChipMOS has actively built an information security management mechanism. All fabs have passed the third-party verification of ISO/IEC 27001:2013 Information Security Management System. There have been no customer complaints related to customer information leakage in the past 5 years.



5.2 Product Quality

> ChipMOS promises that the products and services delivered to customers can meet customer needs, and have market competitiveness and timeliness.

ChipMOS Quality Policy



5.2.1 The Quality System has Passed the Third-Party Quality Verification

ChipMOS fabs have passed ISO 9001 Quality Management System, IATF 16949 Quality Management System for Automotive Industry and ISO 26262 Road Vehicles - Functional Safety Certification. In addition, the electrical property testing field, electric quantity and temperature correction field and chemical analysis field of the Quality Laboratory (at both Tainan fab. and Zhubei fab.) have also passed the certification of the Taiwan Accreditation Foundation (TAF) ISO/IEC 17025 respectively. The Product quality and production of ChipMOS meet a number of international standard quality specifications and requirements.



Note 1: Hsinchu fab., Tainan fab., Tainan fab. 2), Zhubei fab., Zhubei fab. 2, Hukou fab.
Note 2: The ISO/IEC 17025 laboratory quality management system is verified only for the facilities with laboratories at ChipMOS, which would be the Zhubei and Tainan fabs.

Reliability System

In an effort to improve Product quality and reliability, ChipMOS has established a manufacturing quality control system that can maintain product reliability and high yield, and has the most advanced instruments to monitor and control product manufacturing quality and reliability, including:

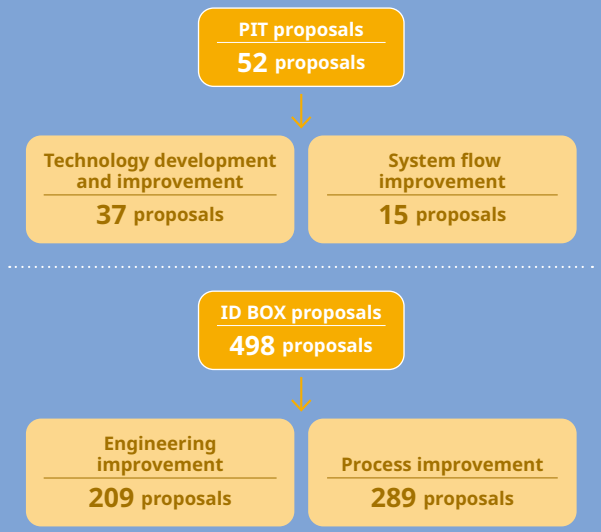
- **Reliability Analysis, including:** temperature cycling tester, pressure cooking tester and highly accelerated stress tester
- **Physical Failure Analysis, including:** scanning acoustic tomography and scanning electron microscope
- **Electrical Failure Analysis, including:** semi-automatic probe instrument, curve measuring instrument and DC testing machine
- **Chemical Analysis, including:** atomic absorption spectrometer, inductively coupled plasma emission spectrometer and automatic potentiometric titrator

Inculcate intelligent production to improve quality protection

Since 2018, the Company been proactively pushing to create its automatic Intelligence factory. According to the products and environment, ChipMOS introduces big data, automatic program control, AI, automatic loading and unloading devices, laser mold cleaning machine and etc. By integrating product logistics, information flow and talent flow, combines software and hardware technologies, and specifically improves production efficiency and Product quality. For many years, we have continued to strive to promote automation projects in various product lines, maintain ChipMOS' professional technical competitiveness, and strive to provide customers with high specifications, high quality and high services.

Performance Highlights

In 2023, there were 52 PIT proposals across all whole fabs, along with 498 ID BOX proposals. The benefits derived from the combination of the two amounted to NT$16.45 Million, of which the achievement rate of the PIT proposals exceeded 100% for consecutive years. In the future, we will continue taking incentive measures, such as proposal incentives, to encourage colleagues to communicate and brainstorm across departments, stimulate innovative idea and improve problem-solving ability, and continue improving ChipMOS' high-quality green competitive advantages, and create a win-win situation with customers.



ChipMOS has proactively responded to climate change issues and implemented relevant energy conservation and carbon reduction policies. In 2022, we leveraged our ID BOX proposal platform and added a new category of "Energy Conservation and Carbon Reduction" along with the setting of specific proposal targets for relevant business units. Through our proposal incentive mechanism, we aim to encourage all employees to brainstorm and offer their creative ideas so as to inspire novel thinking on carbon reduction that could lead to concrete changes, thus enabling us to work together and mitigate the impacts of climate change.

*For more details on the performance and results of our energy conservation and carbon reduction proposals, please see CH4 Environmental Friendliness.

5.2.2 Establish the Correct Quality Awareness of Employees to Improve Quality

In order to effectively improve Product quality and customer satisfaction, we take the initiative to monitor, warn and prevent, so as to achieve quality management with risk thinking, thus minimizing product risks.

- **Monitoring**: monitor quality indicators, strengthen internal audit mechanism, and implement improvement cycle
- **Warning**: earlier warning, level deviation and shutdown
- **Prevention**: strengthen data analysis to achieve effective and immediate quality management

Action 1 Quality Awareness Publicity Activity

In order to implement the ChipMOS quality policy and ensure that it is effectively communicated to all ChipMOS employees, we have taken positive and positive actions. Since 2018, we have promoted quality awareness publicity activity, and continuously promoted the concept of quality awareness to employees in the form of physical and electronic bulletin boards through the Quality Concept Announcement and Automotive Quality Promotion and Sharing, thus ensuring that ChipMOS quality policies and concepts are deeply rooted in the hearts of the staff, and ChipMOS' determination to create high quality is clearly expressed to all stakeholders.

Action 2 Reward for proposals to jointly improve product quality

In order to ensure that the policies and objectives can be effectively and continuously improved, a set of continuous improvement mechanisms and activities are established to enable all employees to participate in quality management activities. In addition, we provide proposal incentives to encourage colleagues to put forward effective solutions, strengthen the Company's quality culture, and continuously improve Product quality and production efficiency. Two important quality control functions are: the Process Improvement Team (PIT) and the IDEA BOX (ID BOX). Through the proposal system and cross functional teams, we implement and promote the continuous improvement of the whole fab.

Achievement of PIT & ID BOX Proposals over the Years

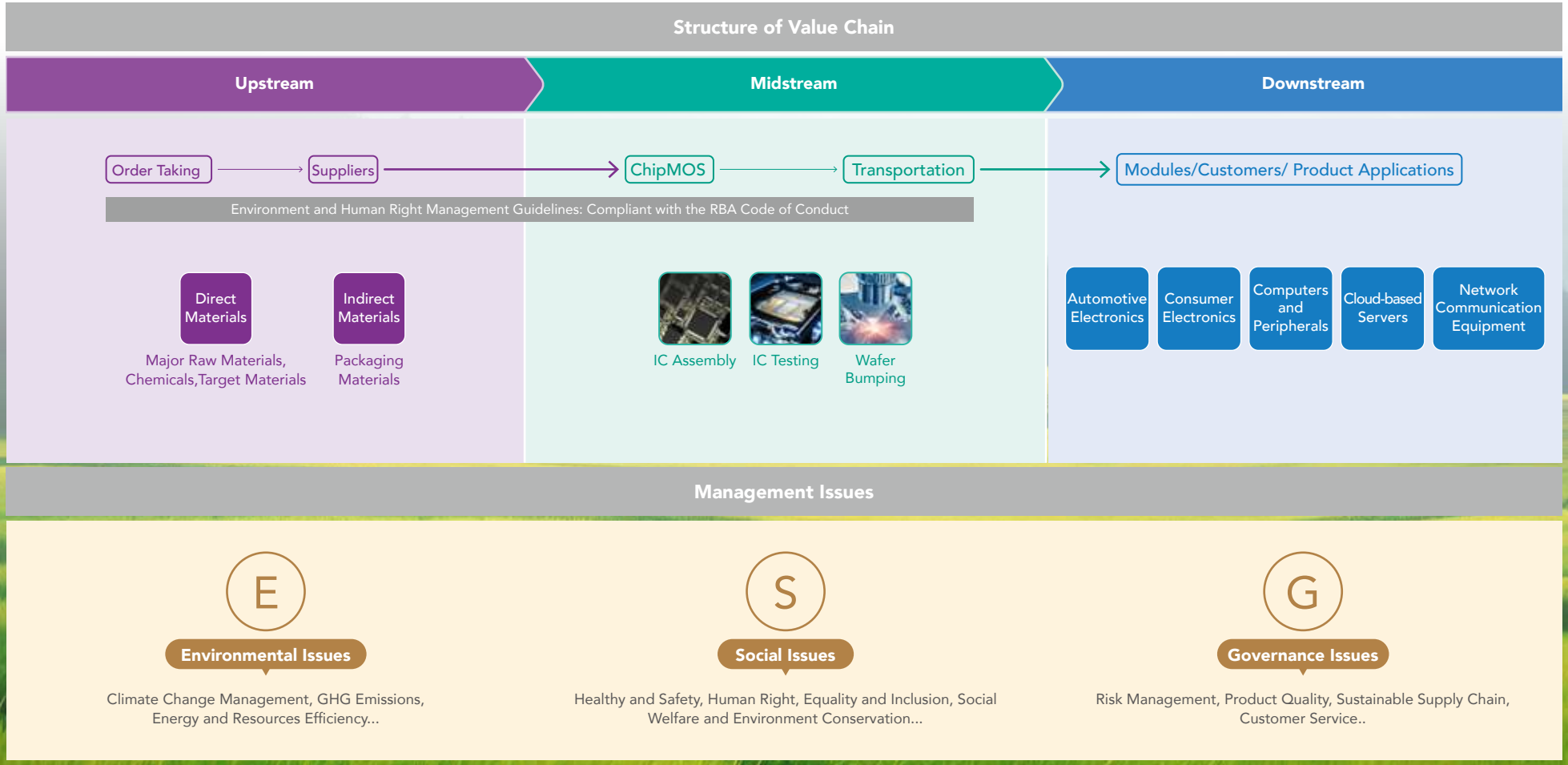
Item	Proposal Activities	2020	2021	2022	2023
Targeted[Note 1]	PIT	33	32	32	30
	ID BOX	170	146	140	129
Total Proposals	PIT	46	66	58	52
	ID BOX	511	426	438	498
Achievement Rate (%)[Note 2]	PIT	139	206	181	173
	ID BOX	301	292	313	386
Benefits[Note 3] (NT$10,000/year)	PIT & ID BOX	2,388	6,632	1,764	1,645

Note 1: The PIT & ID BOX set targets for the number of proposals annually, and count the performance of the number of proposals every month.
Note 2: Achievement Rate = number of proposals / targeted number x 100%
Note 3: The benefits (NT$/year) are the costs saved after the improvement of the proposal.

5.3 Supply Chain Management

GRI 2-6 GRI 204-1 GRI 308-1 GRI 308-2 GRI 414-1 GRI 414-2

ChipMOS's main product lines are Memory IC, Display Driver IC, Logic & Mixed-Signal Products. Raw materials purchased from upstream suppliers for our manufacturing process are subjected to IC Assembly, IC testing, and Wafer Bumping at the Company before providing the products for downstream module applications or customers. Following the mutually beneficial business philosophy of "Good for Employee, Good for Shareholder, Good for Vender Team", we are dedicated to relevant management in all aspects, and maintaining long-term relationships with our employees, shareholders, customers and suppliers. In terms of supply chain, the Supplier Management Committee (consisted of cross-departmental organizations) conducts management based on environmental, social, and governance-related issues. It regularly conducts supplier assessments and audits to ensure that suppliers meet the standards of Product quality, environment, and human rights. While focusing on revenue and profitability, we actively encourage our suppliers to promote energy saving and carbon reduction in the hope to enhance the overall competitiveness and create a win-win situation to achieve the goal of sustainable supply chain management.



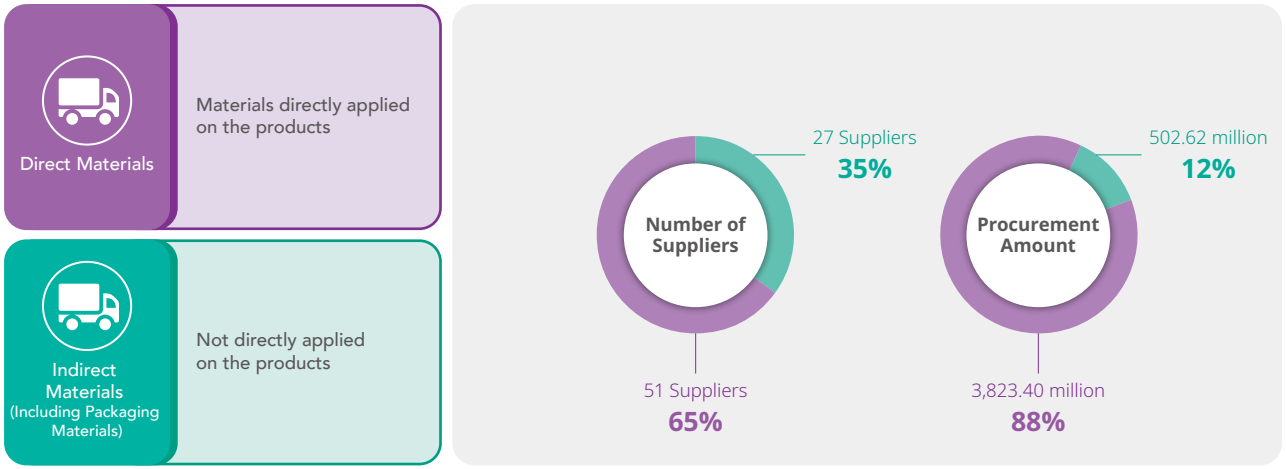
5.3.1 Sustainable Supply Chain

The production and operating activities of ChipMOS, not only create the direct economic values, more importantly, help the up- and downstream industrial chain to create the indirect economic values via the technology cooperation. By following the RBA code of conducts as the policy guidelines for the supplier management, it is committed to promote the local sourcing strategy and supplier coaching, seeking to improve the overall competitiveness and create the win-win situation.

The major procurement items of ChipMOS include the raw materials, machine and equipment, parts and component, plant affair facilities, information devices, among other things. Currently, the suppliers with long-term relationship are more than 900; of which, the raw material suppliers are essential to the Company's daily operations, including production and quality of shipped products, and accounting for 43% of the total annual procurement amount in 2023; which is most influential and direct to the production and operation, so it is listed as the key item for the supplier management. ChipMOS is committed to enhance the Company's competitiveness and partnerships in the supply chains. The key material supplier barrier is established based on the annual procurement amount (greater than NT$5 million) and feature (the only supply source or unreplaceable), and control and coach these key suppliers, to achieve the goal of effective management and continuous improvement.

For the management of the key raw material supply chain, the key materials for the Company's products include auric potassium cyanide (KAu(CN)2), Substrates, Gold Wires, Lead Frames, Molding Compounds, among other things. By insisting the principle of good faith, the relationships with suppliers are maintained; the operation and financial position evaluations for key suppliers' are done, to ensure the stability of supplies. While establishing good partnership with suppliers, other alternative materials and suppliers are being developed, to increase the flexibility of supply sources. In 2023, there was no shortage in critical raw materials.

Overview of Key Raw Materials Suppliers



5.3.2 Local Sourcing Strategy

> **For the material procurement strategy, our first choice is the the local suppliers and coach them; this approach not only reduces the carbon emission from transportation, but also supports the stable development of local economy, and creates jobs.**

By enhancing the local sourcing strategy, ChipMOS reduces the supply chain risks, as well as the carbon emssion in the overall supply chain and creates the local jobs. The term "local supplier" refers to the manufacturing plants of suppliers locate at the same area as the production bases of ChipMOS. For instance, if a manufacturing plant of a supplier locates in Taiwan, this is a local supplier to ChipMOS' plants in Taiwan. In 2023, 63% of the procurement expenditure came from local suppliers. In recent years, the proportion of local procurement has shown a slight upward trend. In 2023, due to factors such as changes of gold price/exchange rate/rising inventory level and rising price of some raw materials, the order amount in Taiwan was increased. Looking to the future, we will insist the local sourcing strategy and spirit, to select quality suppliers in Taiwan, and increase the proportion of local sourcing, while expecting to bring more jobs to Taiwan, and further enhance the development of overall local industries.

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Local Sourcing Trend in the Most Recent Five Years

Location of supplier	2019	2020	2021	2022	2023
In Taiwan	53%	62%	60%	57%	63%
Out of Taiwan	47%	38%	40%	43%	37%

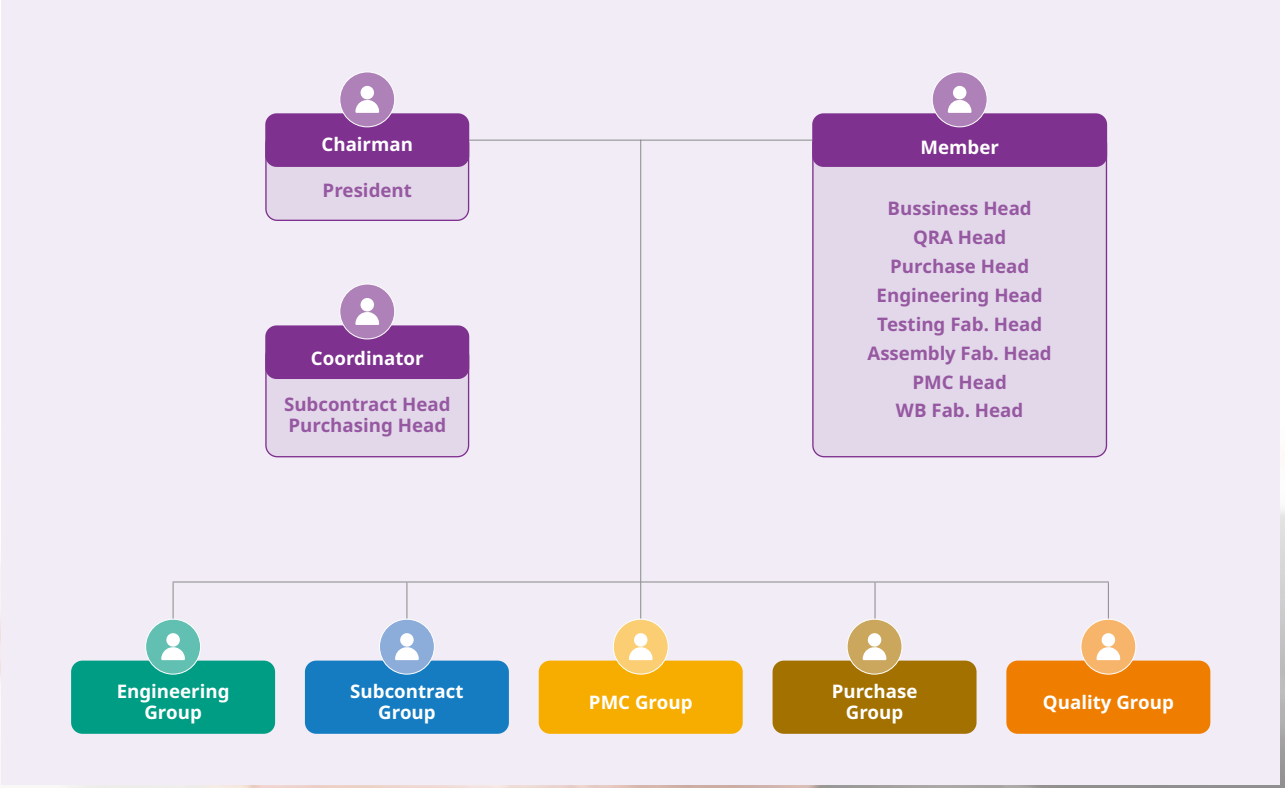
Note: Calculation targets are the key raw material suppliers

5.3.3 Supplier Management Committee

ChipMOS complies with the code of conducts of the Responsible Business Alliance (RBA) and applies such as the policy and guidelines to manage the suppliers in terms of environment and human rights, and clearly specifies the 5 management scopes for suppliers, including labor, health and safety, environment, professional ethics and management system.

ChipMOS has established the "Supplier Management Committee" consisting of 5 panels, namely construction, outsourcing, production and material management, procurement, and quality. The Committee works in a cross-function way to implement the supplier management scopes together, including supplier selection, supplier audit, and supplier appraisals, to be committed to conform to the standards of RBA's code of conducts, and work with the suppliers to grow together, and operate sustainably.

Supplier Management Committee Organization



Standards for Suppliers to Comply with

Supplier Integrity Policy

To ensure that suppliers understand that ChipMOS insists the principles of ethic and integrity when conducting all business activities, when entering procurement contracts with the suppliers, the terms of Regulations Governing Professional Moral Conduct are required; whenever any employee of ChipMOS or related supplier is found being unethical, the whistleblowing email: Audit_Committee@chipmos.com may be used. ChipMOS will handle the whistleblowing pursuant to the procedures, and keep strictly confidential of the whistle blower's information, be it an entity or individual; proper protective measures are taken pursuant to laws and regulations, and ChipMOS shares the responsibility of complying with the Regulations Governing Professional Moral Conduct with suppliers.

Suppliers Sign the Declaration of Corporate Social Responsibility

ChipMOS is committed to conform to the standards of RBA's code of conducts. Since 2014, we have requested our suppliers of raw materials, equipment and specific services (including human resource agencies, janitors, security personnel, resident employees of vendors, catering personnel and so forth) to sign the Declaration of Corporate Social Responsibility to ensure the suppliers understand the code, The declaration clearly requires the partners in the supply chain to fulfill the corporate social responsibilities together. As of the end of 2023, a total of 267 suppliers have signed the Declaration of Corporate Social Responsibility; the signature reply rate is 100%.

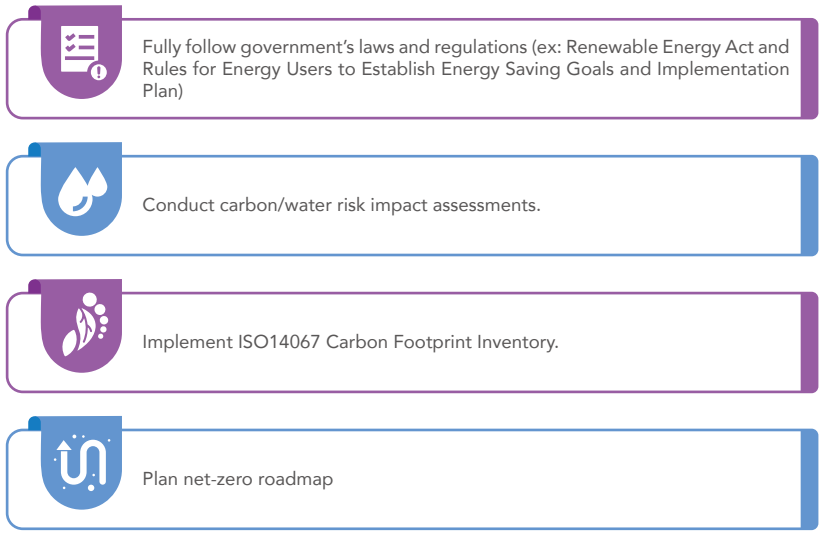
Boosting Suppliers' Green Competitiveness

Through the climate change/water security survey, we can ensure more effective management and oversight of the environmental actions of both direct and indirect material suppliers. The supplier questionnaire distribution rate increased from 80% (70 companies) in 2022 to 82% (99 companies) in 2023, resulting in an overall response rate of 100%. In 2023, we will be focusing specifically on distributing the questionnaire to the top 20 greenhouse gas emitters (13 companies). The carbon and water survey investigates 7 material topics, including climate governance, climate advocacy and action, compliance with applicable regulations or drivers, adoption of international standards, goal-setting for management, organizational GHG emissions assessment, and organizational water security assessment. Upon collecting and analyzing the survey responses, ChipMOS will carefully review the feedback from suppliers and based on the analysis results and improvement suggestions, offer constructive feedback to suppliers for discussion and explore the feasibility of implementing improvements.

Through the SCM platform, all suppliers are made aware of our attitude and direction on climate issues. Suppliers are encouraged to evaluate and invest in related plans to enhance their green competitiveness.

ChipMOS publish the information of climate change on the SCM platform

Suppliers shall accelerate the preparation and dedicate themselves to signing or committing to climate issues. The commitments are as follows:



* At the end of each year, ChipMOS plans to collect the concrete data and outcomes of the suppliers goal through questionnaires with respect to their achievement of this.

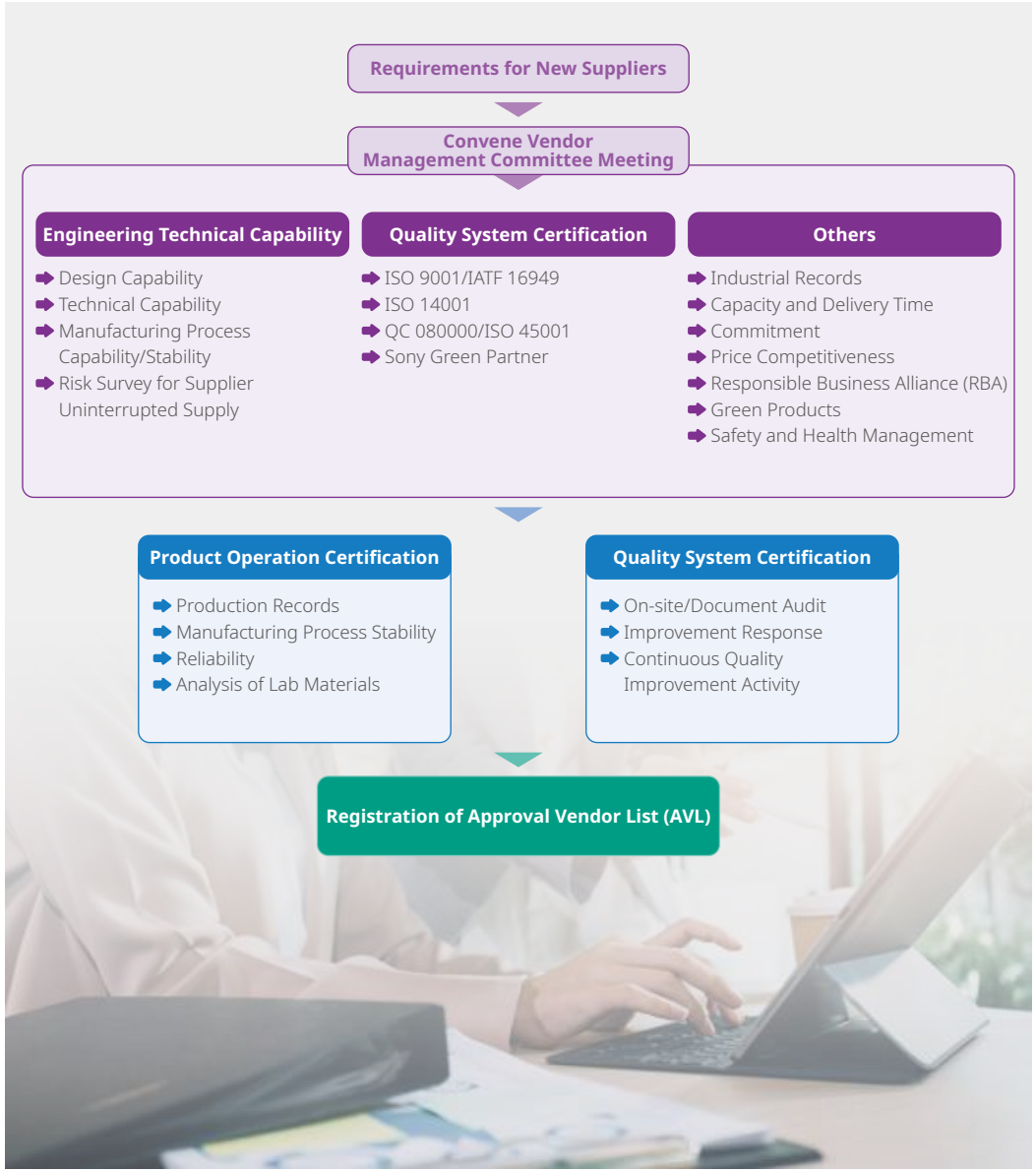
5.3.4 Selection of New Suppliers

When evaluating new suppliers, ChipMOS complies with the RBA purpose and related codes, to investigate if the candidates insist the philosophy of environmental protection, occupational health and safety, and corporate responsibilities, and fulfill their responsibilities as corporate citizens, and if they have any past record of affecting environment, occupational health and safety and/or society. Any candidate with related records will be required to provide the report and improvement result, and the current practical implementation will be verified. Based on this, ChipMOS has built a set of new supplier selection process. When the unit in need request for new suppliers, the Supplier Management Committee will evaluate, including for major dimensions: construction technical ability, quality management system, price, service (including capacity and promise of delivery time), as well as the industrial history from the candidate's existing customers, to evaluate the risks of introducing the candidate in a holistic manner.

ChipMOS expects suppliers to agree with our philosophy of sustainable operations and the requirement of ensuring Product quality. We adopt the highest standards for the evaluation; for the new suppliers of the key materials, their certifications of international quality systems and the percentage of 40% of new supplier evaluation items in the quality management system - international quality system certification (g.: IATF16949: 10%; ISO9001: 10%; ISO14001: 10%; QC080000/ISO45001: 5%; SONY GP: 5%) IATF16949: 10%; ISO9001: 10%; ISO14001: 10%; QC080000/ISO45001: 10%; SONY GP: 5%) are verified; implementation of the process management, green product, Responsible Business Alliance (RBA) and health and safety management are reviewed to ensure the suppliers meeting the requirements in terms of environment and labor practices, including product quality, prohibition of hazardous substances, and employee protection.

The selection process of new suppliers is as the following figure. These who pass the evaluation will be registered in ChipMOS' Approval Vendor List ("AVL") for subsequent daily management. 3 suppliers were added in 2023 to be more flexible in terms of deploying supply sources and coping with customers' demands. All of them passed the evaluation, conforming to the ChipMOS' requirements for quality, environment and social sustainability practices.

Selection Process of New Suppliers



5.3.5 Supplier Appraisal

Supplier Appraisal

To ensure the normal operation of quality system in every supplier, ChipMOS schedules the audit plan for next year in every Q4 based on the appraisal scores from Q4 of last year to Q3 this year (frequency of audit is once a year). In 2023, a total of 61 suppliers were subjected to the quarterly appraisal and the result showed that all of them reached B or higher with an achievement rate of 100%. We will make improvement together with the suppliers based on this standard.

Appraisal time

quarterly

Targets

qualified suppliers of direct and indirect materials who have transaction during the quarter.

- The suppliers obtain A as the appraisal with certification of IATF 16949 or ISO 9001, or these who are not appraised but with certification of IATF 16949 or ISO 9001, may be audited via the quality system questionnaire.
- These who are appraised under B for any quarter (and scores between 70-90 points), or with any material irregularity and more than 2 of incidents are RMA/QAR related to materials that interrupt the product lines, or the irregularity is requested by customers for on-site audit, will be targets for the audit plans of next year.
- The audit definitions of the automotive suppliers with IATF 16949 are as follows: The appraisal result is A, and the audit is conducted every 3 years

Appraisal Item



Approach

The treatments and measures are categorized for A, B, C, and D 4r levels, to meet the expectation of society and ChipMOS

- Level A (appraisal scores more than 90 points): the quality of the supplied materials, construction ability, delivery time and price are all deemed outstanding
- Leve B (appraisal scores 70 - 90 points): the quality of the supplied materials, construction ability, delivery time and price are all deemed normal
- In case of level C (appraisal scores 60 - 69 points), the suppliers shall furnish the corrective measures within 7 days, and will be re-audited by the Supplier Management Committee
- Obtaining a level C score twice in row will be result in disqualification from the AVL
- Level D (appraisal scores below 60 points): the suppliers are directly disqualified from the AVL

Supplier Audit

Pursuant to ChipMOS' "Management Procedures for Suppliers," the audit plans are formulated every year, to audit and review each details of suppliers under the 5 major dimensions of RBA, and to clearly define the evaluation time of each suppliers via the audit plants, as well as explain the key points covered in the audit. In 2023, document review has been conducted for a total of 58 suppliers and the RBA audit compliance rate of all suppliers for all the fabs in 2023 reached 99%, and the audit compliance results in the recent 4 years have been improving year by year, maintaining at an ideal level (>95%). In addition, on-site evaluations were conducted for 28 key direct material suppliers. The audit results revealed that 8 suppliers had a total of 55 non-conformities, including quality and RBA-related issues. All 55 identified improvement items have been addressed and closed, resulting in a 100% closure rate.

Appraisal time

annually

Targets

key material suppliers

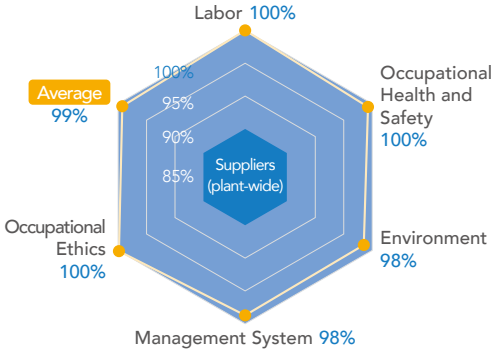
Appraisal Item

Document review and on-site audit target (RBA>95%, audit improvement and case closure rate ≥ 100%)

Approach

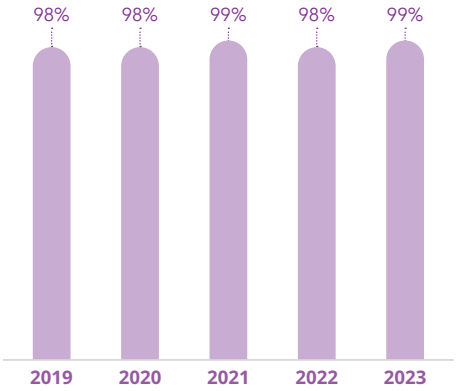
a.Document review
b. Onsite evaluation for suppliers is conducted regularly
c. For any disqualified suppliers or any defect need to be rectified, the active coaching and training will be provided for improvement.

2023 Conformity of Supplier RBA Audit



Note: Calculation targets are 58 key material suppliers (30 in the north area and 28 in the south area)

The Average Conformity of Supplier Audit Results in the Recent 5 Years



Coaching and training suppliers

By correcting the defects found during the appraisal and audit, ChipMOS insists a positive and open attitude to discuss with the suppliers, plus promotions and training from various aspects to ensure no recurrence of defects.

In the 2023 RBA environmental audit, it was found that a few suppliers neglected the importance of saving and managing water and energy, and did not treat the carbon emission issue seriously. Through on-site audits, ChipMOS asked the suppliers to propose carbon emission reduction plans and rainwater management plans. In addition, the Company shared its experience during the review process, conducted discussions, and guided suppliers in paying attention to environmental issues through two-way communication. It is hoped that through continuous guidance, the energy efficiency of the overall supply chain can be enhanced and improved to achieve the goal of sustainable environmental protection.

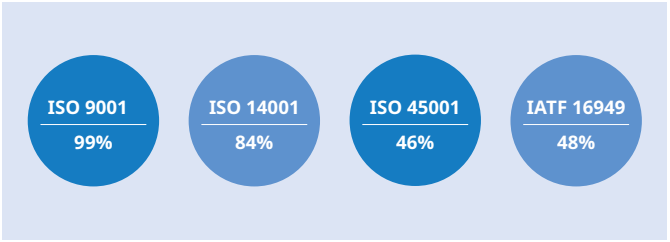
Process of Coaching Suppliers to Improve



Eencouraging suppliers to obtain the international certifications

ChipMOS continues guiding and encouraging suppliers to obtain certification of international standards. If suppliers obtain certification of international standards, it is a plus for audit and evaluation. This way, ChipMOS grows together with the suppliers.

Suppliers Obtaining Certification of International Standards in 2023

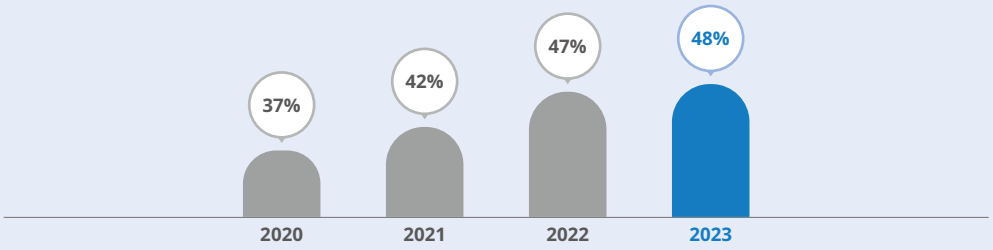


Note 1: Calculation targets are 92 key material suppliers (30 in the north area and 62 in the south area)
Note 2: ISO 45001 is the certification related to occupational health and safety; IATF 16949 is the certification for automotive products; the two certifications are relative difficult to obtain, but ChipMOS is actively coaching suppliers to push for compliant management practices

Actively coaching supply chain partners to pass automotive specification verification

In recent years, our suppliers have shown improvements in their accreditations to relevant international standards and specifications. In light of our customers' demands for automotive application products in 2023, ChipMOS has not only obtained IATF16949 certification, the but also enforced more stringent standards in the control of relevant suppliers' production quality. Apart from requiring suppliers to incorporate relevant automotive specification components in their annual supplier audit quality questionnaire, we have also implemented stricter assessment and evaluation for automotive product suppliers pursuant to Germany's VDA 6.3 Process Audit. Through the process of supplier coaching and audits, we hope to help suppliers better understand the requirements of pertinent automotive specifications so that they can obtain relevant certifications. The percentage of ChipMOS' suppliers that have obtained IATF 16949 certification has grown from 42% in 2021 to 48% in 2023. Not only that, the percentage of suppliers that have obtained the certification in the past three years has grown by 10%, reflecting a significant increase in the quality and competitiveness of our suppliers.

IATF 16949 Accreditation Status for Suppliers in the Past 3 Years



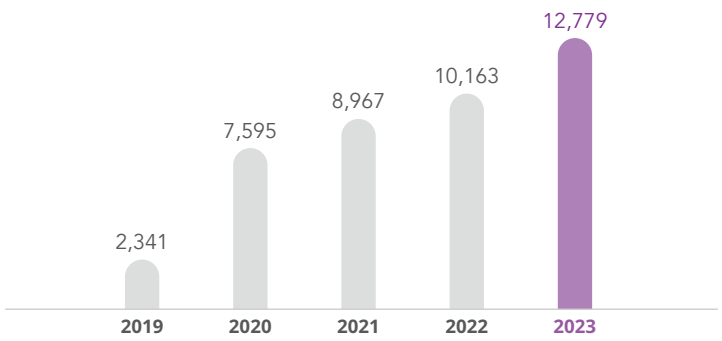
5.3.6 Green Procurement



To promote the green procurement and consumption, ChipMOS's goal is to procure the materials and equipment lowering the environmental burdens and meeting the quality requirements, and procures the products with international and domestic environmental labels recognized by the Green Procurement Program of the Environmental Protection Administration. With the active promotion of the Company, from 2018 to 2023, for consecutive 6 years, the Company received the "Enterprise Green Procurement - Special Contribution Award" and was awarded as the "Outperforming Green Procurement Enterprise," recognized by the Hsinchu County Government and Tainan City Government.

Statistics of Green Procurement Amounts

Unit: NT$10 thousand



Note 1: The data of procurement amounts is based on the Company's filing to the Environmental Protection Administration for disclosure on the "Private Enterprise and Organization Green Procurement Reporting Platform"
Note 2: In 2019, no green building material was procured, so the green procurement amount is relatively lower

5.4 Conflict Mineral Management TC-SC-440a.1

Conflict minerals refer to the minerals mined by the criminal groups with armed conflicts a violating human rights, in particular gold, tin, tantalum, and tungsten (commonly known as 3TG in short) mined in Democratic Republic of the Congo and neighboring countries. The harvest and trading of such minerals have caused many social and environmental issues such as the violation of human rights and armed conflicts, resulting in significant regional bloodshed and international disputes.



ChipMOS Prohibits Procurement of Conflict Minerals

For the corporate social responsibility and implementation of international justice, while being aligned with Dodd-Frank Act of 2010, H.R. 4173 passed by the U.S. Congress, and complying with the due diligence guides of Organisation for Economic Cooperation and Development (OECD), ChipMOS does not purchase the conflict minerals from the high-risk areas (Note 1), and oversees the supply chain to ensure the sources of materials, to avoid the conflict minerals are used in raw materials or during the production process. Our goal is to fully procure non-conflict mineral raw materials. Meanwhile, ChipMOS has made the following statement, to express the concern about the conflict mineral issues; to fully communicate the conflict mineral management requirements of ChipMOS, the statement is publicly disclosed on ChipMOS website:

- **ChipMOS fully supports and responds to the boycotts on conflict minerals, and promises to observe the no conflict mineral policy in the RBA's regulations, by not accepting the minerals directly or indirectly funding the armed conflicts in the Democratic Republic of the Congo and neighboring countries.**
- **ChipMOS clearly communicated to its supplier and is committed to require suppliers to inform ChipMOS immediately upon knowledge of using conflict minerals in the products. ChipMOS's suppliers are required to execute "RBA Conflict Minerals Reporting Template (CMRT)" and "Non-Used Of Conflict Minerals Guarantee Letter.**

Note 1: Information of the conflict-affected and high-risk areas (CAHRA) of OECD (https://www.cahraslist.net)

Comforming to the annual filing procedure of the U.S. Securities and Securities and Exchange Commission

Requirements of the conflict minerals are the U.S. regulations, and mandatory to all public listed companies in the U.S. Since 2014, ChipMOS has included the filing of the conflict minerals in the annual financial reports filed to the SEC, clearly stating the survey process and the outcomes. Our SEC report and relevant data are available on ChipMOS website .

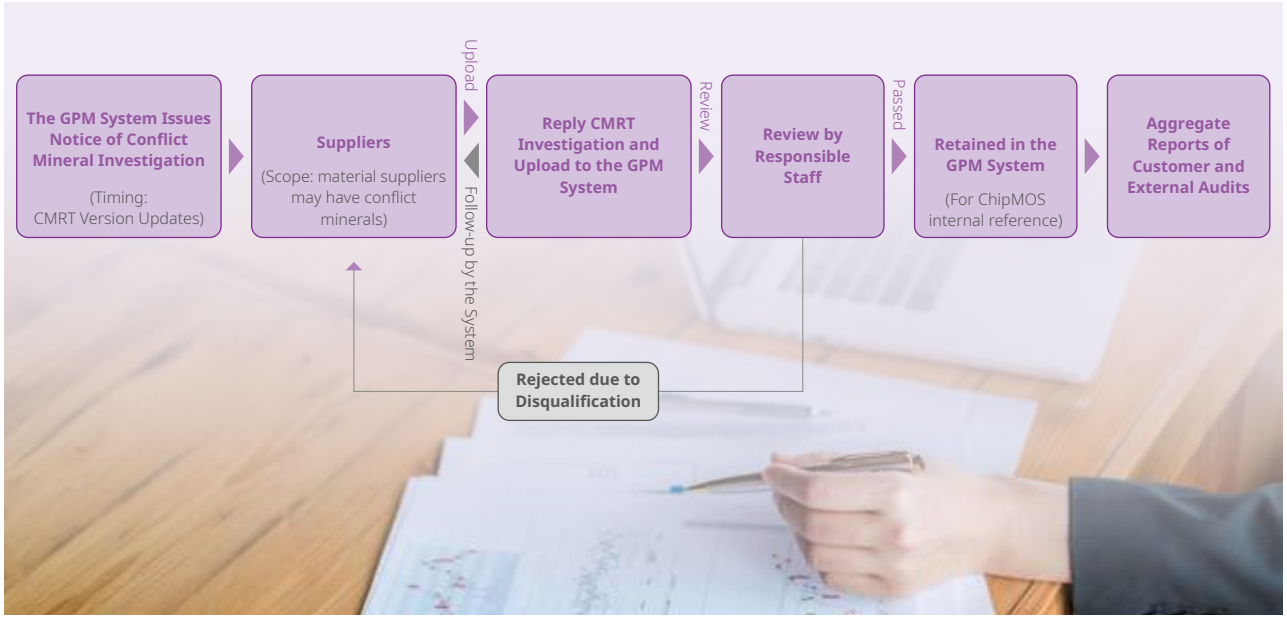
Drive suppliers to procure 100% of non-conflict minerals

ChipMOS respects and continues monitor the international human right issues, while leading our supplier partners to investigate the sources of metals used in the products in detail and faithfully, to ensure the sources of gold, tin, tantalum, and tungsten are not from mines in the areas impacted by the conflicts and high-risk areas. For the replies from the suppliers, ChipMOS conducts due diligence, to ensure the smelters are all 100% smelters and refineries in the qualified list of the Responsible Minerals Initiative (RMI), and the RMI qualifications of these smelters and refineries are verified quarterly.

For cobalt and mica, which have received much attention in recent years, ChipMOS has released the new Extended Minerals Reporting Template (EMRT) according to the Responsible Minerals Initiative (RMI). Through the template, a standardized method is provided to collect due diligence information related to where and how minerals are obtained in the supply chain, and confirm that none of the materials used in the products come from unqualified cobalt smelters and that no mica is used. The Company plans to include cobalt and mica in the conflict mineral procurement management policy by 2024.

Note: Conflict Minerals Reporting Template, or CMRT
Note: Extended Minerals Reporting Template, or EMRT

Quarterly Confirmation of RMI Compliance of Smelters or Refiners



Sources of minerals are 100% conforming to the non-conflict mineral program

From 2014 to 2023, ChipMOS's supply chain sources of materials and minerals 100% conformed to the non-conflict mineral policy. All smelters participated in and passed the responsible procurement procedure verification by the Conflict-free Smelter Program (CFSP). Looking to the future, ChipMOS will continue to encourage suppliers to implement the participation of CFSP.

For the suppliers of materials possibly containing conflict minerals, ChipMOS complies with the CMRT for investigation. The key points of the investigation report are as following:

In 2023 investigation to the raw material suppliers, the suppliers under the scope of conflict mineral management were 39 suppliers in Taiwan.

Among the raw material suppliers related to the conflict minerals, the smelters include 43 for gold, 26 for tin, 1 for tantalum, and 6 for tungsten.

The sources of metals contained in materials: gold was mainly from Japan and China; tin was mainly from Indonesia and Japan; tungsten was mainly from China; and tantalum was mainly from the USA; none of the metal was from the illegal smelters in Democratic Republic of the Congo and neighboring countries.



CHAPTER

6

Inclusive Workplace



Mid- and Long-term ESG Goals

Social Aspect

	2025(Mid-term)	2030(Long-term)	Outcomes for 2023
Friendly Workplace	The average employee approval rating came to 90% In regards to aspects such as new employee cultural identity, employee learning and growth, work-life balance activities, and health protection	95%	94%
Talent development and training	60% internal talent promotion rate	70%	17%
	60% success rate for internal transfer coordination	70%	44.35%
Environmental Public Welfare and Social Assistance	80% participation in social engagement initiatives	85%	82%

The average employee approval rating	Newcomer Orientation	All employees		
	Cultural identity	Employee learning and growth	Work-family balance	Health care and protection
Satisfaction 94%	91%	94%	97%	93%

Cultural identity	We value the feelings of our employees and listen to newcomers' voices through regular interviews. A total of 666 newcomers were interviewed in 2023. The employees gave high marks in the cultural identity survey.
Employee learning and growth	Through a comprehensive education and training system, we have implemented the BU Learning Curriculum Blueprint, deepened and extended the professional capabilities of employees, and applied what they have learned in the workplace. In 2023, we offered 619 internal and 140 external training courses, to a total of 759 courses, to achieve the goal of sustainable talent development.
Work-family Balance	We are committed to creating a happy and friendly workplace and continue to promote work-life balance. In 2023, we planned 35% of career-home balance activities and invited employees and their families to participate. The ratio of the employees to their family members ratio was 1:1.2. Many employees participated in the activities and highly recognized our efforts.
Health care and protection	We organize annual health checkups for employees. We have planned a variety of screening items and checkup frequencies that are better than the industry standard. We have also arranged for physicians to visit the fab to check the health of the employees and provide them with professional health education. The employees have praised the screening, and we will continue to supervise the health of our employees to improve the overall quality of health checkups.

*For more details on our social engagement, please refer to 2.3 Sustainability Objective Management and SDGs
*For details on the concrete actions taken and outcomes on each issue, please refer to the contents of this chapter

Management Policy

Policy
To comply with the domestic and international labor regulations, implement the human right protection, committed to the diverse and inclusive, health and friendly workplace environment with employee growth.

Commitment
Value and take care of employees, establish a good salary and benefit system, talent cultivation program, implement the work-family balance, and create a happy and harmonious workplace

Resources
- ESG Committee and Environmental Safety, Health and Energy Management Committee
- Responsible Unit for Human Resource Management

Specific Actions

1. Diverse and fair mechanism for talent recruitment
2. Competitive overall bonus scheme and long-term incentives
3. Talent cultivation and diverse channels of independent learning
4. Holistic health management and safety protection

Evaluation Mechanism

RBA audit | internal audit | customer audit | Sustainability evaluation by investment institutions

6.1 Attraction and Retention of Talents GRI 2-7 GRI 202-1 GRI 202-2 GRI 401-1 GRI 405-1

6.1.1 An Equal Employment Environment TC-SC-330a.1

Adhering to our principle of "Professional Respect", ChipMOS has always evaluated employee competence solely on their professional capabilities and work experience. We comply with Gender Equality in Employment Act and basic human rights as outlined in international standards to ensure zero discrepancies in employee treatment and benefits regardless of their gender, race, age, marital status, political affiliation, religious beliefs or nationality. With due respect for employees' professional skills and insistence on equal opportunities and inclusiveness, the Company is committed to creating a healthy and trustworthy working environment.

We emphasize the human rights at work and the equal remunerations; there is no difference between females and males. Fair and open opportunities are provided to the employees, and there is no difference due to nationality, race, religion, gender, age, marital status, mental and disability, or other factors.



Workforce Structure

In recent years, the recovery of the semi-conductor sector has propelled strong market demands, which in turn led to substantial increase in the need for human resources. As numerous companies aggressively recruited and scouted for talents, ChipMOS also proactively recruited new employees to address the pressing demand for additional manpower whilst creating diverse channels in preparation for talent incubation in the long run; the Company continued its expansion of Display Driver IC and memory packaging/testing capacities in order to maintain its momentum for future operational growth. In the fast-changing technology industry, ChipMOS continues to promote development, constantly enhance competitiveness, and strive for excellence. Through the promotion of automated Intelligence factory and the development and expansion of core technologies, we hope to drive relevant demands for manpower, thereby creating more quality job opportunities.

As of December 31, 2023, the total number of employees in Taiwan and overseas subsidiaries reached 5,417. There were 5,410 employees in Taiwan, accounting for 99.87%, and 7 employees in overseas subsidiaries, accounting for 0.13%. For the manpower required for production capacity, the number of employees increased by 115 compared to 2022, with a growth rate of 2.17%. In the following sections, the statistical boundary is only limited to the number of employees in Taiwan.

For the age structure of employees, ChipMOS complies with the regulatory and statutory requirements, not hiring child labor. The average age is 39.51 years old, and the major workforce consists of people in their youth and middle age. The group of people aged 30-50 years old accounts for 79.17% of all employees; 12.09% is under 30 years old, and 8.74% is 51 years old or older. Since the Company's major revenue comes from the production lines of packaging and testing plants, the majority of employees are operators, accounting for 52.61%; followed by technicians, accounting for 33.49%; mangers account for 7.04% and administrative clerks are 6.86%.

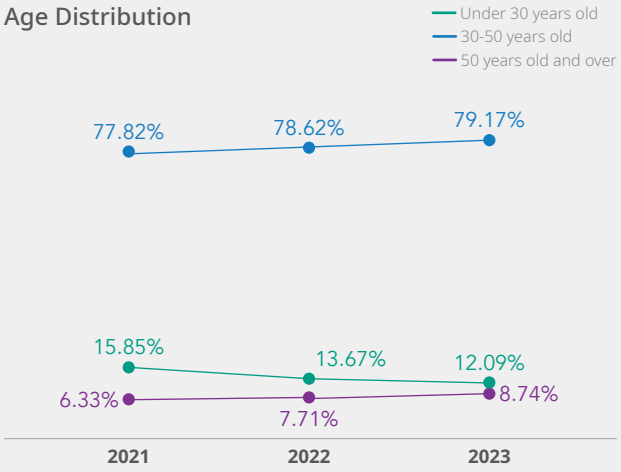
ChipMOS also periodically reviews the composition of its workforce in order to formulate effective strategies to recruit excellent talents, to hire competent professionals to maintain its industrial competitiveness. In 2023, the percentage of masters and PhDs hired was 10.05%, and 62.91% was bachelors, to adapt to the feature of the semiconductor industry that the technologies have been continuous improving.

Distribution of Employee Demographic in 2023

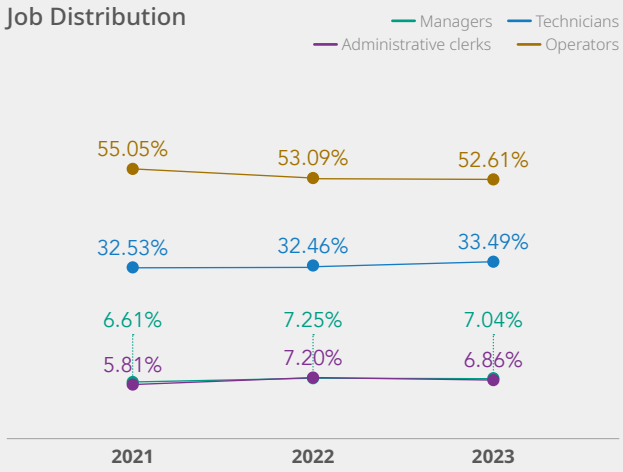
Employment Category			Male	Proportion	Female	Proportion	Total	Proportion
Full-time employees	Full-time employees	Formal employees	2,330	91.34%	1,883	65.86%	4,213	77.87%
	Temporary employees	Filipino employees	202	7.92%	974	34.07%	1,176	21.74%
		Foreign labors	19	0.74%	2	0.07%	21	0.39%
Part-time employees			0	0%	0	0%	0	0%
Total			2,551	100%	2,859	100%	5,410	100%
Type of Position	Managers		301	11.80%	80	2.80%	381	7.04%
	Technicians		1,472	57.70%	340	11.89%	1,812	33.49%
	Administrative clerks		214	8.39%	157	5.49%	371	6.86%
	Operators		564	22.11%	2,282	79.82%	2,846	52.61%
	Total		2,551	100%	2,859	100%	5,410	100%
Age	Under 30 years old		244	9.56%	410	14.34%	654	12.09%
	30-50 years old		2,080	81.54%	2,203	77.06%	4,283	79.17%
	50 years old and over		227	8.90%	246	8.60%	473	8.74%
	Total		2,551	100%	2,859	100%	5,410	100%

Note:
1. The base date of data is the in-service workforce on December 31, 2023.
2. Temporary employees refer to personnel who have entered into fixed-term or temporary employment contract with the Company.
3. Managerial personnel refer to managers at or above the department level, excluding technical and project-specific managers.

Age Distribution



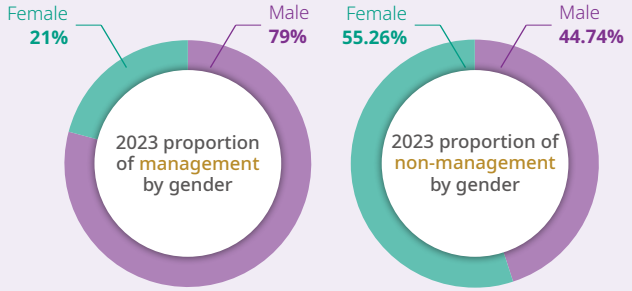
Job Distribution



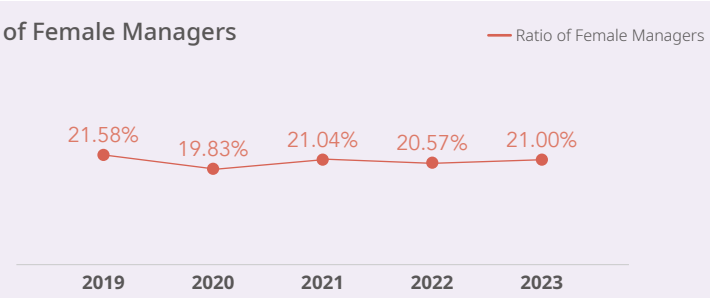
Female Workers

The Company strives to create a diverse and inclusive work environment, and as of 2023, the ratio of our female employees out of all employees came to 52.85%, with a male-female employee ratio close to 1:1; the percentage of female managers at ChipMOS is at 21.00%, and it has been growing in the past few years. The Company has made an effort to keep the gender ratio of workers, be it entry-level employees or managerial staff at a specific balance over the years and offered equal treatment and job security without any discrepancy in talent recruiting or promotion due to gender biases. We will continue to monitor the issues of female employees in the future and while respecting the pursuit of each employee's goals, we will also continue to optimize relevant benefit systems, so that more female employees will stay for longer, to continuously exert their personal values and make contributions to the Company and society.

Proportion of Male and Female Workers in Management and Non-Management



Ratio of Female Managers



6.1.2 Diversity and Inclusion SASB TC-SC-330a.1

Diversity Policy for Employment

With regards to the nationality distribution of ChipMOS employees, there are a total of 4,225 employees (78.10%) of Taiwanese nationality and 1,185 employees (21.90%) of foreign nationalities[Note 1], mainly Filipino. As for the managerial staff, most managers consist of local residents in the respective region of operation, with a local hiring rate at 100%.

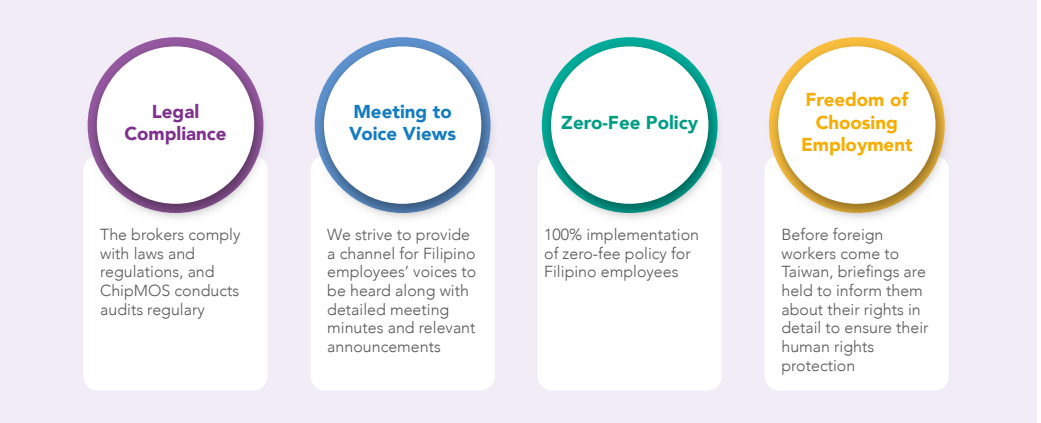
At ChipMOS, we believe that promoting labor-management harmony and creating a friendly workplace are the foundations of a happy enterprise. We seek to foster a culture of Diversity, Equality, and Inclusion by recruiting diverse talents and broadening the horizons and careers of our employees. We take good care of our Filipino employees and achieve effective talent retention through a comprehensive migrant management system. The percentage of our Filipino employees who have served for more than 9 years is 10.97%, demonstrating that our employees are able to work at ChipMOS with stability and peace of mind.

To evaluate the convenience of machine operation and communication, we mainly chose Filipinos whose official language is English to reduce the risks of work discomfort and misunderstanding. In addition, to ensure that Filipino employees can work in Taiwan comfortably, we pay them full employment fees before and after onboarding. We are committed to complying with the relevant requirements of international labor conventions and RBA. At the same time, we actively promote the life, physical, and psychological care of Filipino employees and provide workplace support and labor security for overseas employment. During the pandemic, the Company covered the costs of PCR testing, transportation, and pandemic insurance in full to ensure a healthy and safe work and life. In 2022, the Company started promoting contract renewal incentives for Filipino employees and provided them with retention incentives after their contracts expired. In 2023, The retention rate of the Filipino employees was 88.5%, an increase of 12.9% from 2022 (75.6%). The Company started to hire foreign spouses, regardless of nationality, in 2021 in response to the need for talents. We provide foreign spouses with learning opportunities and enable them to acquire skills, while also reducing the Company's shortage of workforce to form a win-win situation is achieved.

Note 1: Foreign employees refer to Filipino employees, Filipino spouses, and spouses of Chinese nationality.

Actions of Diversity and Inclusion

Principles of Filipino Employee Care



2023 Highlight of Outcomes

The retention rate of Filipino employees

88.5%

(An increase of **12.9%** from 2022)

Filipino employeeshave stayed at ChipMOS for over 9 years

10.97%

Concrete Measures

- ChipMOS offers various assistances for foreign employees to acclimatize to the life in Taiwan and their work. Such measures include orientation to working culture in Taiwan and introduction to various systems at the Company
- The Company sporadically organizes various festive celebrations and strives to care for foreign employees by helping them to enjoy the local festivals and experience Taiwanese culture
- Since 2022, the Company has prepared and published an e-newsletter titled "Communicating with Filipino Colleagues" as a way for local employees to gain rudimentary understanding of their mother tongue so as to close the gap between employees of different nationalities
- Since 2022, the Company has introduced a contract renewal bonus as an incentive for Filipino employees to stay at ChipMOS upon the expiration of their employment contract
- Monthly public Filipino employee meetings are held

The Proportion of Local Residents Employed as General Staff in 2023

Category	Local	Non-local	Subtotal	Proportion of local resident
Hsinchu Science Park fab. 1	490	96	586	83.62%
Zhubei fab.	628	176	804	78.11%
Zhubei fab. 2	206	34	240	85.83%
Hukou fab.	173	42	215	80.47%
Tainan fab.	2,038	723	2,761	73.81%
Tainan fab. 2	309	114	423	73.05%
Total	**3,844**	**1,185**	**5,029**	**76.44%**

Note: Local residents refers to the Taiwanese employees

Proportion of Local Residents Employed as Managerial Staff

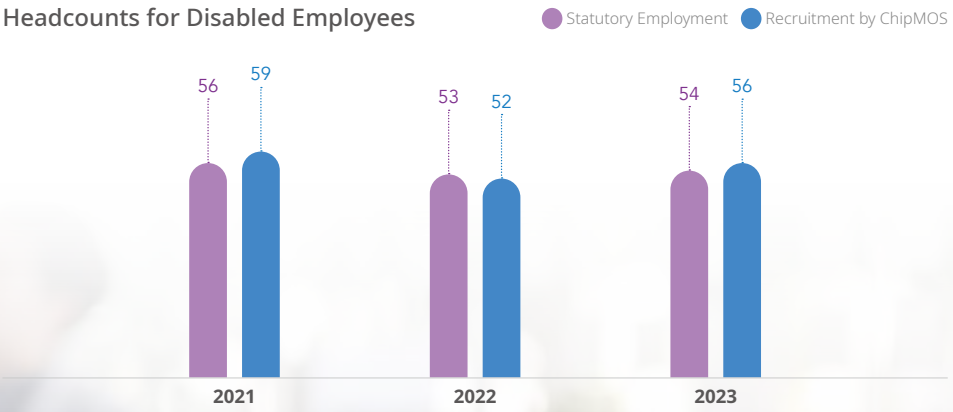
Category	Local	Non-local	Subtotal	Proportion of local resident
Hsinchu Science Park fab. 1	71	0	71	100%
Zhubei fab.	90	0	90	100%
Zhubei fab. 2	18	0	18	100%
Hukou fab.	9	0	9	100%
Tainan fab.	179	0	179	100%
Tainan fab. 2	14	0	14	100%
Total	**381**	**0**	**381**	**100%**

Note: Managerial personnel refer to managers at or above the department level, excluding technical and project-specific managers

Promoting Employment Opportunities for the Disabled

ChipMOS is committed to creating a diverse and friendly workplace. To promote the employment of people with disabilities, we continue to work with associations for the blind and the deaf to hire employees with visual and hearing disabilities. The moderate-to-severe-weighted number of the employees with disabilities hired in 2023 was 56, occupying 1.04% of the total employees, and this exceeded the percentage of employees with physical or mental disabilities required by the government. 35.71% of the employees with disabilities at ChipMOS came from our collaboration with disadvantaged minority groups. In fact, the Company endeavored to promote relevant assistive measures for improved accessibility for our hearing-impaired employees, including communication aids for them to adapt to the workplace successfully; their jobs are also appropriately adjusted depending on their learning progress; meanwhile, visually impaired massage therapists are employed in the plants to provide services. The guide dogs are permitted to enter the plants to accompany them to work and assist the visually impaired to walk safely. We will continue to provide and manage our diverse employment channels, for providing suitable job positions for the disabled, and create a barrier-free and friendly working environment.

Headcounts for Disabled Employees



Note 1: The number of employees with disabilities hired in 2023 is calculated based on 5,450 employees who participated in the labor insurance as of December 1, 2023.

6.1.3 Talent Operation

"Talent" is one of the decisive factors for an enterprise to stay competitive. In the face of rapidly changing global markets and challenges, enterprises must have the ability to respond quickly and select suitable talents in line with the overall development strategy of the organization. In order to keep abreast of the latest industrial trends and to constantly adjust our employment strategy, we constantly improve the human capital of the organization. In 2023, due to factors such as the global semiconductor market downturn and inventory adjustment, the level of production capacity utilization was affected, and the recruitment of talents slowed down. Benefiting from the continuous improvement of the memory market in the second half of the year, however, ChipMOS has quickly adjusted the employment strategy in response to the industry trend, focusing talent recruitment on key positions for future development. To consolidate human capital, we continue to operate diverse recruitment channels, including the human resources bank, our official website, the career service center, employee referrals, R&D substitute servicemen, veterans affairs council, industry-academia collaborations, and campus job fairs. We continue to cultivate in campus and implement industry-academia collaboration projects. We have actively participated in the youth employment projects promoted by the government, including the "Youth Employment Flagship Program" and the "Secure Employment Program". For the first time, we participated in the job matchmaking event for retired military officers and soldiers organized by the Veterans Affairs Council in 2023. We expect to expose recruitment information and recruit diverse talents through schools and the public sector to increase opportunities for job matching.

According to statistics, a total of 736 new employees were hired at ChipMOS in 2023, accounting for 13.6% of the total number of employees in the same year. Among them, young people under the age of 30 accounted for 51.36 % of all employees. They continue to bring innovative ideas and perspectives to ChipMOS and help the Company maintain the competitiveness in the semiconductor industry.

Number of New Recruits in 2023

	Male		Female		Total	
Age	Number of people	Proportion	Number of people	Proportion	Number of people	Percentage[Note]
Under 30 years old	136	44.44%	242	56.27%	378	51.36%
30-50 years old	161	52.62%	186	43.26%	347	47.15%
50 years old and over	9	2.94%	2	0.47%	11	1.49%
Total	306	100%	430	100%	736	100%

Note: Ratio = Number of new employees in each age group / Total number of new employees X 100%

Diverse Recruitment Channels



Youth Employment Flagship Program

Starting from 2018 ChipMOS has been participating in the “Youth Employment Flagship Program” planned by the Workforce Development Agency, MOL. The purpose is to integrate the resources from industries, schools, and trainings, to enhance the willingness of hiring youth, providing practical vocational training to youth, to increase employment opportunities for young people aged 15-29 years old. A total of 68 people were admitted to this program as of 2023. Excluding those who resigned early, more than 60% of the participants completed their training and thus making this program a remarkable success.

Secure Employment Program

Affected by the COVID-19 pandemic in 2021, the unemployment rate rose. ChipMOS actively participates in various government employment benefit measures, to assist and stabilize the employment of citizens. Since September 2021, the Company has participated in the government's Secure Employment Program, to provide high-quality jobs and increase the willingness of the people to work; as of December 2023, total 53 people applied for this program and have been successfully hired.

6.1.4 Cultivation in Campus and Recruitment for Young Students

The demand for outstanding semiconductor technology talents continues to be strong, and it is not easy to cultivate them. Therefore, ChipMOS has established long-term partnerships with local colleges and universities through continuous industry-academia collaborations. We hope to enhance young students' professional knowledge and practical experience related to the semiconductor industry by providing scholarship and internship opportunities. Through on-site practical training, they can better understand and recognize the corporate culture of ChipMOS. We provide a mechanism for immediate employment after graduation to shorten the gap between learning and application, reduce the circumstances of maladjustment, and adapt themselves to the ChipMOS family quickly.

We recruit professional talents from different colleges and universities every year. In 2023, we participated in a total of 11 campus talent recruitment activities, and at the same time, we worked with National Cheng Kung University to plan and organize the corporate visit activity named "Integration into the Industry, Joint Creation of Better Career" and helped the students who are about to enter the workplace have a further understanding of the semiconductor industry and have a better direction in job selection through introduction of the industry train, end application of products, company's profile, and sharing of work experience by senior employees. As for industry-academia collaboration, we continued to promote diverse internship programs in 2023, including internship, scholarships, and industry-academia classes, and develop the program to a semester and academic year system. In the future, ChipMOS will continue extending to more schools, departments, and institutes to jointly promote the practical experience of "unifying learning and practice for immediate employment after graduation".

Industrial-Academic Collaboration Projects

Diverse Internship Programs

Description

To provide diverse summer/semester/annual internship programs designed to help students gain more practical experiences and training

Collaborating Schools

Chung Yuan Christian University, National University of Kaohsiung, Minghsin University of Science and Technology, China University of Science and Technology, Chung Hua University, Kun Shan University, Southern Taiwan University of Science and Technology, National Formosa University

Total Number of Participants: 116

Retention Rate[Note 1]: 53.45%

Scholarships and grants

Description

To encourage outstanding students by providing scholarship and grant-in-aid programs so as to assist and incubate professional talent in the semiconductor field

Collaborating Schools

Chung Yuan Christian University, Minghsin University of Science and Technology, China University of Science and Technology, Chung Hua University, Kun Shan University, Southern Taiwan University of Science and Technology, National Formosa University

Total Number of Participants[Note 2]: 67

Retention Rate: 83.58%

Industrial-academic classes

Description

To bridge academic expertise to industrial practice so that students can achieve the integration of learning and application through on-site practice and machine operations

Collaborating Schools

TransWorld University, Far East University, Kao Yuan University, Kun Shan University

Total Number of Participants[Note 3]: 40

Retention Rate: 45%

Employment-oriented program

Description

To realize the philosophy of integrating leaning and application for incubation of talents that enterprises need through relevant courses and seminars

Collaborating Schools

Chung Yuan Christian University, Kun Shan University, Southern Taiwan University of Science and Technology

Cumulative Number of Participants: 1,487

No. of ChipMOS Corporate Trainers in 2023: 8

No. of Trainings offered in 2023: 18

Note 1: Retention ratio = number of retained employees/total number of project participants * 100%
Note 2: Those who have applied for scholarships and have already graduated
Note 3: The statistics of the industrial-academic classes are from 2015 to 2018. We have continued to sign collaborations with colleges, but the classes failed to be organized due to the impact of the COVID-19 pandemic; we will continue to seek opportunities of collaboration in the future.

6.1.5 Activating the Organization and Trigger Potentials in Employees

The continuous growth and sustainable operation of an enterprise rely on the efforts and contributions of all employees. In addition to providing a quality work environment and comprehensive education and training, we enhance employee benefits and implement the employee stock ownership trust plan to encourage employees to hold the Company's shares continuously and share the Company's operating results. It is hoped that a sound company system and a welfare mechanism can enhance employees' willingness to stay and establish a closer partnership with the Company.

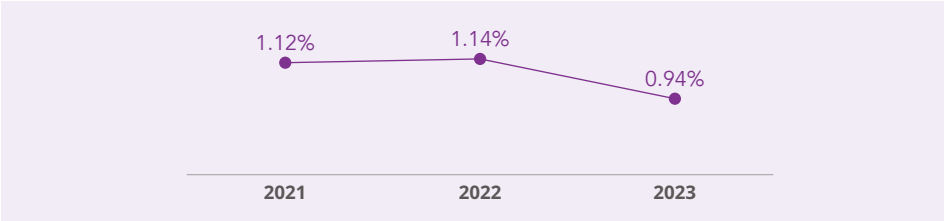
In order to facilitate better flow and transfer of internal talents so that our employees may benefit from more opportunities of development, the Company has worked tirelessly to create a sound internal job transfer system along with ensuring internal job vacancy information transparency. Apart from ensuring suitable positions for employees of corresponding talents and broadening their career horizons, these measures also help to tap into the potentials of our employees and invigorate the whole organization. In 2023, we continued to provide internal transfer opportunities to encourage employees to transfer to and challenge new positions. In addition to cultivating diverse professional skills, this can enhance personal vision and bring new ideas to the organization. In 2023, our success rate for internal transfer coordination came to 44.35%.

ChipMOS values and cherishes every talent, and regularly reviews and enhances the talent retention measures. In the face of fierce competition in the semiconductor industry, ChipMOS has continued to grow steadily and provided a good working environment and competitiveness. In 2023, the average monthly employee turnover rate was 0.94%, which was slightly lower than that in 2022. For the resigned employees, the line manager and the HR department conducted resignation interviews to understand the reasons of the resignation, provide assistance as much as possible or adjust their job descriptions while offering internal job transfer opportunities in a timely manner. In addition, we continue to optimize the talent database system, which not only facilitates data analysis of manpower data but also makes it easier to record the expertise or special skills of the employees. We source suitable potential talents from our talent pool and customize employee training plans to meet the talent needs of the organization in time.

Resigned Employees in 2023

Age	Male		Female		Total	
	Number of people	Proportion	Number of people	Proportion	Number of people	Proportion
Under 30 years old	71	29.70%	55	15.19%	126	20.97%
30-50 years old	160	66.95%	293	80.94%	453	75.37%
50 years old and over	8	3.35%	14	3.87%	22	3.66%
Total	239	100%	362	100%	601	100%

2021~2023 Average Monthly Employee Turnover Rate Statistics



Note: Average monthly turnover rate = number of people resign in the current year ÷ average number of people in service or the year [(Number of employee at the beginning of the year + number of employee at the end of the year)/2] x 100% ÷ 12

6.2 Employee Incentives and Benefits

GRI 201-3 GRI 401-2 GRI 401-3 GRI 405-2

6.2.1 Remuneration Policy and Systems

Talent is the driving force to support the development of ChipMOS and the foundation for the sustainable development of the Company

Through a comprehensive remuneration system and a competitive and fair rewarding structure, we strive to attract outstanding talents and retain employees who can grow together with the Company. The relationship between ChipMOS and the employees is not only a simple employment relationship. We are colleagues working together on the path of corporate sustainable development.

Comprehensive Remuneration System

We highly value our employees' salary and benefits. We also firmly believe in creating a workplace that promotes gender equality. To achieve this, we have developed a robust compensation system and cultivated a positive working environment. Our comprehensive compensation package encompasses base salary, allowances, bonuses and incentives.

Introduction of Job Level and Relevant Systems

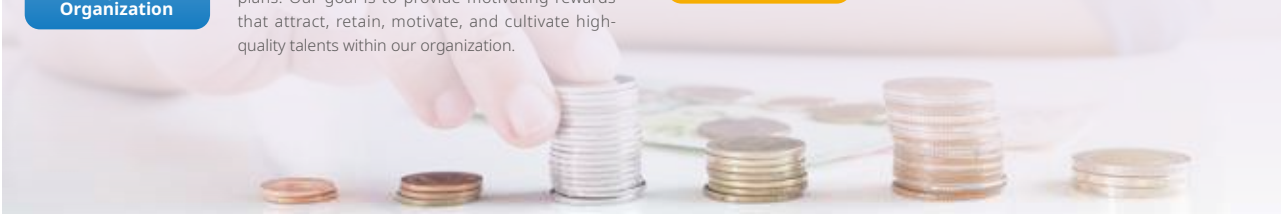
In order to foster a thorough understanding among our employees of the connection between rewards and job responsibilities, and to motivate them to take on more challenging roles, we have implemented a comprehensive compensation policy that integrates market benchmarks and competency-based considerations. By aligning our company's operational needs with individual performance, we establish annual salary adjustments, incentive bonuses, and other rewards. This approach encourages our employees to strive for exceptional performance.

Overall Remuneration that is Competitive and Fair Within and Beyond the Organization

We regularly participate in external salary surveys to gain insights into the salary trend and competitive benchmark; based on ChipMOS' operational objectives, we utilize a performance management system to design suitable overall compensation plans. Our goal is to provide motivating rewards that attract, retain, motivate, and cultivate high-quality talents within our organization.

Allocation of Profit

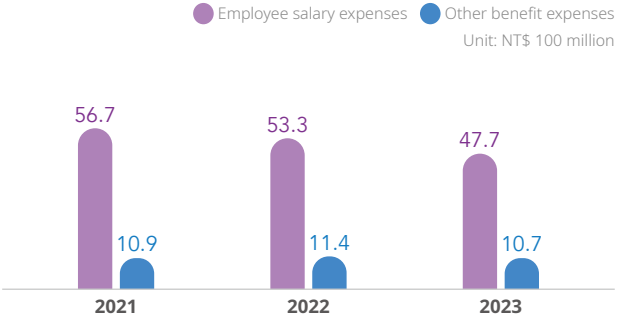
When the company makes a profit in the year, 10% will be allocated as employee compensation to share the Company's stable growth with employees.



Implement equal pay for equal work and an inclusive and fair wage policy

The Company insists on implementing inclusive and fair treatment for all employees and we are firmly against discriminations of any form. To ensure that all employees receive fair and equitable compensation, we have established a standardized compensation policy that applies across all operational locations. We continuously implement fair compensation practices, and individual salary principles are based on job performance and responsibilities. Therefore, employees of both genders holding the same positions are evaluated using consistent compensation criteria, regardless of gender, race, religion, age, marital status, or workplace location.

Remuneration and Benefits

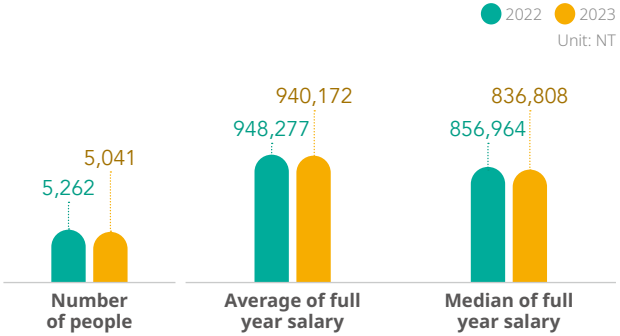


Note: The wage ratio is calculated based on the wage of full-time employees in service as of December 31, 2023, who received the complete base of monthly salary and bonuses for the year of 2023

ChipMOS ensures legal protection of employee rights. The initial salary for the entry-level employees meets the regulations and is capable of maintaining the market competitiveness. The standard wage for the entry-level employees in 2023 was 1.15 times higher than the minimum wage required by the law in Taiwan and there was no difference between male and female employees. When assessing the wage ratio between male and female employees based on job categories, the ratio for indirect and personnel was 1:1.1 and 1:1.07, respectively. The discrepancy is primarily due to the factors such as educational background, work performance, and functions, without respect to gender.

6.2.2 Long-Term Incentive Measures

The number of full-time employees in non-managerial positions over the past three years, along with the differences in average salary and median salary are disclosed as follows. In 2023, the total number of full-time employees in non-managerial positions was 5,041. The average salary was NT$940,172, which decreased by 0.85% compared to the previous year. The median salary came to NT$836,808, showing a decrease of 2.35% compared to the previous year. These differences can mainly be attributed to the impact of the economic conditions in 2023, which resulted in a relative decline in the data compared to the previous year.



ChipMOS understands the crucial role that talent and specialized skills play in driving the company's long-term success. The collective performance of our organization is a direct result of the individual capabilities and contributions of our entire workforce. Therefore, we cherish and appreciate the value of each and every employee. To retain and develop exceptional talent, and to encourage employees to deliver outstanding performance, we have been optimizing a range of long-term retention measures so as to foster a stable workforce committed to ChipMOS. To strengthen talent retention, the Employee Stock Ownership Trust (ESOT) was launched in 2023. All full-time employees can participate in the plan according to their wishes. A fixed amount will be appropriated from their wage every month and, combining with the Company's 100% corresponding contribution, deposited to a dedicated trust account to buy ChipMOS's shares and help employees accumulate retirement assets. We encourage employees to hold the shares and share the operating results of the Company.

Salary Adjustment and Rewards	In the last 5 years, the salary adjustment has been about 3% to 5%, to maintain the Company's overall competitiveness The Company's operating results are linked to employee performance, to distribute incentive bonuses and employee remuneration as timely encouragement
Double-track promotion system	Based on their capabilities and performance, employees are promoted to managerial or project/technical positions.
Stock ownership trust	Encourage employees to hold the Company's shares continuously and share the Company's operating results Help employees accumulate retirement assets, create a win-win situation for both labor and management partners, and implement talent sustainability action
Seniority award and annual role model employees	Recognize the value that employees have made and contributed to the organization over the long term Praise outstanding employees have them serve as role models for the team continuously
Proposal rewards	Recognize employees for their suggestions on improving existing working processes, technologies or systems Enhance technologies, improve process capabilities, for a good internal cycle
Patent rewards	Encourage employees to brainstorm and stimulate their creativity
Service bonus	Improve competitive advantages; employ and develop outstanding talent

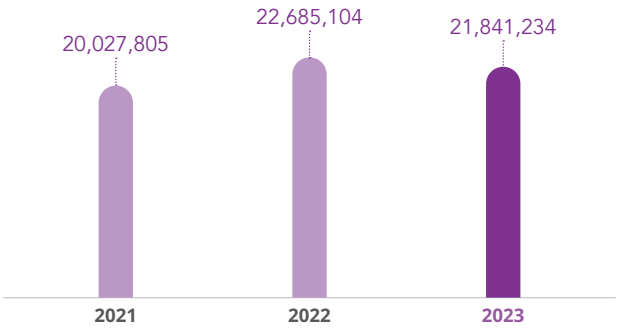
All-Encompassing Insurance Plans

We prioritize safeguarding employee rights in accordance with legal regulations. In addition, we strive to enhance the healthcare coverage for our employees by offering a comprehensive group insurance plan that also extends to their dependents. The Company covers the full premium cost, which includes life insurance, accident insurance, medical insurance, and cancer insurance. Furthermore, we offer an enhanced group insurance program for employees' dependents, providing them with additional coverage options and ensuring diversified care. For employees traveling abroad on business, we also provide travel insurance coverage to ensure peace of mind during their business trips.

We have dedicated personnel to provide our colleagues with face-to-face consultations and claims handling, allowing employees to gain in-depth understanding of group insurance benefits and improve the efficiency of application processes. Our utmost priority is to assist employees in caring for their families and extending care and protection to them.

Premiums paid by the company

Unit: NT



A Robust Retirement System

To ensure our colleagues can adequately plan for their post-retirement lives, the Company has established employee retirement procedures in compliance with relevant regulations. At the same time, in order to protect the rights and interests of employees to claim pensions in the future, in addition to the actuarial calculation of the retirement reserves through professional accounting consultants every year, the Pension Supervision Committee also regularly reviews the special pension accounts and discusses retirement-related topics.

In addition, we appreciate the hard work and contribution from senior employees during their service at ChipMOS, and we provide "preferential retirement" conditions that are superior to that stipulated by the law, so that senior employees can apply for their own needs. With such a well-rounded retirement system, our employees can have no worries about life after retirement.

	Labor Standards Act	Labor Pension Act
Retirement Conditions	**Statutory retirement** • Those who have worked for more than 15 years and are over 55 years old • Those who have worked for more than 25 years • Those who have worked for more than 10 years and are over 60 years old **Preferential retirement** • Those who have worked for more than 10 years, and the seniority plus age is 58 or more	-
Pension System	Old system pension - company pension account	New system pension - individual pension account
Implementation	• Established the "Retirement Reserve Supervision Committee" • Provided pension in full according to law • As of 2023, the amount of pension reserves under the old system was about NT$510 million	• Contributed amount equal to 6% of the employee's monthly salary • Employees who took up their jobs before June 30, 2005 (inclusive) can freely choose to be eligible for the new pension system, and opt to use the new pension system instead
Retirement allowance as a percentage of salary	Employer: 2% Employee: 0%	Employer: 6% Employee: 0%~6%
Proportion of employees participating in the pension system	100%	100%

6.2.3 Encouragement to Birth

ChipMOS values the contributions of its employees in the workplace and actively strives to create an environment of equality and respect. We also recognize the issue of declining birth rates in Taiwan and are committed to providing necessary assistance to our employees during the process of childbirth and raising children.

Maternal Health Protection

ChipMOS actively protects maternal health, and establishes a "maternal health protection system" to report and control cases. For female employees who are pregnant, less than 1 year after giving birth, and still breastfeeding after 1 year, conduct Health risk assessment and hazard confirmation, and then based on risk classification management improvement suggestions or work adjustment, implement case-by-case protection to maintain the health balance of mothers and babies, and ensure the health of all female employees. In 2023, a total of 60 pregnant and lying-in women will be assisted in health risk assessment and hazard confirmation. The assessment result showed that 62 of them were classified as Level 1 management; that is, employees' work or health issues did not pose any harm to the health of mothers, fetuses, or infants.

Childbirth Subsidies and Measures

Childbirth subsidy
Provide a maternity subsidy of NT$5,000 per employee/spouse, with a proportional increase for twins or more

NT$1,605,000 subsidy in the past 3 years
313 beneficiaries in the past 3 years

Daycare measures
Actively develop special businesses such as postpartum care homes, childcare centers and kindergartens and provide employees with a secure childcare care resource from birth, childcare to kindergarten

34
relevant contracted organizations in 2023

Breastfeeding room
We provide employees with lactation (milk collection) breaks as required by law

7 locations
All our fabs are equipped with milk collection rooms, medical-grade breast pumps and sterilization equipment to ensure high-quality facilities for employees in the workplace

Designated parking spaces for pregnant women
Reserved parking spaces are allocated for pregnant women to create a supportive work environment that prioritizes their needs

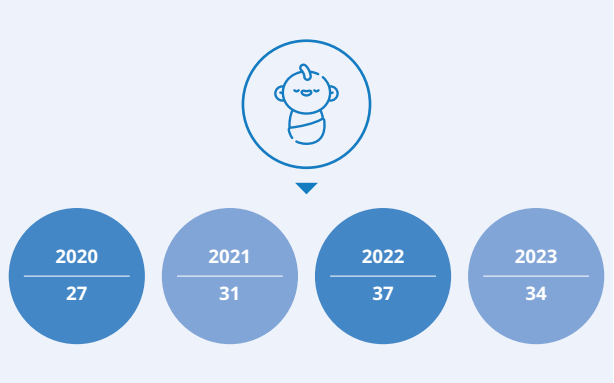
Reserved for employees with special needs
In consideration of the needs of pregnant colleagues, priority is given to reservingparking spaces to maintain a supportive and family-friendly environment for child-rearing

In consideration that Taiwan's fertility rate has been hitting new lows in recent years and based on the analysis of the age structure at ChipMOS, new employees are mainly newcomers to the society and thus the number of applicants for maternity subsidies has decreased relatively year by year. In addition to supporting government policies to encourage childbirth, we will continue to support childbirth subsidies and sign contracts with postnatal care and childcare institutions to provide employees with more childbirth-related benefits.

No. of applicants for childbirth subsidy



No. of contracted institutions for postnatal care and childcare services





Parental leave

ChipMOS is committed to promoting work-life balance and creating an equal and friendly work environment. We comply with laws and regulations and encourage parents to share the children rising responsibility. According to the "Regulations for Implementing Unpaid Parental Leave for Raising Children" and the "Gender Equality in Employment Act," ChipMOS allows both male and female employees to apply for unpaid parental leave for raising children after being on board for six months. We also provide information regarding application for labor insurance allowance to protect the rights and interests of the employees. Before the expiry of the suspension period without pay, we will take the initiative to care for the employees, confirm the employees' willingness to reinstate and arrange reinstatement-related matters in advance. After reinstatement, we will provide sufficient education and training to help employees quickly transition to their original positions for a successful reinstatement.

In 2023, there were 57 employees applying for unpaid leave. The retention rate for male employees who returned to work after parental leave and completed one year of service in 2022 was 100%, while the retention rate for female employees was 71.00%. The reinstatement rate in 2023 was 61.70%, and some employees who did not return to work chose to give up reinstatement because they still need to take care of their families.

Statistics of Parental Leave in the Past 3 Years

Item	2021			2022			2023		
	Male	Female	Subtotal	Male	Female	Subtotal	Male	Female	Subtotal
[A] No. of eligible applicants for parental leave	148	106	254	184	108	292	166	90	256
[B] No. of actual applicants applying for parental leave	6	59	65	14	59	73	11	46	57
[C] No. of employees expected for reinstatement during the year	8	37	45	5	38	43	12	35	47
[D] Actual number of employees reinstated during the year	3	25	28	3	20	23	8	21	29
[E] No. of employees actually reinstated during the previous year	6	29	35	3	25	28	3	20	23
[F] No. of employees reinstated during the previous year and completed one year of work	5	24	29	3	19	22	3	14	17
Application Rate [B/A]	4.05%	55.66%	25.59%	7.61%	54.63%	25.00%	6.63%	51.11%	22.27%
Reinstatement Rate% [D/C]	37.50%	67.57%	62.22%	60.00%	52.63%	53.49%	66.67%	60.00%	61.70%
Retention Rate% [F/E]	83.33%	82.76%	82.86%	100.00%	76.00%	78.57%	100.00%	71.00%	73.91%

Note 1: Calculation formula: application rate=[B]÷[A] X 100%, reinstatement rate=[D]÷[C] X 100%, retention rate=[F]÷[E] X 100%

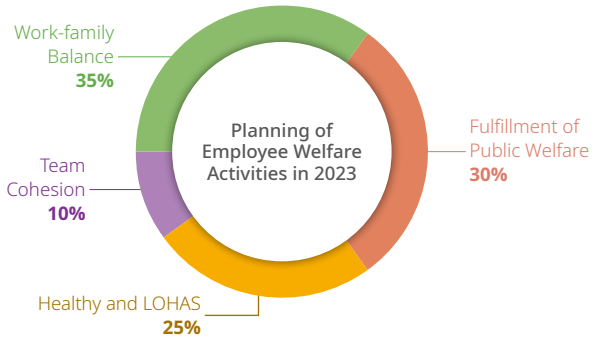
Note 2: To accurately reflect the situation of employee reinstatement, "No. of employees expected for reinstatement during the year" and "Actual number of employees reinstated during the year" have been adjusted so that employees who have their reinstatement extended would not be counted more than once. The number of employees who have their reinstatement extended would be calculated based on their actual year of reinstatement

6.2.4 Cares for Employees

As we officially bid farewell to the COVID-19 era in 2023, we prioritize building strong connections among our employees and promoting a healthy work-life balance. We combine the values of community service and environmental education, encouraging our employees to explore the outdoors with their loved ones. We value and cherish the quality time spent together, creating meaningful and memorable experiences.

ChipMOS implements employee welfare activities focusing on "Team Cohesion," "Work-Family Balance," "Healthy and LOHAS," and “Fulfillment of Public Welfare.” To foster stronger interaction between our employees and their families, we planned work-family balance promoting activities, accounting for 35% of the employee welfare activities that we held in 2023, with a participation ratio of 1:1.2 for employees and their family members. This means that, on average, each employee could bring along 1 to 2 family members to company events, fostering stronger emotional bonds and strengthening the sense of belonging within ChipMOS.

In 2023, ChipMOS invested more than NT$79.24 million in employee welfare activities, which included work-family balance, team cohesion, health and LOHAS, as well as activities related to public welfare and environmental protection. We strive to enable more employees to enjoy the Company's benefits through diversified planning, thereby enhancing their sense of well-being and job satisfaction.



Relaunch of large-scale events in 2023

Family Day

Hsinchu fab.

Family Day was held again after 3 years. In addition to inviting employees and their families to participate in the fun and entertaining garden party, we led employees to Hsinchu County Gymnasium for a basketball game to support the local basketball team with the power of the enterprise.

Tainan fab.

By continuing the form adopted in 2019, the Company organized a family day at the existing venue. We invited employees and their families to enjoy the joyous family day and various other related activities such as garden party, team competition, and outstanding performances.

Reservation of a cinema

The series cinema reservation events were highly recognized for many years. Through these events, employees could feel the care of ChipMOS for them and for their families. We also invited nonprofit organizations to enjoy the movie together. This way, we continue contributing to the public welfare and taking care of disadvantaged children.



Team cohesion

Team Contests

We encouraged team unity and boosted team morale by organizing team competitions that fostered cooperation and strategic analysis. These activities aimed to create a strong sense of belonging and cohesion among team members.

- **ONE TEAM BELIEF ChipMOS SPORTS CUP**
  We called on BU basketball players in Hsinchu fab to cultivate tacit understanding and enhance solidarity through teamwork, and to release body and mind and relieve stress in the sweating.
- **Shoot a ball for the throne of the king**
  The Company gathered basketball players of Tainan fab. to participate in the competition and win honors for BU, enhance immunity through relaxing sports activities, and increase employee cohesion.

Sports Club:

We encourage employees to participate in various club activities and offer club subsidies on a quarterly basis. The total subsidy in 2023 came to NT$373,000.

Departmental Gathering

Twice a year, we provide a subsidy for departmental gathering expenses, where supervisors lead their team members in coming together over a meal to strengthen the bond and camaraderie within the department. In 2023, the subsidy amounted to about NT$10.22 million.

Department Outing

Employees participate in the itinerary planning together, and can be held across units and departments to promote mutual interaction and affection. Subsidy is provided on a yearly basis

Work-family Balance

Seminars with Celebrities

We invited HAN-Dian Chen, who loves to perform, to share his splendid life story. As a supporting role that has never been unknown, he stepped up and cut a figure in the fiercely competitive entertainment industry with his step-by-step hard work and perseverance. The event inspires employees and their families to work and live.

Farm Light Trip

We encouraged employees to bring their family members to get close to nature with us in our spare time. In addition to improving their' understanding of the environment and ecology, we hope that everyone can follow us to understand and feel the earth, and then invest support and care in the sustainable development of the earth.

Beach Cleaning, Reducing Plastic Waste and Caring for the Earth

ChipMOS has been actively involved in adopting the coastline in the Tainan area for a long time. We gathered employees and their families to participate in a periodical beach cleaning activity every year. Through this initiative, we aimed to educate the younger generation about the importance of environmental conservation and fostering a love for our planet.



Fulfillment of Public Welfare

Children's Day Wishes Adoption Event

We Invited employees to adopt the wish of the children of elementary schools in Wufeng Township, and gave schoolchildren in remote townships them gifts that are packaged in an environmentally friendly way that reduce plastics personally on the day of meeting. In addition, we gathered ChipMOS volunteers to lead the schoolchildren in a small-scale environmental protection activity. The interesting and interactive game conveys the concept of sustainable love for the earth.

Donation of Invoices to Ignite Hope

Due to the prevalence of e-invoicing and the pandemic, the number of invoices for the disadvantaged groups that have long relied on them as a source of funding has been decreasing. Therefore, ChipMOS has teamed up with "St. Paphael Center, Tainan" to launch an invoice donation activity. We invited employees to support the activity, bring together power and spread the love.

Toxic-Free Jade Tomato x Hometown Peach Subscription/Pomelo as the "Home" of Public Welfare for You and Me

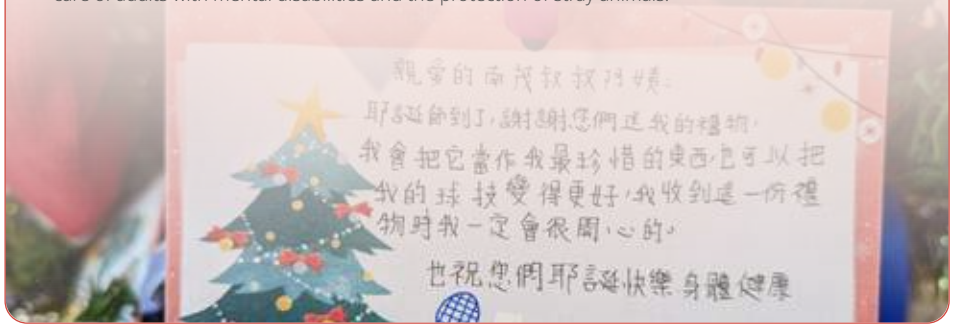
In 2023, we collaborated with the tribes in Hsinchu, Suan Lian Pear Corporation, and Tainan "5012 Pomelo" to add a variety of fruit products for employees to adopt. They could buy fruits as gifts for public welfare groups to exert corporate influence, support local smallholder farmers, and implement social welfare.

Sending Love to Remote Townships Directly

During the "Sending Love to Remote Townships" activity, which is now in its 9th year, we visited 16 districts and 24 elementary schools in Tainan to call on employees for adoption of the wishes of the schoolchildren. Nearly 2,326 wished gifts were collected to send the sincerest warmth this Christmas to show our care for disadvantaged school children and contribute to the society.

Year-end Subscription Program for 2023 - Desk Calendars/Red Envelopes/Spring Festival Couplets

Employees were invited to subscribe for the 2024 ChipMOS co-branded desk calendars of the "Chensenmei Social Welfare Foundation" and the red envelopes and spring festival couplets promoted by "Heart of Taiwan Animal Care Association". The subscription proceeds will be used to support the care of adults with mental disabilities and the protection of stray animals.





Health and LOHAS

Daily Leisure Activities

- **Friendly Measures**
  - Resident convenience store, non-profit coffee machine
  - Milk collection room, billiard room, table tennis room, gym
  - Exclusive outdoor smoking area
- **Convenient Life**
  - Food: All fabs are equipped with an employee cafeteria where meals are available for our staff; night shift employees also enjoy the privilege of late-night snacks and breakfast
  - Lodging: We provide a dormitory for employees
  - Transport: free shuttle bus services for technicians, foreign workers and employees living across the counties/cities
  - Free parking spaces for cars and scooters, with exclusive parking spaces are reserved for pregnant women and employees with special needs

Health Promotion

- **Free health examination** (once per year)
- **Monthly on-site medical services provided by contracted physicians**

Benefits System

- **Gift vouchers/gratuities:** Birthdays/festivals/labor day/year-end gratitude
- **Bonuses:** Full attendance/Performance/Discretionary incentive bonus
- **Other:** Wedding celebratory/Funeral condolence allowance/free group insurance for employees

Mental Stress Relief

- **Positive New Life :** The "Sincere Counseling Center"was invited to give 5 online spiritual courses, including stress management, mindful living, parent-child education, etc. They provided a series of courses to help employees gain health and balance between the work and life for a sustainable workplace and create the power of health.
- **Employee Assistance Program (EAP)**
- **Free massage by the visually impaired therapists**

Experiences of Life

- **Love the Earth, DIY Wool Felt Cup Cover:** In conjunction with World Earth Day, we held a polar bear DIY wool felt cup cover activity. Professional lecturers led employees to make cup covers with humanely raised wool and encouraged the use of environment-friendly cup covers and other materials in daily life.
- **DIY Glowing Line:** We invited employees to participate in the neon lamp DIY decoration course to achieve a stress-relieving effect through the hand-making process and experience the fun and sense of accomplishment of handicrafts.
- **Discount at contracted merchandisers** (695 merchandiser in total)

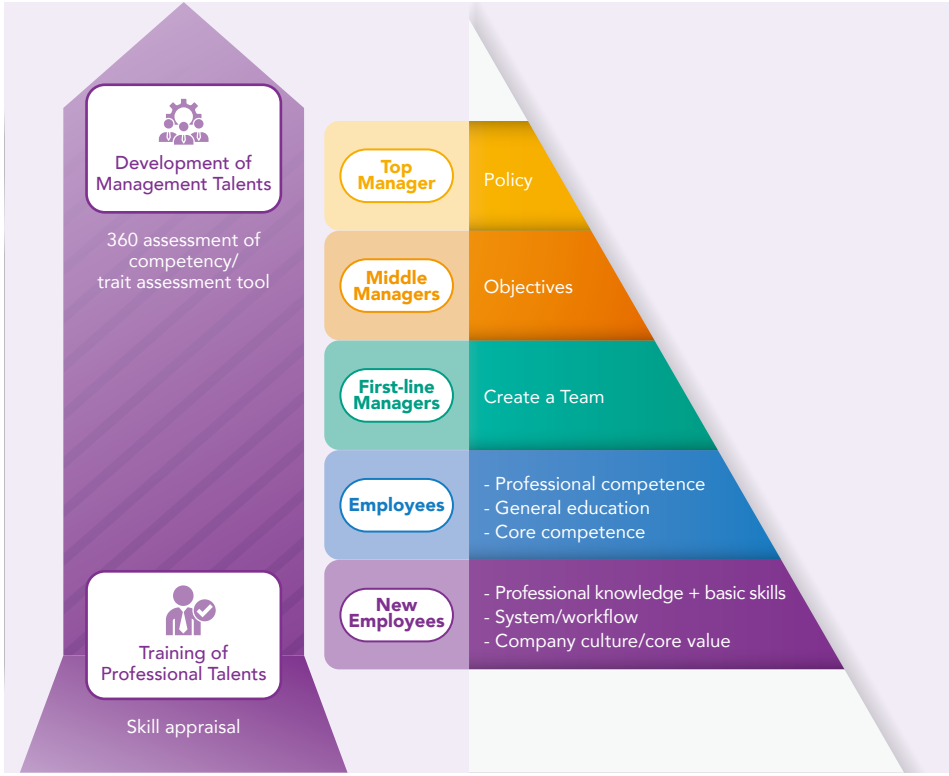
6.3 Talent Development

GRI 404-1 GRI 404-3

6.3.1 Strategic Talent Development Creating Talents and Demonstrating Diverse Values

Employees are the core momentum of sustainable operation of ChipMOS. Our Talent development strategy connects the careers of employees with the talent needs of the organization. Based on the principles of diversity, equality and inclusiveness, we aim to provide an environment where employees can learn and develop in a sustainable manner. ChipMOS's comprehensive Talent development system includes extensive and diverse talent cultivation across different disciplines, in-depth leadership and technical professional teams, and reserves of potential talent to ensure personal growth and organizational development goals are aligned to achieve mid-term and long-term talent cultivation goals.

Talent Development System



We value our employees. Through systematic education and training, we enable employees with different positions to improve their skills. When the environment changes and employees need new skills, they can receive appropriate retraining to maintain competitiveness. In 2023, we have invested about NT$ 3,836,290 in the learning and development of employees. Each employee had an average of about 123.6 hours of learning and training courses, and the course satisfaction is 4.7 points (out of 5 points).

The average number of training hours for each category of employees

		Female	Male	Subtotal
Managerial staff (Supervisor above the class level ,excluding project leader/project manager)	Actual number of people	80	301	381
	Training hours	10,827.58	51,212.37	62,039.95
	Average training hours	135.34	170.14	162.83
Technicians (Engineer/Technical Supervisor/ Production Line Leader)	Actual number of people	340	1,472	1,812
	Training hours	49,179.74	252,191.58	301,371.32
	Average training hours	144.65	171.33	166.32
Administrative staff (Administrator/Project Leader/ Project Leader/Warehouse Team Leader/Switchboard)	Actual number of people	157	214	371
	Training hours	18,744.41	18,117.78	36,862.19
	Average training hours	119.39	84.66	99.36
Operators (Technician/Foreman)	Actual number of people	2,282	564	2,846
	Training hours	227,650.31	40,731.50	268,381.81
	Average training hours	99.76	72.22	94.30
Total number of employees participated in training	Number of people	2,859	2,551	5,410
	Hours	306,402.04	362,253.23	668,655.27
Average hours of training per employee	Hours	107.17	142.00	123.60

Note 1: Average hours of training per year per employee = total training hours / total number of employees participating in education and training
Note 2: The range of data includes the training records of existing employees in 2023 as of December 31, 2023

6.3.2 Systematical Establishment of a Leadership Team

In addition to diagnosing the leadership of employees using objective assessment tools, we help employees understand their strengths and weaknesses as well as possible development directions through one-on-one feedback dialogue with internal functional experts. We link personal development with the Company's strategy, cultivate management talents in a planned way, and accelerate employee empowerment to achieve the goal of sustainable talent development.

Manager Competence Project

Description

1. Understand the strengths, weaknesses and development goals of supervisors through 360 assessment and 1 to 1 feedback
2. Personal training plans are designed based on the 721 Rules. 70% of tasks are practiced to unleash the true capabilities of personnel; 20% of direct coaches aim to provide guidance and peer feedback to build interpersonal networks; 10% of classroom learning is used to effectively help supervisors structure their knowledge and skills.

Benefits and Outcomes

1. First-line managers (planning and organization):
- Overall ability improved from L3 to **L4**. (Ability level: L1-L6)
-75.8% of the employees have shown significant growth in their leadership after the training.

2. Middle managers (influence):
During the learning and development process, **91.7%** of the personnel received positive feedback from their coaches.

3. Top managers (leading the change):
Implementation of 360 assessment; average score increased from 3.81 to **4.14**.

New manager development

Description

1. Conduct personality tests and competency evaluations; formulate development plans based on 1-on-1 feedback.
2. Management knowledge and experience are taught by senior executives with rich experience and internal lecturer certification to guide new manager to change their mentality, find their own motivation, and achieve remarkable performance at work.

Benefits and Outcomes

1. A total of **75** people were tested
2. A total of **134** people were trained, of which **24%** (32/134) were female managers. **431.73** hours in total
3. The Q&A session of the training course is compiled into management guidebooks, serving as a knowledge pass-down tool for newly appointed managers

6.3.3 Technical Team That Emphasizes Both Depth and Extent

ChipMOS places great importance on training employees for their professional skills. They can take training programs that can meet their needs. Regarding the professional fields of the duties, the Education and Training Committee plans and implements the competency-based learning blueprint for each business unit. Since the cultivation of diversified talents is one of the focuses of sustainable development, ChipMOS actively optimizes training for cross-disciplinary job transfer and encourages employees to take the initiative to rotate and extend their careers. We organize industry trend lectures periodically every year, so that all employees can gain extensive industry knowledge and connect with the market.

BU Professional Programs

Description

According to different positions and seniority, professional talents are trained from basic to advanced level for their critical skills.

Benefits and Outcomes

1. Implement **332** professional classes, accounting for **54%** of internal training courses. All of them are taught by internal lecturers to implement the inheritance of technical experience and achieve the goal of stabilizing the supply of talents and optimizing the quality of talents.
2. The completion rate of blueprint training reached **97%** (**2,363** participants completed the course/**2,435** employees who must complete the course)
3. Continue to develop **9** self-designed digital courses.

Cross-disciplinary Professional Training

Description

A comprehensive transfer training mechanism enables employees to engage in horizontal cross-departmental professional learning comfortably, demonstrate their diverse strength and potential, and create new career possibilities.

Benefits and Outcomes

1. Internal transfer success rate was **44.35%**.
2. **269** transferees completed the training, with a total of **193,680** training hours.

Industry Trend Lecture

Description

Through the Industrial Development Bureau's Smart Electronics Talent Application Development Program, we invite experts of the industry to share and exchange ideas on industry trends, advanced technology, new products, etc., so that employees can understand the development of trends and keep up with the times.

Benefits and Outcomes

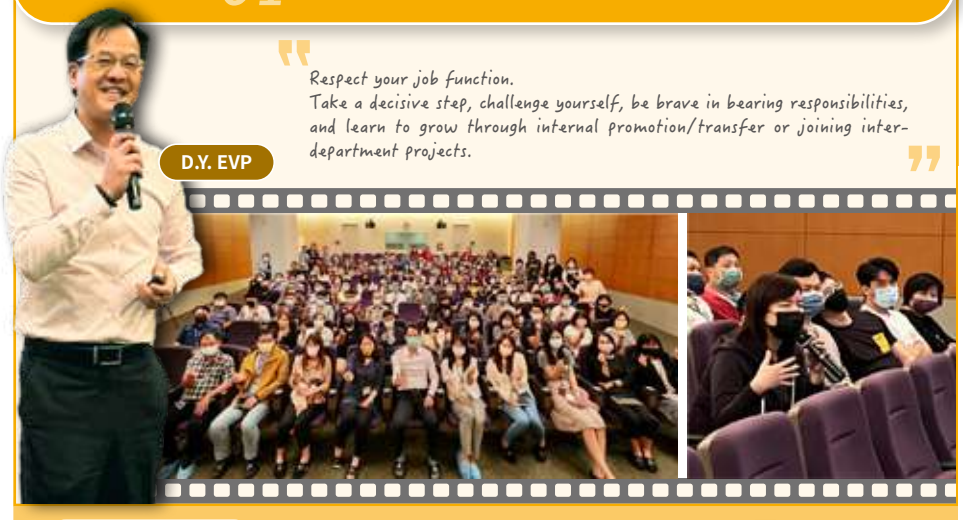
The employee participation rate was **97.6%**, the lecture satisfaction reached **4.7** points, and the positive feedback rate reached **57.8%**. (26/45)

Internal trainers are key contributors to the transmission of technical expertise

Passed-down of ChipMOS EVP Career Experiences

Senior executives are important leaders in the sustainable development of talents at ChipMOS, and they are also important internal coaches. In 2023, the 2 executive vice presidents shared their career history with employees through career lectures. This initiative not only bridges the Company but also encourages employees to bravely step out of their comfort zone and become professional leaders based on their experiences at work. While the work environment is becoming more diversified, we should be willing to accept challenges. As long as they continue to learn, broaden their horizons, and enrich their work skills, it is possible to create unlimited possibilities for their career and life.

Career Sharing 01



D.Y. EVP

"Respect your job function.
Take a decisive step, challenge yourself, be brave in bearing responsibilities, and learn to grow through internal promotion/transfer or joining inter-department projects."

ChipMOSer Feedback

- The speech was humorous and interesting. The most impressive thing is that the D.Y. EVP considers work a life experience. He encouraged us to learn from it together and face the work in a more positive way.
- The learning experience of the supervisor can be an example for us to make corrections at work whenever necessary.
- Through the sharing of the D.Y. EVP, we can learn the attitude we should have when facing problems.
- The work experience and philosophy of the D.Y. EVP give me a different solution when I hit a plateau in certain part of my work.

Career Sharing 02



Vincent EVP

"Apply what have been learned, continue to learn, and extend work skills and horizons. Not just looking for a job, but looking for a possibility in life."



ChipMOSer Feedback

- Through EVP's experience sharing, we can formulate our own methods and directions and reduce the chance of going the unnecessary long way.
- By giving the excellent lecture, EVP shared the practical experiences of his personal thoughts and concepts at different stages of his career. He is brave enough to try to increase the breadth and depth and find a possibility in his life.
- The EVP analyzed the key roles of the supervisors at different levels, and helped them understand the exceptions to their roles. These are very inspiring for personal career development. Thank you, Vincent, for your sharing. We have benefited a lot!
- Thank you for sharing your work history. This speech also provides a reference for the engineers to develop a new path for their career. We need to learn improvement of ourselves at every stage.

Internal trainers development

The trainers development program of ChipMOS is also becoming more and more diverse, covering everything from offline teaching skills and digital course creation to the recent application of generative AI in the production of high-quality training content. In 2023, we published an e-newsletter to trainers, so that internal lecturers can not only pass on technology but also have corresponding learning input. This year, we invited the No. 1 lecturers in the industry to teach from the perspective of a teacher and extend the training contents from the internal value creation to the external teaching techniques by giving a wonderful interactive speech for internal trainers to lean and grow in this opportunity. They share and exchange experiences each other in order to provide employees with a more diversified learning experience in the future.

In 2023, 17 new trainers were hired, bringing the total number of internal trainers to 406. 76.58% of the year's internal training was given by internal lecturers, thereby ensuring the inheritance of ChipMOS's core value and professional knowledge and experience.



2023 Outstanding Lecturer Award and Internal Lecture

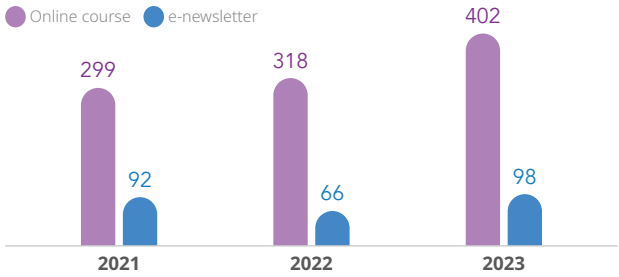
6.3.4 Diverse Learning Channels and Rich and Autonomous Learning Resources

In terms of Talent development, in addition to accelerating learning outcomes and enhancing competitiveness, we aim to provide employees with a better learning and growth environment and diverse learning channels, so that employees can feel inclusive and belong. This is our persistent goal. For example, online courses, learning communities, audiovisual platforms, podcasts, e-newsletters, external training, technical forums, and participation in project tasks are all methods for provision of a better learning experience for employees.

In response to digital trends and changes in learning models, we have evolved our internal learning group - Learning Engagement - to Version 2.0. By adjusting the operation model of the group, increasing interactive feedback and conducting learning experience surveys, we have created an atmosphere of active learning and improved employees' motivation for self-learning. These makes the group the best partner for employee's self-learning X supervisor's cultivation of the subordinate X organization's Talent development.

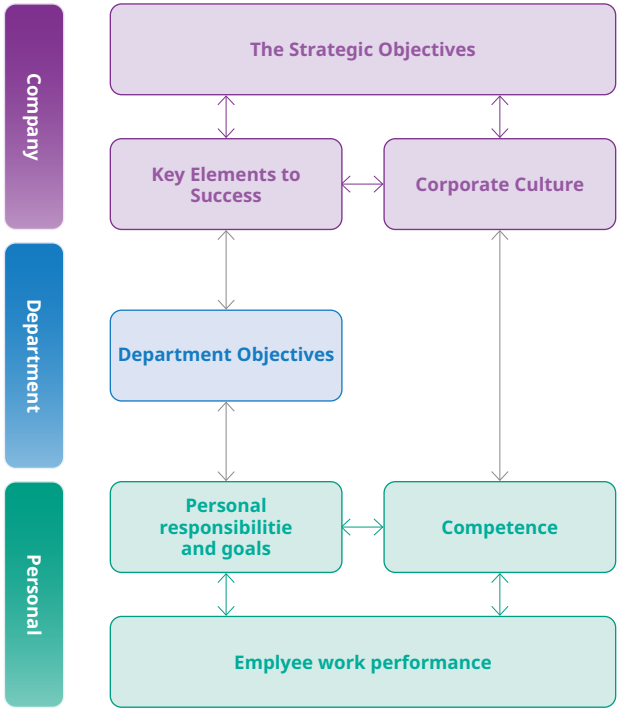


We have gradually increased the proportion of digital learning resources. In 2023, digital courses accounted for 65% (402/619) of the internal courses. The average reading rate of the e-newsletter reached 96.81%.



6.3.5 Performance Management and Development

To ensure that the Company's operational goals are effectively implemented at every level in a top-down manner, we strive to connect organizational objectives, individual goals, and personal development, and implement the core of the labor resource management. This includes Talent development, promotion rotations, and rewards planning. We also conduct regular performance evaluations every year to align their contributions with our company's mission. The annual performance management cycle involves several key steps. At the beginning of the cycle, supervisors and employees collaborate to clarify job responsibilities and establish goal management and development plans. Midway through the cycle, progress is reviewed to allow supervisors and employees to make any necessary adjustments to achieve their performance and outcome goals. At the end of the cycle, performance evaluations are conducted based on the annual work performance.



Plan at the beginning	Interim followup	Ending Appraisal
Setting up goals	Review and adjustment	Result evaluations
The performance plan encompasses • Primary scope of performance • Objectives • Competence/Conduct • Personal development plan **Reaching consensus with managers**	**Employee** • Goal tracking • Review • Adjustment **Manager** • Feedback on the status of target execution • Communication	• Performance interview • Employees' self-evaluation • Managers' feedback
Discuss with supervisors and set performance plans and specific performance measurement indicators	**Review or provide feedback on the implementation status without calculating scores. If there are changes in the scope of work and goals, the performance plan can be adjusted during the interim review.**	**Employees perform self-assessment of their performance and conduct performance interviews with supervisors**

Implementation results

The regular employees of ChipMOS and those who meet the performance appraisal methods during their employment are all subject to regular performance evaluations. In 2023 a total of 5,001 employees went through regular performance assessment, accounting for 92.8% of the Company's total. Divided by gender, 2,447 male employees went through regular performance assessment, accounting for 96.64% of the total male employees at the end of the reporting period. 2554 female employees went through regular performance assessment, accounting for 89.39% of the total female employees at the end of the reporting period.

	Male			Female			Subtotal		
Types of Employees	Total number of employees at the end of reporting period A	Number of employees to be reviewed for performance B	Percentage (%) C=B/A	Total number of employees at the end of reporting period D	Number of employees to be reviewed for performance E	Percentage (%) F=E/D	Total number of employees at the end of reporting period G=A+D	Number of employees to be reviewed for performance H=B+E	Percentage (%) I=H/G
Managers	301	300	99.67%	80	80	100.00%	381	380	99.74%
Technicians	1,461	1,407	96.30%	340	334	98.24%	1,801	1,741	96.67%
Administrative clerks	206	202	98.06%	155	154	99.35%	361	356	98.61%
Operators	564	538	95.39%	2,282	1,986	87.03%	2,846	2,524	88.69%
Subtotal	2,532	2,447	96.64%	2,857	2,554	89.39%	5,389	5,001	92.80%

Note 1: The annual performance appraisal period is from January 1 to December 31 of the year
Note 2: Indirect labors who have been on the job for less than 3 months and direct labors who have been on the job for less than 1 month are not required to undergo performance evaluation
Note 3: The total number of employees at the end of the reporting period does not include part-time employees, dispatched employees, and term personnel

6.4 Safeguarding Human Rights

GRI 2-23~2-26 GRI 2-30 GRI 402-1 GRI 406-1 GRI 408-1 GRI 409-1

Policy and Management Guidelines

ChipMOS adheres to the core principles of the United Nations Global Compact (UNGC), the Universal Declaration of Human Rights, the standards of the International Labour Organization (ILO), and the guidelines for multinational enterprises of the Organization for Economic Co-operation and Development (OECD), and develops relevant management procedures. Although ChipMOS has not signed Collective bargaining agreements with our employees, we still scrupulously abide by various laws and regulations and explicitly declare the protection of employees' human rights in various documents, including legal requirements, employment freedom, humane treatment, anti-discrimination and anti-harassment, protection of employee opinions, etc. Furthermore, to promote harmonious labor relations, we provide multiple communication channels, and regularly hold Labor-Management Meetings to promote labor communication and human rights-friendly management. We also follow the statutory regulations for the minimum notice period for operational changes. Aside from protecting the employees, it also extends the influence to suppliers to ensure that the interests of all personnel in the supply chain are protected. In 2023, there were no human rights violation or discrimination incidents to the employees and non-staff workers.



Human Rights Risk Management

ChipMOS conducts an annual risk assessment of labor rights and ethics to ensure that human rights risks in the entire plant are effectively controlled and to reduce or eliminate various labor rights and ethics risks Since 2016, we have implemented the RBA Responsible Business Alliance Code of Conduct Self-Assessment Questionnaire (SAQ) and internal audit operations to review and confirm human rights risk assessment every year. Through voluntary risk control, self-assessment and control, we ensure the effective control of human rights risks in the all the fabs and reduce or eliminate various labor rights and ethics risks. This in turn leads to specific improvement of human rights-related measures and creation of an equal working environment. According to the RBA 7.1.1 SAQ criteria, the assessment results are scored on a scale of 0 to 100. They are then categorized into 3 risk levels: (1) ≥ 85 indicates low-risk, (2) ≥ 65 and ≤ 85 indicates moderate-risk and (3) < 65 indicates high-risk.

According to the 2023 assessment results, ChipMOS's overall enterprise score and the score of each operating site were ≥85, indicating that the overall risk of the fabs was low including Hsinchu fab., Zhubei fab., Zhubei fab. 2, Hukou fab. and Tainan fab., and Tainan fab. 2.



Note: SAQ assessment risk level: (1) ≥85 is classified as low risk, (2) ≥65 points and ≤85 as medium risk, (3) <65 as high risk
VAP assessment risk level: (1) >200 is classified as platinum level, (2) 180~200 is classified as gold level, (3) <180 is classified as silver level

ChipMOS' Human Rights Risk Assessment and Response

Human Rights Risk Issues	Description of Risk Items	Rules and Regulations	Outcome of Risk Assessment	Response Measures
Anti-forced labor	Hiring of non-voluntary labor	Procedure Manual for Preventing the Useof Forced and Prison Labor	**Low-risk**	➡ Zero Fee Policy; employees are not required to pay any fees in order to secure employment. ➡ Before workers leave their home country, they are provided with an employment agreement written in their native language, which describes the terms and conditions of employment. ➡ Employees' ID and original copies of their personal documentations are not retained by the Company and any intermediaries. ➡ Employees may choose to resign after giving reasonable notice, without facing any penalties or repercussions.
No Child Labor	Hiring of child labor under the age of 16	Procedure Manual for Child and Youth Labor Management	**Low-risk**	➡ Develop policies and procedures to effectively protect young workers, student workers, interns, apprentices ➡ Strictly enforce the rule not to employ children under the age of 16 ➡ Young workers between the ages of 16 and under 18 may not perform work that may endanger their health or safety, including night duty or overtime
Reasonable Work Hours	Failure to comply with pertinent regulations on work hours	Management Procedure on Overtime Work	**Low-risk**	➡ Work schedules are predetermined and effectively managed to ensure that colleagues' working hours comply with the legal requirement of one day off for every seven days worked.
Humane Treatment	Subjecting employees to sexual harassment, physical punishment, psychological or verbal abuse	1. Management Procedure on Anti-Discrimination and Anti-Harassment 2. Management Procedure on Prevention of Punitive Management 3. Management Procedure on Suggestion Box Operations 4. Sexual Harassment Prevention Regulations	**Low-risk**	➡ Develop and communicate to all employees and other stakeholders policies and procedures prohibiting inhumane management of employees ➡ Manage in accordance with personnel rules and regulations, and there shall be no disciplinary deduction of wages ➡ The company shall not force labor, punish employees and deprive employees of their basic rights and interests for various reasons ➡ Employees who experience sexual harassment at the workplace can make a complaint. Upon receiving the complaint, the Company immediately forms a committee to investigate and handle the complaint in a confidential manner.
Anti-Discrimination and Anti-Harassment	Any discrimination against or harassment of employees in recruitment and actual work (i.e. wages, promotions, rewards or training opportunities) by the Company	1. Management Procedure on Anti-Discrimination and Anti-Harassment 2. Management Procedure on Suggestion Box Operations	**Low-risk**	➡ Respect every worker, prohibit discrimination in the recruitment process, and prevent any harassment from happening ➡ Implement equal pay for equal work and gender equality wage policy ➡ Carry out hazard identification and risk assessment investigation of illegal workplace violations, and educate employees to prevent discrimination and harassment
Freedom of Association	The Company prohibits employees from freely associating or limits open communication between labor and management	Organization Regulations for the Employee Welfare Committee	**Low-risk**	➡ The Company regularly holds Labor-Management Meeting, in which employee-elected worker representatives participate and provide feedback

Note: The risk assessment is conducted by multiplying the likelihood of occurrence with the impact level, resulting in 3 risk levels: low-risk, moderate-risk, and high-risk. When an assessment identifies an item as high-risk, it will be classified as a significant risk issue. In such cases, a comprehensive risk control and improvement plan will be formulated to mitigate the risk to an acceptable level. For items assessed as low or moderate risk, continued monitoring and effective management of the existing response measures will be maintained instead.

Human rights related education and training

To protect employees' interests and fulfill the corporate social responsibilities, ChipMOS has promised to conform to RBA 7.0 code of conducts, to ensure employees fully understand their own interests, healthy and safe working fields, environmentally protective actions, Regulations Governing Professional Moral Conduct of the Company, and the implementation of human right education and corporate social responsibilities in the management system. All employees must receive the human right education and trainings when they come onboard. In 2023, a total of 3,300 new employees received RBA and other on-the-job human-right courses, completing a combined total of 1,296.3 hours of training, which translated to 61% of all employee training hours.

Diverse Communications and Appealing Mechanism

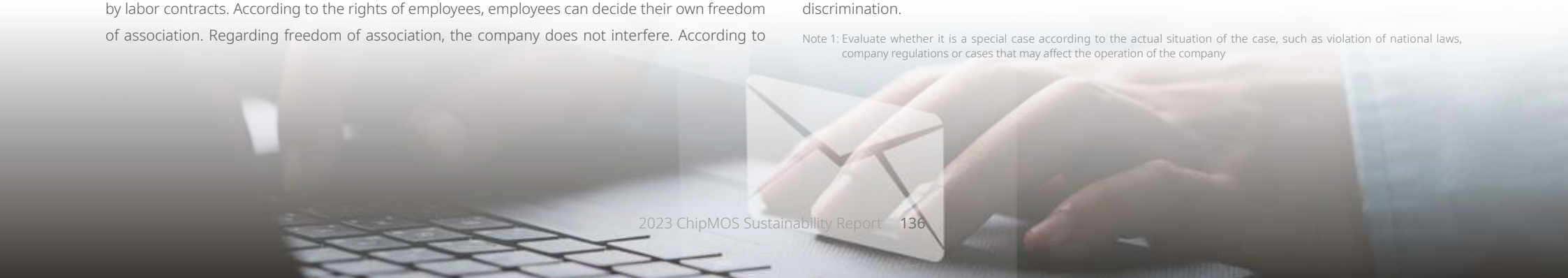
In addition to diverse and open communication channels, ChipMOS have established comprehensive internal and external complaint mechanism, which includes periodical meetings, employee suggestion boxes, Chairman's mailboxes, Audit Committee mailboxes, cybersecurity suggestion boxes, contact in person or by phone, employee interview, EAP hotline and special communication channel, and more. Through these channels, employees and stakeholders can raise concerns about potential or actual negative impacts caused by the company and seek assistance. This ensures the protection of the rights and interests of all employees, customers, and suppliers. The responsible departments handle these matters with complete confidentiality and anonymity, aiming to facilitate open communication and effectively address relevant issues. The response rate is used as the follow-up indicator. We are committed to promoting labor-management communication and human rights-friendly management.

We also attach great importance to the freedom of assembly and association of employees with an open management style. Although there is no trade union, all regular employees are protected by labor contracts. According to the rights of employees, employees can decide their own freedom of association. Regarding freedom of association, the company does not interfere. According to Article 83 of the Labor Standards Act, ChipMOS holds quarterly "Labor-Management Meetings" in compliance with the law. These meetings provide a platform for elected labor representatives from each of our fabs to report on the latest labor-related updates. These reports cover topics such as the workforce status and growth, training courses, and welfare activities. The purpose of these meetings is to strengthen communication between labor and management, as well as encourage employee participation in decision-making and discussions.

In response to the Company's implementation of RBA, if employees have questions about the policy or are willing to provide practical suggestions, the Company encourages employees to share their opinions with the audit unit or other responsible departments and make improvement suggestions to manifest the spirit of mutual good. When stakeholders of the Company have concerns about the Company's business activities, such as illegal or improper incidents, or situations that may harm their own interests, they can report them through the Audit Committee mailbox or directly approach the Legal Office and Audit Office.

There will be no major labor disputes in 2023; in 2023, a total of 27 related opinions and responses from employees will be received, and all feedback will be responded to and processed immediately. The acceptance and closing rate is 100%, and there are no special cases (Note 1), and there is no delay. or accumulated cases. If there is a complaint of sexual harassment, it will be investigated and tried by the handling committee, and it will be coordinated and completed in accordance with laws and regulations. The medical office will also share articles related to gender relations from time to time, and in accordance with the regulations of Article 6 of the Occupational Safety and Health Law, to carry out the harm of illegal workplace violations in the company Identification and risk assessment surveys to educate employees to prevent incidents of gender discrimination.

Note 1: Evaluate whether it is a special case according to the actual situation of the case, such as violation of national laws, company regulations or cases that may affect the operation of the company



Communication Channels

Response rate for all communication channels in 2023: 100%

Communication Channels	Meetings	Communication Platform				Communication hotline/other			Others
	Meetings[Note 1]	Employee suggestion box (electronic/physical)	Chairman's mailbox	Audit Committee Mailbox	Information Security Suggestion Box	Contact in person/ via phone calls-HR	Employee Interviews[Note2]	EAP Hotlines	Grievances referred by external entities
Level responsible	Tier-1 Managers	Division-level Managers	Chairman	Department Head, Independent Director or Audit Committee (depending on the accused)	Management Representatives of Information Security Management Committee	Division-level Managers	Division-level Managers	Outsource a management consulting company, and notify the company if the circumstances are serious (such as suicide, violence, etc.)	Division-level Managers
No. of cases	23	10	0	2	0	10	20	5	3
Email / Phone number	-	HR_Hsinchu@chipmos.com HR_Tainan@chipmos.com	Chairman@chipmos.com	Audit_committee@chipmos.com	ISMS@chipmos.com	-	-	0800-025-008	-

Note1: Meetings including the 45 sessions of Labor-Management Meetings, production line meetings and Welfare Committee meetings held
Note2: A total of 898 employees were interviewed in 2023
New employee interview: interview the direct employees after working for a full term.
Transfer interview: interview with transferees after working for a full term
Project interviews: interviews for key talents or special cases

ChipMOS's unique communication channel

Employee Symposium

This is held from time to time every year, and a total of 4 sessions were held in 2023. In addition to face-to-face communication with employees, the Company's future operating strategies and policies are also shared, giving employees more support and positive energy for their work.

Foremen Luncheon

To get closer to the low-level managers and get to further know issues at work, foremen/employee luncheons have been held sporadically. Through the luncheons of the Chairman and the foremen/employees, the voices of employees are listened to, and they are given encouragement and assistance.

Company Publication-ChipMOS Quarterly

Since its establishment in 2001, a total of 88 issues have been published over 23 years. Selected articles are published every quarter, including important company policies, patented technologies, interviews with executives, ESG columns, patented technologies, event sharing and so forth.

6.5 Healthy and Safe Workplace

GRI 2-8 GRI 403-1~403-10 SASB TC-SC-320a.1

ChipMOS is committed to creating a safe and friendly work environment, ensuring the well-being of its employees. We prioritize safety and health by implementing our comprehensive "Safety and Health Policy" to prevent accidents and maintain a sustainable and healthy workplace as part of our long-term commitment.

ChipMos Safety & Health Policy

- Comply with regulatory requirements.
- Provide a safe and healthful workplace, prevention of occupational injury and illness.
- Enhance internal, external communication and value customer's, neighbor's and employee's opinion.
- Establish objectives, continually improve the Safety & Health performance.



6.5.1 Safe Working Place with Thorough and Continuous Improvements

ChipMOS attaches great importance to the safety and health issues of employees and non-employees who are active in the factory. Only a safe and healthy working environment can allow all workers to work with a peace of mind and create high efficiency and high-quality work performance. We adopt a systematic management model, all fabs continue to promote the ISO 45001 Occupational Safety and Health Management System, and through third-party verification, safety and health management is implemented in the work environment, in line with international management trends. The coverage of the management system includes the routine and non-routine activities of all workers in the fab, as well as the safety and health risks that may be derived, covering 100% of the scope. The Company regularly implements safety and health risk and opportunity identification in the Plants every year, to continuously reduce potential risks. Whenever any change in work, occupational disasters, near miss, or legal updates occur, the related safety and health risks are re-identified, analyzed, assessed, and controled at any time.

Environmental Safety, Health and Energy Management Committee

In 2023, the committee received a total of 56 proposals, achieving a 100% completion rate.

In the promotion of sustainability and occupational health and safety at ChipMOS, we adopt a top-down strategy for planning and execution. Each fab has established an Environmental Safety, Health and Energy Management Committee with the Executive Vice President responsible for promotion and implementation of relevant goals and programs. The Committee is chaired by tier-one managers, with the department managers and committee members actively participate in regular committee meetings held every three months in accordance with the law. The labor representatives constitute more than one-third of the total committee members and are elected through an open selection process involving the employees. In 2023, the committee received a total of 56 proposals, achieving a 100% completion rate. Among them, 17 proposals were completed for ISO 14001, with a reduction of the risk score from 60 to 40 points (33.3%) for the reduced waste of APG packaging production SWR and E-Run Card input by SWR Info at Tainan fab. 29 proposals were completed for ISO 45001, with a reduction of the risk score from 900 to 180 points (82%) for the improved installation of the fire-fighting system for the machines at Zhubei fab. 10 proposals were completed for ISO 50001, with which the ceramic-coating power-saving solution for CWP impellers in the TB Building of Tainan fab. brought about reduced annual electricity consumption by 147,890 kWh to reduce the energy (electricity) of the entire fab by 1%.

Item	Hsinchu fab.	Zhubei fab.	Zhubei fab. 2	Hukou fab.	Tainan fab. (including Tainan fab. 2)
Total Number of Members in the Committee	15	15	15	15	22
Number of Labor Representatives	5	5	5	5	8
Percentage of Labor	33%	33%	33%	33%	36%

Ensuring Occupational Safety of All Employees



In 2023, ChipMOS' safety and health management was planned towards the direction of full participation, under the promotion model of enhancing worker participation, consultation and communication, including review of procedure documents, participation in Workplace Environmental Monitoring, joint incident investigation and hazard identification, while building a management system including the communication of opinions.

Pursuant to the prescribed Environmental Safety, Health and Energy Communication Management Procedures, employees may raise opinions related to occupational safety and health, communicate and consult with managers or accountable units, or raise opinions to the labor representatives of the Environmental Safety, Health and Energy Management Committee via phone, e-mail, and various meeting, and propose discussion in the meetings of Safety Committee at each fab. For the communication of relevant occupational safety and health laws and regulations in the fabs, employees may inquire about the announcement on the Company's electronic bulletin board, or refer to the publications, education and trainings, or announcements issued in-house, for safety and health information. Meanwhile, for the communication and promotion to various stakeholders, diverse communication channels (promotional seminars, emails, phone calls, and orders) are also applied, or reply to the stakeholders of the handling situation by recording the "Environmental Safety and health Communication and Opinion Form," while promoting the Company's safety, health and environmental policies to customers, contractors, suppliers and stakeholders, for preventing and reducing negative impacts on occupational safety and health.

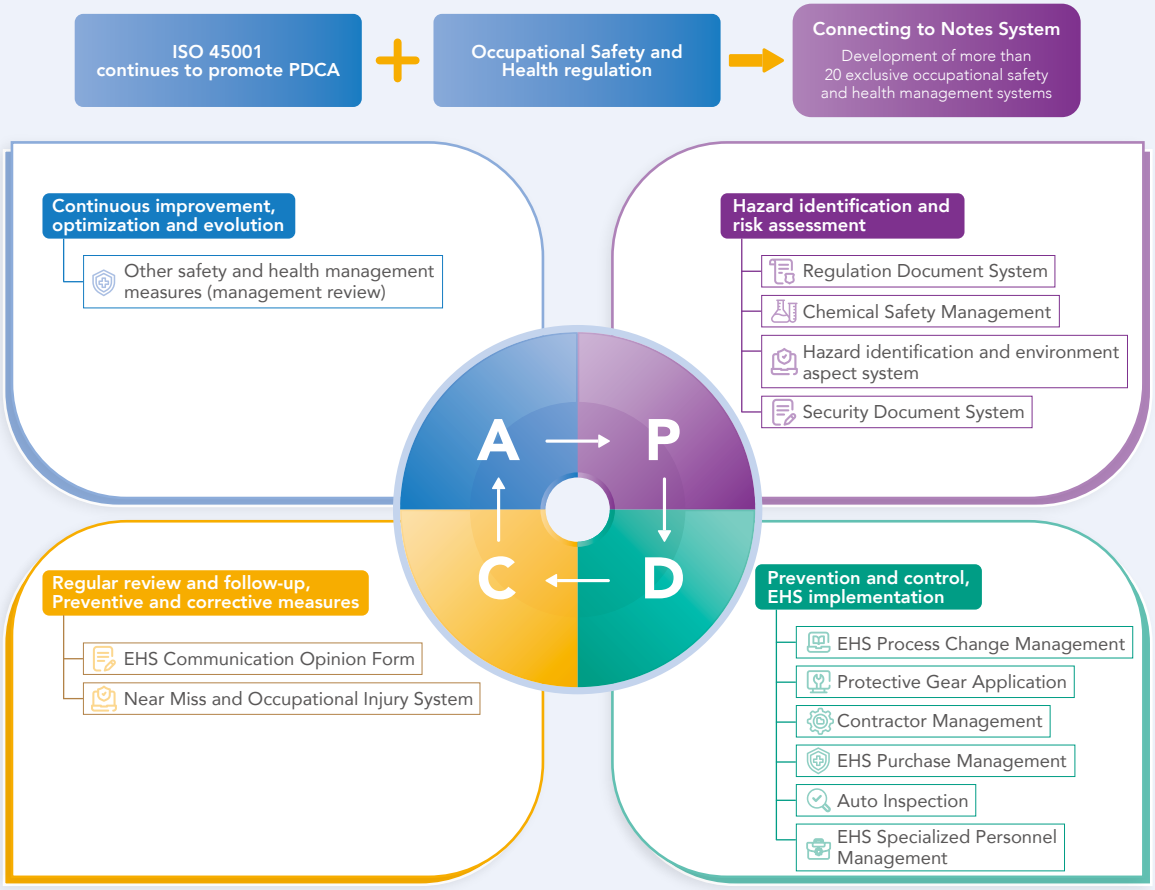
In order to build the occupational safety of all employees, and improve the safety awareness, ChipMOS has prescribed the Educational Training Program For Environment, Safety And Health Working Instruction, as the basis of the annual occupational safety and health education and training plans. The trainings are conducted by the nature of workers; other than the general safety and health education, the education and trainings also provided for occupational safety and health supervisors/managers, operators of dangerous machine or equipment, special operators, and occupational health nurses. For the occupational safety and health education and training to contractors, it is handled pursuant to the Management Procedures for Contractor's Safety, Health and Environmental Protection, to implement the occupational safety and health education and training as enhancement of workers' safety and health awareness.

Moreover, activities such as praising excellent environmental safety and health units and personnel are promoted, to enhance the participation of all units. The Environmental Safety, Health and Energy Communication Management Procedures are prescribed to encourage employees to propose in terms of environmental safety, health and energy. Employees may raise their concerns to managers, or consult with the Safety and Environmental Office or Factory Service, without worrying that the Company will act against the employees. The Company does not impose disciplinary actions against employees who report hazardous conditions in the fabs, and expects to encourage the employees to actively propose improvements regarding daily business and the environment through the in-house proposal incentive system, to prevent disasters. Through activities, the safety and health awareness of employees are enhanced, and the sense of honor is stimulated via praises, to achieve the objective of improving the safe and healthy working environment.

Strengthening Healthy Labor Force

For the occupational safety and health management activities, at ChipMOS, the PDCA is followed and the ISO 45001 management system is continuously implemented. In addition, in accordance with the requirements of occupational safety and health regulations, we have developed more than 20 exclusive occupational safety and health management systems, which are connected to the fab's Notes system for systematic, digital to effectively improve operational efficiency, data control, and record retention.

- **Occupational safety and health management activities are linked to form a systematic operation.**
- **Systematization and digitization effectively improve operation efficiency, data control, and record retention**



Note: Each management activity corresponds to the name of the ChipMOS Notes management system.

Risk assessment and identification

- Conduct ISO45001 hazard identification team training and system maintenance every year. Provide the identification personnel of each unit with the concept of promoting the management system to understand hazard identification approaches, so that high-risk items in the identification operation can be identified and the management by target plan can be introduced for improvement.
- Educate employees on compliance and conduct regular review and amendment every year



Strengthen contractor management

- Set up multiple Notes systems for systematic EHS management.
- We use the contractor control system and enter the "Contractor Control System" to apply for the construction and access permits before construction commences.
- The contractors are evaluated on their safety and health performance every year, and the evaluation results will be used as the basis for the renewal of contracts.
- Regularly convene contractor agreement organization meetings.



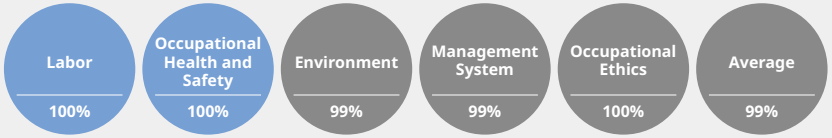
Build a Healthy Supply Chain

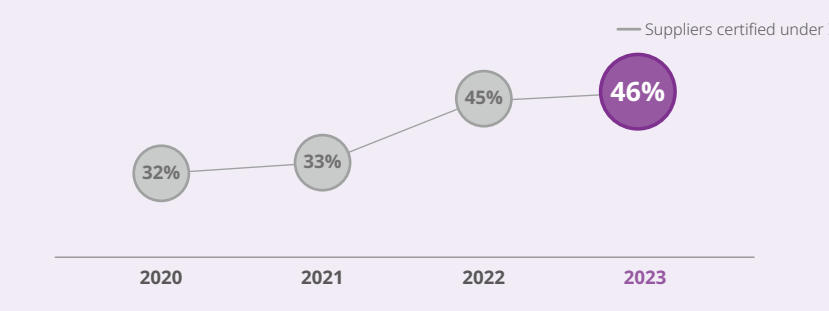
We are committed to building a healthy and safe supply chain. We are also strengthening the management and safety awareness of non-employees. Through supplier audits and regular meetings with contractors, we improve the health and safety capabilities of the supply chain, hoping to exert our corporate influence and create a win-win situation.

In response to the Occupational Safety and Health Administration's "Sustainability Leader in a Healthy Workforce" campaign, ChipMOS invited 12 suppliers to complete the self-evaluation on the OSH Sustainability Performance Self-evaluation Platform of the Occupational Safety and Health Administration, Ministry of Labor. Due to the business scale and hazard risks of some suppliers, some suppliers did not reach the threshold required by the Ministry of Labor for establishment of an occupational safety and health management unit and setup of occupational safety and health management personnel. Hence, this platform is provided for them to understand the OSH evaluation indicators and indirectly help them improve their OSH management ability, thereby giving the full play to the spirit and influence of large manufacturers leading small factories, implementing responsible supply chain management, and improving the overall safe and health labor force in the supply chain .

Supplier management

Conduct annual supplier audits based on the 5 major aspects of RBA guidelines, including labor and occupational health and safety issues, and encourage suppliers to obtain ISO 45001 certificates for more efficient management.





*Contractor: Enhance and implement contractor management on a regular basis through contractor agreement organization meetings and the risk assessment mechanism (for more information, see Contractor Management)

Hazard Identification, Risk Management, and Incident Investigations

Through the preventive mode of Risk management and autonomous training in each fabs of ChipMOS, each employee's awareness of work safety and health is improved. Based on the established safety and health risk identification and assessment procedures, with the implementation of ISO 45001 system training courses by employees in every fab every year, the probability of risks and severity level are identified via the elements including hazard severity, frequency of occurrence and accident probability by conducting hazard identification and risk assessment procedures for each routine and non-routine operations from the 5 aspects, namely personnel, machinery, materials, engineering methods and the environment, to analyze the resulting major occupational safety and health risks, and find out the improvable hazard points, plan and propose corresponding control methods, corrective measures and goals/management plans for reducing risks and avoid accidents. In 2023, based on major occupational safety and health risks, 29 improvement plans were proposed and all were completed as scheduled.

Item	Hsinchu fab.	Zhubei fab.	Zhubei fab. 2	Hukou fab.	Tainan fab.	Tainan fab. 2	Total
Items of Hazard Identification	828	771	333	671	2,093	427	5,123
Number of Unacceptable Risk (item)	4	3	1	3	3	1	15
Number of Established Management Programs	5 Note 1	6 Note 2	2	4 Note 3	9 Note 4	3 Note 5	29
Numbers of Completed Management Programs	5	6	2	4	9	3	29
Completion Percentage	100%	100%	100%	100%	100%	100%	100%

Note 1: In addition to rejecting 4 unacceptable risk items, Hsinchu fab. implemented 1 additional continuous improvement management plan.
Note 2: In addition to rejecting 3 unacceptable risk items, Zhubei fab. implemented 3 additional continuous improvement management plans.
Note 3: In addition to rejecting 3 unacceptable risk items, Hukou fab. implemented 1 additional continuous improvement management plan.
Note 4: In addition to rejecting 3 unacceptable risk items, Tainan fab. implemented 6 additional continuous improvement management plans.
Note 5: In addition to rejecting 1 unacceptable risk items, Tainan fab. 2 implemented 2 additional continuous improvement management plans.

If the workplace is concerned with imminent danger, workers may stop work and retreat to a safe place on their own without endangering the safety of other workers, and the Company will not impose disciplinary actions. For incidents, investigations and improvements are conducted pursuant to each corresponding procedure set forth in the "Instructions for Work Injury Management and Incident Investigation," and reviews are conducted in the meetings of the Environmental Safety, Health and Energy Management Committee, to avoid similar incidents from re-occurrence.

Continue the 5 Major Occupational Safety Management and Prevention Tasks

Performance Highlights 01



Industry-Academia Collaborative Research Program - Enhancement of Fire and Explosion Prevention and Safety

External expert

Hazardous area and explosion-proof electrical level - Professor Hung-Te Hsu's team from National Kaohsiung University of Science and Technology

Import method

1. Three levels of "Zone 0 -Zone 2"
2. Selecting explosion-proof electrical appliances according to the hazard level in the fab.

Benefit

Effective prevention and improvement of overall safety.

- **Define the hazard level and set up corresponding measures**
- **Select explosion-proof electrical equipment according to the level of the explosion-proof area in the fab.**

Performance Highlights 02



Chemical Evaluation and GradingManagement Improvement Project

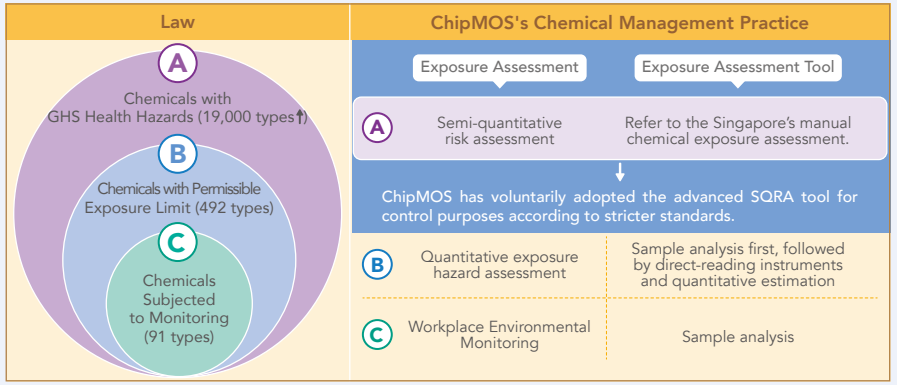
In 2023, we worked with monitoring agencies to adopt more advanced and rigorous management tools for Class A chemicals.

Risk assessment system

Singapore's Quantitative Risk Assessment (SQRA)

Method

Calculate the risk level using the hazard rating (HR) and exposure rating (ER), and adopt corresponding risk control measures according to the risk level to further reduce the Risk management of chemical operations.



To enhance the safety and health management of the fabs, ChipMOS has corresponding management mechanisms for chemicals, procurement, machinery equipment, contractors and contingency drills, explained as below:

Chemical Safety Management

All chemicals in the fabs shall be submitted for review procedures, to ensure compliance with regulations and ChipMOS's internal standards. Establish a complete list of use for all chemicals in Chinese and English, and provide appropriate protective equipment and personal protective equipment (PPE) to protect the health of employees.

For places where chemicals are stored, set up leakage-proof facilities; where solvents and gases are stored in the fabs, set up independent compartments and strictly limit the amount to be taken and storage methods. Moreover, pursuant to Article 11 of the Occupational Safety and Health Act, the risk levels of total 375 chemicals are assessed based on the health hazards, dispersion status, and consumption, and the classification management measures are adopted. Based on different risk levels, the Company takes control measures, include isolation (pipeline supply) or engineering control (local exhaust/closed operation, overall ventilation), to reduce risks. We shall continuously promote the chemical classification management system, reviews the safety protection measures for the storage and use of chemicals in the fabs, and improves the work safety of employees in a holistic manner.

Fire Safety Management

For the storage of organic solvent chemicals, Zhubei fab.'s principle is to reduce the amount of accidents and increase their control rang. The storage design of the organic solvent warehouse is reviewed. After proactively consulting with the local fire authority, the design focuses on compliance with fire regulations and the use of chemicals on the production line. Ultimately, the limit on the amount of organic solvents stored in a single compartment is reduced by less than 1 time the amount under the control amount of public dangerous goods. Each storage compartment is designed with explosion-proof and fire-resistant materials to reduce the risk and range of accidents and enhance the prevention and safety of fire and explosion. Reducing the amount of chemicals in each storage room not only improves the prevention and safety of fire and explosion, but also reduces the extent of the impact in the event of a chemical leak, greatly reducing the environmental impact of chemicals, and shortening the time needed for emergency actions.

In addition to the storage safety management and design, to protect the employees' safety when using chemicals, suppliers are required to attach hazard labels to the outer surface of the chemical containers in Chinese and English so that employees can understand the hazard characteristics at a glance. In addition, ChipMOS has prepared safety data sheets in both Chinese and English for employees to refer to directly, in order to ensure the convenience for personnel when handling chemicals.

Machinery Equipment Safety

Before introducing of various machines and equipment to the fabs, an evaluation application form must be submitted. Hazard identification and safety protection (such as emergency stop buttons and safety interlocks) should be inspected at each stage, including introduction, installation, and acceptance. During installation, equipment manufacturers are required to comply with contractor's safety management matters, procedures for various safety management measures are prescribed to comply with operational safety and health requirements; the hazard signs in both Chinese and English are posted on machine undergoing maintenance and services, for the employees to understand the hazards of the machine and take appropriate safety protection measures. In response to the employee injury accidents in 2023, we have reviewed and revised the operational safety regulations and organizing education and training, and improved all the molding machines with the full interlock design to ensure optimization of safety protection.

Every year, we continue to promote the implementation of hazard identification operations, evaluate the potential risks of personal injury such as the work environment, machinery, and operation actions, and implement improvement plans for items of unacceptable risk based on the evaluation results. This way, we reduce the risk of occupational disasters and ensure that contractors and suppliers working in the fab are protected from injury. In addition to emphasizing the intrinsic safety protection design of machinery and equipment, we also observe, identify, and evaluate potential hazards and risks associated with personnel operations and propose preventive and corrective measures to reduce the risk of injury to personnel. For example, we observed the target replacement operation in a clean room carried out by the WB Thinfilm Equipment Dept. of Zhubei fab. The personnel need to lift up the target at least 120cm during the process of handling, removing a mounting for its replacement. Since the maximum weight of the target can reach 40-50 kg, there is a risk of foot injury if it falls. Therefore, appropriate foot protection is re-assessed for the personnel. Finally, Cleanroom specific safety shoes are provided for the personnel to reduce the risk of foot injury.

We also pay attention to musculoskeletal disorders caused by overload during the operation, and considerable effort has been made to continuous improvement to provide employees with a safe and comfortable working environment. For example, in the handling of WS Probe Card at Hukou fab., a force-saving arm device is installed to replace manual handling as assessed to reduce musculoskeletal disorders.

Contractor Management

ChipMOS places great importance on contractor management. In addition to establishing a comprehensive system for evaluating and managing contractors, which includes assessing their qualifications, providing training, and implementing on-site supervision, we have developed a specific set of procedures for managing construction safety and health for high-risk operations such as hot work, elevated work, lifting operations, forklift operations, and confined spaces. We require contractors to comply with pre- construction, during-construction, and post-construction safety regulations to prevent accidents and ensure a safe working environment. We have a robust contractor rating system in place to evaluate the performance of contractors working within our organization. This system assesses their performance in areas such as quality, delivery, safety, cooperation, and discipline. By implementing this system, we can effectively manage our contractors and minimize any associated risks. I'm pleased to report that in 2023, there were no occupational health and safety incidents involving contractor personnel across all our facilities.

In order for contractors to understand and familiarize themselves with the relevant occupational safety and health regulations of ChipMOS, a contractor agreement organization meeting is held every quarter, in the hope to help the contractors become better partners through reports and good two-way communication.

Item		Hsinchu fab.	Zhubei fab.	Zhubei fab. 2	Hukou fab.	Tainan fab.	Tainan fab. 2	Total
Number of Contractors in 2023		71	111	46	51	78	39	396
2023 Assessment Rating	Class A excellent, retained	0	9	4	0	9	0	22
	Class B good, retained	71	102	42	51	69	39	374
	Class C three-month suspension	0	0	0	0	0	0	0
	Class D disqualified	0	0	0	0	0	0	0

Procurement Safety Management

ChipMOS has established a set of procurement safety management procedures, requiring the contracting and procurement procedures for engineering or services to include the “safety and health requirements,” including purchasing/leasing machines, tools, equipment, materials, raw materials, and personal protective equipment. When signing the contract, executing and accepting, these requirements serve as the basis for requirements, confirmation and delivery of results, to meet the safety and health requirements and ensure that all operations are operated safely.

Emergency Response Drills

ChipMOS is committed to improving employees' awareness of safety and health. The passive training requirements in the past have been effectively transformed into a training mode of autonomous management and autonomous training by us, and trainings at all levels are expanded for improving the adaptability, to implement the goal of occupational safety for all employees. In addition to the education and training for employees pursuant laws, to avoid the management risks of contractors, relevant education and training are required to be conducted, as well as the requirements for safety and health training and toolbox safety meetings before entering the fabs are also reinforced.

In terms of emergency response drills, based on the risk assessment results, for the possible types of incidents such as fires, earthquakes, typhoons and chemical disasters, we all take actions through the 3 indicators of "prevention", "Early Warning" and "Response;" ChipMOS conducts autonomous department drills, or works with relevant governmental agencies to implement large-scale drills. Through scenario simulation and practice, the employees’ awareness of hazards and their emergency response capabilities are improved, and greatly reduce disasters and losses. Meanwhile, members of the emergency response team shall hold emergency response education and training at least once every six months to improve their emergency response capabilities/ For employees who are not members of the emergency response team, the fab shall conduct at least one emergency evacuation drill (both in the daytime and at night) at the fab level. Through the implementation of evacuation and gathering, employees’ familiarity, awareness and adaptability can be increased to reduce casualties in the event of a real accident.

2023 Accident and Evacuation Drill Statistics

Type of Fab		Hsinchu fab.	Zhubei fab.	Zhubei fab. 2	Hukou fab.	Tainan fab.	Tainan fab. 2	Total
Times of Accident Drills		7	6	4	6	18	4	45
Number of Evacuation Drills	Daytime	2	3	3	3	4		15
	Nighttime	2	2	2	2	2		10

Remarks: As the Tainan fabs (including Tainan fab. 2) have more employees, and the plant is a packaging and testing fab, with risks different from the testing fabs, the number of drills is more than other fabs.



Workplace Environmental Monitoring

Pursuant to the "Enforcement Procedures for Labor Operation Environment Measurement," ChipMOS conducts labor operation environment monitoring every six months periodically. Before the monitoring is conducted, the persons in charge of the operating venues are called for a meeting, to discuss the type of work exposure, identify and analyze hazards, and collect data. Based on the analysis results, the "Workplace Environmental Monitoring (Including Sampling Strategy) Plan" is drafted to ensure that all hazard exposure factors are included in the monitoring. The monitoring results are managed according to the type of assessment as follows, and published throughout the fabs to inform all employees.

2023 Environment Monitoring Outcomes

Monitoring Item/ Fab	Hsinchu fab.	Zhubei fab.	Zhubei fab. 2	Hukou fab.	Tainan fab.	Tainan fab. 2
CO_2	●	●	●	●	●	●
Illuminance	●	●	●	●	●	●
Noise (person)	●	●	●	●	●	●
Noise (environment)	▲	▲	▲	▲	▲	▲
Organic	-	●	●	●	●	●
Specialty chemical	-	●	-	-	●	●
Dust	-	●	-	-	●	-

Remarks:
1. ●: means tested and meeting the standard; ▲ means tested but failing to meet the standard. - stands for not applicable/not tested for the item
2. Explanation of failure to meet the standard and preventive measure:
   Hsinchu fab.: one location in the air compressor room in Building C, B1 (noise > 90 decibels); Zhubei fab.: one location in the 1F air conditioning room (noise > 90 decibels); Zhubei fab. 2: one location in the 1F air conditioning room (noise > 90 decibels); Hukou fab.: 2 locations in the B2F air conditioning room and 2F air conditioning room (noise > 90 decibels); Tainan fab. & Tainan fab. 2: 3 locations in the TA1F/TB1F facility management room air compressor area and TC1F CUB area (noise > 90 decibels).
   Preventive measures: The air compressor/air-conditioning/fire pump/CUB rooms are not a normal work area for employees. As required by laws, "noise area signs are posted" outside the concerned machine rooms and "protective equipment (earplugs) are provided"

Occupational Disaster Management

Under the effective operation of the safety and health management mechanism and system, in 2023, there was no death due to work injury for either employees and non-employees[Note 1] in ChipMOS. The severe employee occupational injury incidents[Note 2] in fabs were 5 cases, 0 cases for non-employees; the total recordable occupational injuries[Note 3] were 5 cases; there was no amount of monetary loss due to any lawsuit related to employees' health or safety violations. No fire incidents occurred at ChipMOS in 2023.

The "Frequency-Severity Indicator (FSI)," "Disabling Injury Severity Rate (SR)," and "Disabling Injury Frequency Rate (FR)" of all employees of the Company are superior to other electronic parts and component manufacturers. The Company will continue to enhance the ability of colleagues to recognize hazards, and create the company safety culture in the future, so that every ChipMOS employee goes to work happily and goes home safely.

Note 1: The common types of non-employee workers include contracted workers for cleaning, security, and catering services. The total number of such workers came to 97 people in 2023 (calculated based on the total number of people on December 31, 2023), which did not show significantly difference from the number of non-employees in 2022.
Note 2: Serious occupational injury incidents refer to disabling injury incidents (excluding commuting to and from work) reportable to the competent authority as required by law.
Note 3: Recordable occupational injuries = death cases + disabling injuries (excluding minor injuries)

The company-wide disabling injury statistics

Year	2019	2020	2021	2022	2023
Disabling Injury Frequency Rate (FR)	0.51	0.35	0.54	0.45	0.48
Disabling Injury Severity Rate (SR)	26	5	9	9	13
Frequency-Severity Indicator (FSI)	0.12	0.04	0.07	0.07	0.08
Working Hours	11,859,733	11,276,088	11,167,944	11,023,600	10,480,536

ChipMOS FSI Target 0.16

Note 1: Formula of Disabling Injury Frequency Rate (FR) = (number of disabling injuries × 10^6)÷ total working hours experienced
Note 2: Formula of Disabling Injury Severity Rate (SR) = (days charged for disabling injuries × 10^6)÷ total working hours experienced
Note 3: Frequency-Severity Indicator (FSI) = $(FR \times SR \div 1000)^{1/2}$
Note 4: The total working hours of employees in 2023 was 10,284,592 hours; the total working hours of non-employees was 195,944 hours

Number of Work Injuries 5
Percentage of Occupational Injury (%) 0.09%
Days Charged for Disabling 138 days
Percentage of Lost Days (%) 0.12%

Note 1: The number of employees employed in the percentage of occupational injury (%) is based on December 2023
Note 2: The total work days in the percentage of lost days (%) is based on December 2023
Note 3: The number of non-employee work injuries and lost days at each fab is 0

Corrective and Preventive Measures

In relation to occupational injury incidents, 3e cases involved falls. The reasons included accidentally kicking the stairs or stepping on the air while walking. For these, we made dissemination in different ways such as the internal meeting, Environmental Safety, Health and Energy Management Committee, and electronic/print bulletins. We posted slogans on the stairs throughout the Company and add lighting devices to minimize the potential incident of falls. Additionally, one case was a bruise injury. This happened because an the right index finger of an employee extended beyond the scope of the Chase Holder during the operation and the index finger was accidentally hit by the machine mechanism. In addition to revising the "Operation Safety Regulations" and organizing education and training, we improved all the molding machines with the full interlock design to increase the range of the protection. One case was a strain injury. The reason was that a person accidentally strained the back while handling the wafer cassettes. In addition to the new handling SOP (for the sorting of cart consumables), case studies are provided in pre-work education and through distribution of flyers to prevent man-made injuries.



6.5.2 All-rounded healthy workplace

All-rounded healthy workplace

Safe and Healthy Workplace

Diverse health examinations to protect employees' health

First and foremost is a "safe and healthy workplace". We have introduced a variety of health checkups to meet the health checkup needs of all ethnic groups, protect the health of employees, provide comprehensive health management in case of health risks after the health checkup, keep track of all health risks, and provide appropriate health advice. or preventive measure

Safe and Suitable Workplace

Holistic health management to reduce risk of disease

Create a "safe and suitable workplace" with a series of health promotion activities and uninterrupted health-themed promotion to promote workers' health awareness and establish a quality healthy lifestyle

Comfortable Workplace

Inspiring health awareness and improving autonomous health management

A "comfortable workplace " program for ChipMOS employees to work comfortably

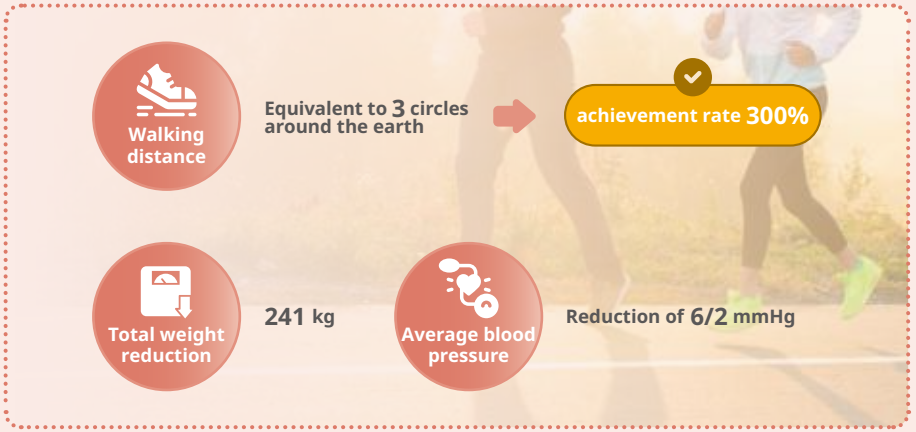
ChipMOS values the health of employees, and believes that healthy employees are an important foundation for an corporate to succeed. The Company seeks to prevent any occupational diseases from occurrence through preventive measures, and emphasizes on the promotion of health management and enhancement; a holistic health management program is planned by a dedicated medical team, to implement employee health management, health Risk management and health care, for continuous protection of employee health, as well as enhancing employees' awareness of self-health management. Meanwhile, in order to ensure the health of non-employees working in the fabs, ChipMOS provides necessary medical consultation and medical resources for all workers to use.

ChipMOS is committed to protecting the health interests of workers; it not only observes laws and regulations related to medical personnel, but also specifies the relevant confidentiality obligation in the contract with the contractor to keep the workers' health information confidential; we establish the "Labor Health Service Program" annually, and report and review the implementation outcomes in the Occupational Safety, Health and Energy Management Committee every quarter. The Company focuses on 3 major health aspects, namely "Safe and Healthy Workplace", appropriate "Safe and Suitable Workplace", and "Comfortable Workplace" where employees can work comfortably. By doing so, we continue creating a comprehensive and healthy workplace so that all the employees of ChipMOS can receive comprehensive health care and thereby achieve work-life balance.

2023 Health Management Highlights

Performance Highlights 01

2023 Walking for Your Health



Insufficient physical activity is a risk factor for mortality. First, walking is the most easily practiced and most recommended physical activity. In 2023, we held a Walking for Your Health event and attracted **169** participants. Awards were provided to encourage employees to participate at any time and at any place. The goal is to reinforce good sports concepts, increase physical activity, reduce health checkup abnormalities, and prevent chronic diseases. In 2023, the participation in the activities was enthusiastic. The goal was to walk a distance equivalent to 1 circle around the earth (about 40,000 kilometers). The total final effect was **122,285** kilometers with an achievement rate of **300%**.

Performance Highlights 02

Cancer Screening Event x Women's Health Month

● Better than what is required by law ○ On-site service to improve the convenience of examination

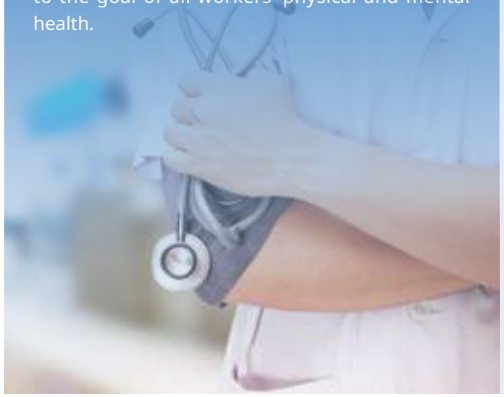
Inspection Item	Number of Participants	Better Than What Regulations Require
Colorectal cancer screening	3,854	●
Liver cancer screening	3,938	●
Cancer tumor marker screening-Liver/pancreas/intestine/prostate/ovary	3,938	●
Oral cancer screening	164	○
Cervical cancer - smear	120	○
Breast cancer screening	96	○
Ovarian cancer screening	78	○

Employee health checkups cover all types of cancer screening. Every year, there are cancer screening tests that are better than legal requirements. To facilitate employees' checkups and take care of female employee's health, we continue to cooperate with the Health Promotion Administration to promote the screening tests of four cancers, including on-site oral cancer screening and Women's Health Month activities, hoping to identify precancerous symptoms, and provide employees with appropriate treatment through early screening to stop occurrence of cancer.

Safe and Healthy Workplace

Diverse health examinations to protect employees' health

ChipMOS conducts the annual health examination for employees. For 21 years in row, the Company has planned a variety of screening programs and frequencies better than peers. We also provide ultrasound and various cancer screening tests (liver/pancreas/intestinal/prostate/ovarian cancer) to detect abnormalities at an early stage with timely treatment, and continue to ensure the health of employees. Similarly, we value the health of non-employee workers in the fabs; ChipMOS fulfills the responsibility of supervision and management, and requires outsourced vendors and contractors to implement the health examinations and care of their workers pursuant to laws and regulations, for moving towards to the goal of all workers' physical and mental health.



	Results	Actions
Employee Health Examination	**3,977** employees took the examination **31** screening items **99.8%** achievement rate	Discuss with occupational specialists to determine the inspection items that are better than legal requirements and implement employee health care. All personnel: air-conduction IOP, fecal occult blood, abdominal ultrasound, liver/pancreas/intestine/prostate/ovary cancer screening. Health killers in recent years - thyroid cancer, liver cancer, and lung adenocarcinoma have been identified.
Managers' Health Examination	**47** employees took the examination **100%** achievement rate	The annual program with fixed-amount subsidy is adopted, with the evaluation done by the onsite physician for the individual's physical condition in advance, to provide recommended examination items; numerous major health examination packages, such as cerebrovascular, lung, and gastrointestinal, are provided for managers to choose and combine flexibly, to achieve effective screening benefits.
Physical Check of New Recruits	**100%** Completed Before Onboard	The Company pays the employees to have a physical examination before onboard, and strictly requires that they must complete and confirm their health conditions before onboard, in order to reduce the risk of infectious diseases in the fabs and protect the health of the employees in the fabs.
Special Hazard Health Examination	**139** employees took the examination **100%** completion rate	As required by law, the examination are taken for these personnel operating with special hazards, such as dust operations, nickel operations, and n-hexane; in the recent five years, there has been no work-related irregularity comprehensively deemed as Level 3 or 4; for the Level 2 irregularities, all have completed with onsite physician's assessment, health instruction, re-examination tracking, and labor allotment measures, to reduce the risk of occupational diseases.
ChipMOS E-Health System	**100%** report conversion completion rate **100%** complete report retention rate	Since 2010, the online platform, "ChipMOS E-Health System" has been established, to completely retain the employee's health examination reports over the years, and provide employees to inquire their own health examination reports, health consultation and management for health service registration.
Health check-up report consultation	**128** employees took the examination	Qualified physicians from a medical examination hospital provide on-site consultation services during health check-up report consultations. They offer professional guidance and help address complex medical inquiries, providing advices and clarifications.

Safe and Suitable Workplace

Holistic health management to reduce risk of disease

To protect the safety and health of employees and prevent occupational diseases, we have formulated "Health Management Instructions, Maternal Health Protection, Health Care for Middle-aged and Elderly Workers, and Prevention of Irregular Workload-Induced Diseases" according to the "Occupational Safety and Health Act". The health grading management results of health checkups, the analysis of the cardiovascular disease risks conducted using assessment tools, and health risk factors of middle-aged and elderly people are combined for health Risk management. Physicians are arranged to offer health instructions and fitness assessment for high-risk employee. Comprehensive health management is implemented through electronization of the health management system and active health follow-up actions.



	Results	Actions
Occupational Disease Risk Management	39 employees subjected to Level-2 management 0 Occupational Disease Cases	For employees working in workplaces of special hazardous operations, the annual health examinations and onsite environmental measurements are conducted to control potential health risk factors; while providing health management measures, including appropriate personal health instruction, re-examination follow-up, and suitable labor allotment, to achieve early detection and immediate treatment, for reducing the risk of occupational diseases.
Prevention of Irregular Workload-Induced Diseases	4,347 employees assessed with irregular load 100% follow-upfor high-risk employees	The issue of employee overwork has been monitored continuously. Since 2014, high-risk employees have been screened out annually, and connected to the unit head for workload assessment; for which the onsite physician identifies the danger factors, to adjust their works, and complete the follow-up improvement tracking, to ensure that the concerned employees are physically and mentally healthy, and achieve work-life balance.
Irregularity Management of Health Examination	508 employees subjected to management with 100%follow-up	Establish a classification management mechanism for irregularities, and implement corresponding measures based the level of irregularity; 103 Level-5 employees subjected to follow-up and tracking, the ones with high irregularity, and a fitness assessment by physicians is arranged, with work adjustment suggestions; for 405 Level-4 employees with moderate irregularity, follow-up and tracking, or in-fab health consultancy is arranged. Through active care management, the improvement rate of abnormal health checkups in the following year reached 55%.
Cardiovascular Disease Prevention	4,707 employees analyzed for risks 100% follow-upfor high-risk employees	According to the statistics of the Ministry of Health and Welfare, cerebrovascular disease ranks among the top 10 causes of death in Taiwan. Multiple screening tools are used to analyze high-risk employees with cardiovascular disease to strengthen the health care system for employees. Physicians are arranged to offer health instructions and fitness assessments, conduct work adjustments, and take follow-up action.
Healthcare for Middle- aged and Elderly Workers	1,336 employees took ECG examination 1,369 employees assessed with work fitness questionnaire 21 employees passed the work fitness assessment	• Starting from 2008 onward, to ensure the safety and health of middle-aged and elderly workers in the fabs, a holistic ECG examination was conducted for employees over (and including) 45 years old, to screen for risks of heart disease. • In 2021, the "Work Fitness Assessment Process for the Middle-aged and the Elderly" was planned to conduct a "work fitness assessment" for middle-aged and elderly employees. The work fitness index level was analyzed, identifying those with low work fitness. A physician was arranged to make a fitness assessment. Measures such as providing medical information or referral to EAP were taken as needed to assist employees and ensure that the overall work fitness achieves the purpose of health protection for middle-aged and elderly employees. • According to the results of work fitness assessments, middle-aged and older employees have rated their own job abilities positively, with nearly 90% achieving a good or higher Work Fitness score
Reinstatement Evaluation for Work Injury	51 persons occupational injury care 4 employees' work adjusted	Reinstatement assessments are conducted in phases based on the severity of employees' injuries, through the onsite visiting of in-house labor health service physicians with occupational safety and health personnel and related departments, to provide the concerned employees with the job function evaluation, and consultations and suggestions of job redesign or adjustment, to encourage early reinstatement, for accelerating their recoveries, both physically and psychologically.
Respiratory Protection Equipment Evaluation	19 employees for physiological evaluation	Physiological evaluation and fit test are conducted for the employees' physiological condition and protection needs, to ensure the employees are capable of correctly using protective equipment and realize the effectiveness of protective gear to prevent injury.

Comfortable Workplace

Inspiring health awareness and improving autonomous health management

In order to ensure the physical and mental health of employees, we raise health awareness and plan a series of health promotion activities. Through the promotion of activities and health-related knowledge, we encourage employees to establish a healthy lifestyle, implement self-health management and practice, and improve their health awareness and cohesion.



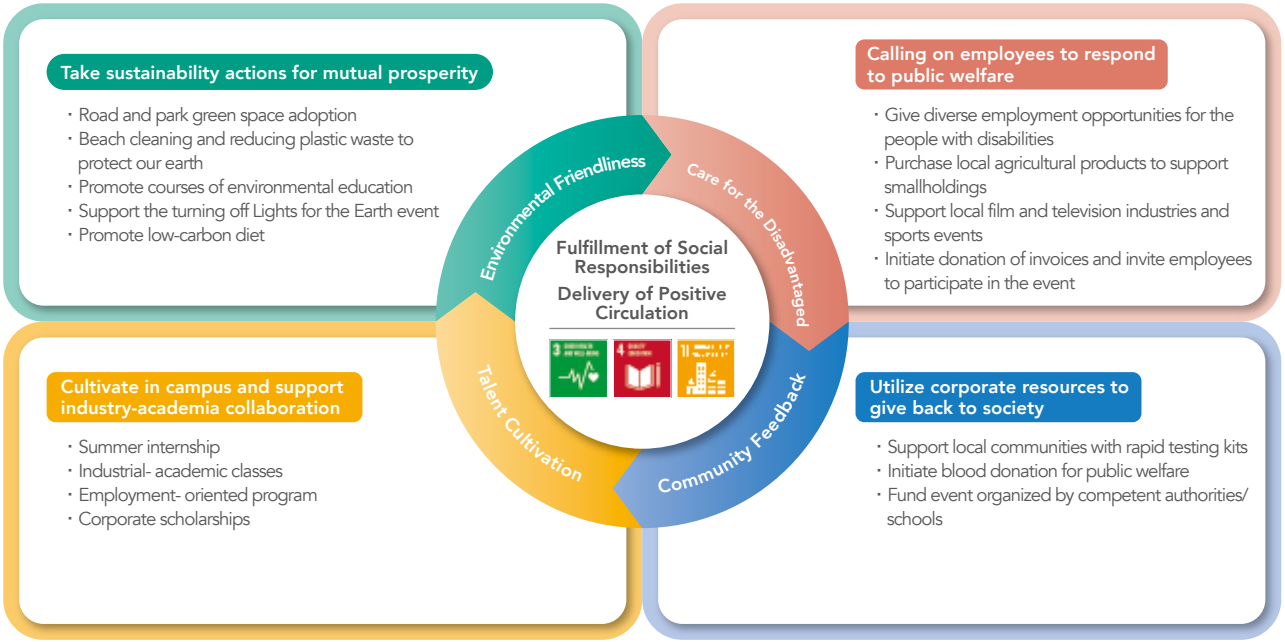
	Results	Actions
Inspire Health Awareness	**12** articles of healthy tips **289** employees participated in Q&A competition with prizes **116** employees participated in health seminars **9.8** points of satisfaction (out of 10 points)	• In 2023, we launched the "Strengthening Muscle and Bone Health Tips" based on the ranking of employees' health consultation. We also devised a "Q&A competition with prizes" activity to encourage employees to read books and improve their health awareness. • The Company continued to organize health lectures and invited "Dr. Jian-Guang Chen from Chang Gung Medical Hospital" and "Nutritionist, Meng-Fan Lu" to give on-site lectures on "Musculoskeletal Health, Keep Away from Sports Injuries" and "Eat Healthy and Nutritious Food to Reduce Your Weight and Keep Away From Metabolic Syndrome", so as to bolster employees' awareness of health and risk prevention.
Injury and Illness Management	**1,217** employees for nursing services **32** employees for care to disease/ unpaid leave	Implement the cares for injuries and illnesses, prescribe the caring mechanism for treatment of injuries and illnesses, as well as unpaid leave/ reinstatement due to injuries and illnesses along with the appointment of on-site medical personnel, unit heads, and HR department to jointly give assistance, provide resources, care for individual cases, provide appropriate health education, and give assistance continuously until the case is closed based on their circumstances. In the fabs, sufficient first-aid equipment are prepared, with automated External Defibrillator (AED) installed in each fab for emergencies of workers in the fabs, to treat immediately and reduce the risk of injury and illness.
Flu Vaccination	**263** employees vaccinated **Periodical** dissemination of epidemic prevention awareness.	Due to the prevalence of influenza in autumn and winter, we conducted influenza prevention awareness sessions earlier. Since 2010, we have organized an annual event to provide self-funded influenza vaccination in the fab to provide discounts for employees to encourage employees to vaccinate them. In recent years, employees' willingness to vaccinate them has demonstrated the effectiveness of health awareness promotion.
Pandemic Containment Management	**11** employees under management of notifiable infectious diseases	Following the loosening of COVID-19 restrictions, PREMIERE also relaxed its epidemic control measures. Still, we continue to grasp the infectious disease risk in the factory and establish an infectious disease tracking and management process to effectively control and maintain the factory operations and the health of all employees.
Employee Assistance Program	**723** employees promoted **6** employees counselled **6** articles of self-motivation	Since 2011, the "Employee Assistance Program (EAP)" has been promoted by working with external professional counseling institutions. Every employee is entitled to 3 free counseling sessions per year and 24-hour consultation services by phone. During new employee training, we promote and distribute EAP brochures and care cards to raise awareness. Our goal is to provide employees with professional resources to address various issues related to "work, family, marriage, interpersonal relationships, and mental well-being". This initiative aims to effectively prevent or solve problems that affect individual work performance, in the hope that employees can achieve a "work-life balance".
Health Clinics	**714** employees received health counseling advices	The presence of onsite physicians enables the provision of comprehensive health guidance, covering various aspects such as personal health management, managing abnormalities identified during physical/health examinations, and addressing issues related to excessive workloads. This dedicated approach ensures the holistic well-being of employees and effectively safeguards their health.
Health Promotion Label	**All Fabs** Have Obtained the Health Promotion Label	Since 2009, the Company has actively applied for the label every 3 years, with all fabs obtaining the autonomous certified health promotion labels; the Company is committed to the implementation of cigarette-free workplace and planned promotion of health promotion, to continuously create a healthy workplace.

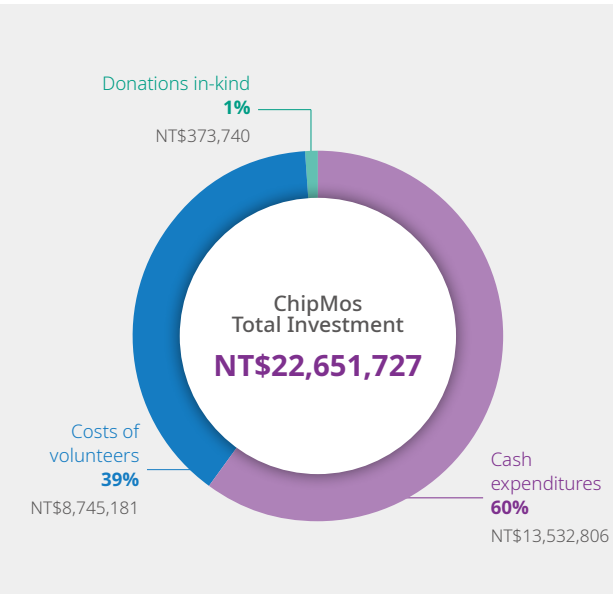
6.6 Social Engagement GRI 201-1 GRI 413-1

Social Engagement Investment Amount	NT$22,651,727
Volunteer Workers	22,352 people
Input hours	26,991 hours
Beneficiaries	1,722 people

ChipMOS has adhered to the Sustainable Development Goals (SDGs) adopted by the United Nations and focused specifically on 3 SDGs (SDG 3, SDG 4 and SDG 11) while referring to the "Corporate Community Investment Assessment Mechanism" developed by London Benchmark Group (LBG) for the management of expenditures such as time, costs, in-kind donations, and administrative expenses for social welfare contributions.

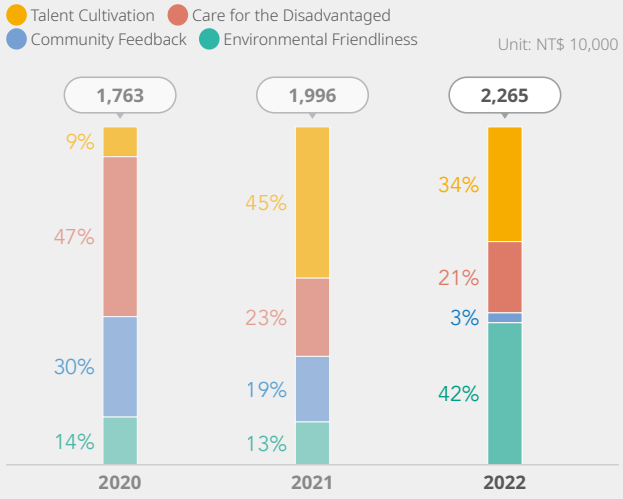
Under the 2 major visions of "Environmental Sustainability" and "Fulfillment of Public Welfare," ChipMOS has launched related activities under the 4 major public interests of "Environmental Friendliness," "Community Feedback," "Care for the Disadvantaged," and "Talent Cultivation." All the employees in our 2 locations in Hsinchu and Tainan, together with internal resources and corporate strength, jointly to launch public welfare activities and sustainability projects. In the future, we will continue to uphold the concept of sustainable management, exert a positive influence on society through our actions, fulfill our responsibility as a corporate sustainable citizen, create sustainable value, and spread love to every corner of the society. In 2023, through a series of public welfare activities and sustainability projects, we helped local communities/schools and disadvantaged groups by taking concrete actions to implement the concept of common good with society.



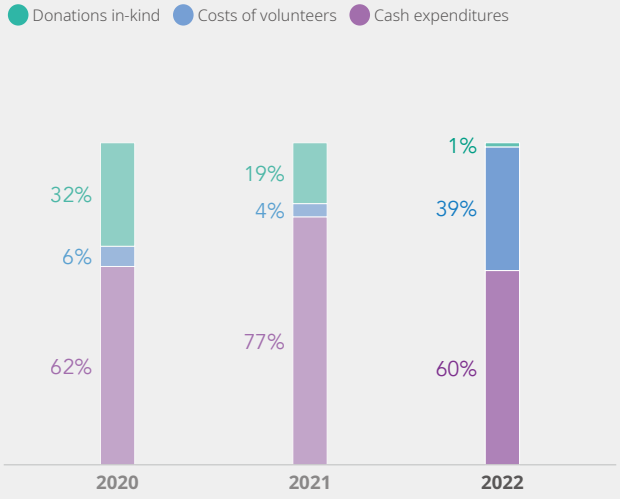


Note: Volunteer input cost is calculated based on the input time x the average salary (hourly rate) of non-managerial positions in ChipMOS of the current year, rather than the actual invested amount

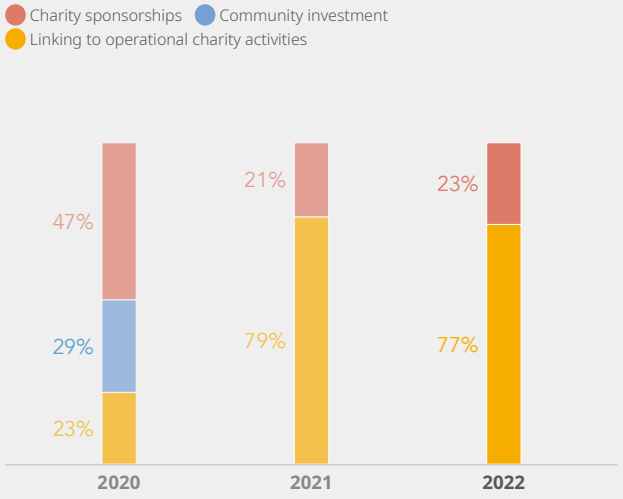
Public Welfare Development Aspect



Type of Investment



Application Aspect



Execution Benefits in 2023

Vision	Development Aspect	Projects	Corporate Benefits	Social Benefits
Environmental Sustainability	Environmental Friendliness	• Beach Cleaning, and Reducing Plastic Waste to Protect our Earth • Love the Earth, Begins with Caring for the Environment around us from Love What's around You • Promotion of Environmental Friendliness Education • Collaboration with Suppliers to Create a Friendly Environment. • Walk for Your Health, Carbon Reduction and Green Initiatives	• 11,671 Volunteers Attend in Total • Enhanced Corporate Image, with 1 Award • News Coverage, for 1 Article in Total	• 327 Direct Beneficiaries • 22 Beneficiary Organizations
	Community Feedback	• Support local communities with rapid testing kits • Spreading Love amid the Pandemic, Rolling up Sleeves for Public Welfare • Participated in [Sports in Southern Science Park] and [Christmas in Southern Science Park] • Sponsor the Government Event " 2024 Taiwan Lantern Festival in Tainan "	240 Volunteers Attended in Total	• 1,583,250 CC Accumulated for Blood Donation for 23 consecutive years • 57 Direct Beneficiaries in 2023 • 3 Beneficiary Organizations
Fulfillment of Public Welfare	Care for the Disadvantaged	• Constant Care for Children in Remote Area/People with Disabilities/Stray Animals • Diverse Employment Opportunities for the Physically Challenged • Support local film and television industries and sports events • Purchase local non-toxic agricultural products to support smallholdings • Call on Invoice Donations and Invite Employees for Public Welfare Activities	• 10,418 Volunteers Attended in Total • News Coverage, for1 Article in Total	• 854 Direct Beneficiaries • 12 Beneficiary Organizations
	Talent Cultivation	• Industrial-Academic Collaboration • Sponsor the " FRC Robot Competition, National Nanke International Experimental High School"	Cultivating Semiconductors Professionals	• Support 484 young students • 5 Beneficiary Organizations

Stakeholder's Feedback

Year 2023 **Project title** Support Local Team to Make the Basketball Dream of Children Come True

Coach Li-Fen Zeng, Hsinchu County Jianshi Junior High School

Thank you! ChipMOS TECHNOLOGIES INC.

Your kindness and predestination provide children from remote area with an opportunity to watch a professional basketball game in Taiwan up close. It provided the students, who practice their basketball skills and knowledge every day, with motivation and deepened their aspirations They also give these children who rarely leave the mountain living environment and opportunity to see and experience what "Corporate Family Day" is.

In the well-arranged on-site activities and various interesting booths, the children eager to share what they have seen, heard, and felt. The colorful and dazzling atmosphere of a professional basketball game was awe-inspiring experience to the children who have been practicing on the school's simple court, making them feel as if they were stepped into a wonderland. The competition, the goings-on, and the cheers and sighs of the fans on the sidelines moved the children's hearts up and down.

I am afraid that the children really shocked even more by the opportunity to step on the court during and after the game! Facing the same basket rim, the three-point line, and the same basketball court, the insignificance of the children was reflected in the bright and big arena and the dream to took root!

During this exciting trip, I would like to express my sincere appreciate to ChipMOS for giving the students of the Jianshi Junior High School basketball team such a rare opportunity. I am even more grateful to the staff on the front line to implement the plan. They showed their ability to solve problems of any kind and set an example for children to learn from. What they did is the most touching demonstration of corporate social responsibility.





Year 2023 **Project title** Fruit Adoption Program for Small Farmers

Suan Lian Pear Corporation

We would like to express our heartfelt gratitude to ChipMOS for their commitment to public welfare. By actively participating in the purchase of our agricultural products as a social enterprise, ChipMOS has not only supported the local farming community but also helped ensure smallholding's stable income. The company's involvement has significantly contributed to the expansion of eco-friendly farming practices. ChipMOS invested resources for the education in remote areas to improve local industrial economy and develop local education resources.

In Zhuolan Township, where resources are allocated unevenly, we express our heartfelt appreciation to ChipMOS for their tangible social actions in fulfilling corporate social responsibility and supporting the efforts of local teams. Their assistance has been instrumental in enhancing the number of local youth to our region and transforming the educational capabilities of small schools in remote areas.



Environmental Sustainability

In the face of the severe challenges brought by global climate change, ChipMOS has upheld the concept of symbiosis and co-prosperity with the environment and led all employees to implement green action plans based on "Environmental Friendliness" and "Community Feedback". It is hoped that through internal and external cooperation, resources can be invested to protect the surrounding environment, and we will support smallholdings and promote environmental education to contribute to the sustainable development of the earth, work together with employees to combat climate change and global warming in more diverse ways, and jointly become the guardians of environmental sustainability.



Environmental Friendliness

Targets in 2023	Results Achieved in 2023 (objective met)		Targets in 2024
✓ Continuous Implementation of Environmental Protection Programs ✓ 9 Promotional Events for Environmental Protection Awareness	Continuous Cultivation	➡ **Air Quality Purification in Zhubei, Hsinchu County:** in 2023, the Company Won the Award "Merit Award - Excellence Award" from the Ministry of Environment ➡ **Road cleaning in Zhubei, Hsinchu County:** adopted 2.8 kilometers in total ➡ **Hsinchu and Tainan Fabs:** adopted **2 pieces** of public green lands in the Science Parks ➡ **Adopted public restroom of Jiali Library in Tainan City**, **1 restroom** in total ➡ **Tainan City's coastal cleanup:** 150 colleagues and their family members joined forces to clean up 75 kilograms of trash. ➡ **We prompted all employees and 7 external organizations to participate in the Earth Hour 60+ event by turning off the lights and showing our love for the planet**	✓ Continuous Implementation of Environmental Protection Programs ✓ 9 Promotional Events for Environmental Protection Awareness
	Annual Events	➡ **Promote courses of environmental education:** 1. Children's Day Charity Box: Adopted a total of 171 Children's Day gifts, and gave lectures on environmental conservation to 3 elementary schools. 2. DIY activity for polar bear wool felt cup sleeves, promoted plastic reduction, environmental protection and love the earth. 3. Called on employees to participate in the climate change drawing competition to advocate sustainable development of the environment. 4. Organized half-day farm tours to support the conservation of local farms. 5. A total of 4 environmental education courses were held at the elementary schools in remote areas of Tainan. 6. Held 8 farmers' markets 7. Implemented a monthly no-meat day to promote a low-carbon diet. 8. Walk for Your Health, carbon reduction and green initiatives 9. Worked with employees to support friendly cultivation of crops and protect the land of Taiwan.	

[Environmental Protection] Actions of Focus

Zhubei Air Quality Purification Area in Hsinchu County

Adoption over 10 years
Recognized by the Ministry of Environment for Outstanding Achievement and by the Environmental Protection Administration as an outstanding adoption company

- Improve air quality and neighborhood living environment
- Create green and friendly resting space
- Invest a total of **NT$10,531,166** over the 10-year period
- A total area of **3.9** hectares maintained

Continue with plant care and maintenance, as well as setting up explanatory signs for the plants, adding more educational value to the air quality area, thereby attracting more people to rest, experience, and learn.

Road Adoption Program in Zhubei, Hsinchu County

Adoption over 10 years

- Reduce dust pollution from vehicles and improve the overall road cleanliness
- Improve living environment and air quality
- Invest a total of **NT$834,567** over the 10-year period
- A total area of **2.8** hectares maintained

Through the weekly cleaning activity, we hope to provide nearby residents with a clean, high-quality living space.

Adoption of Tainan Public Restroom

Adoption over 6 years

- Support the "Public Restroom Adoption Program" of the Environmental Protection Administration, Executive Yuan, and continue to maintain the public restroom in the library of Jiali District, Tainan City.
- Provide free toilet paper, hand sanitizer, disinfectant, cleaning tools and other consumables
- Accumulated investment cost of **NT$256,251**

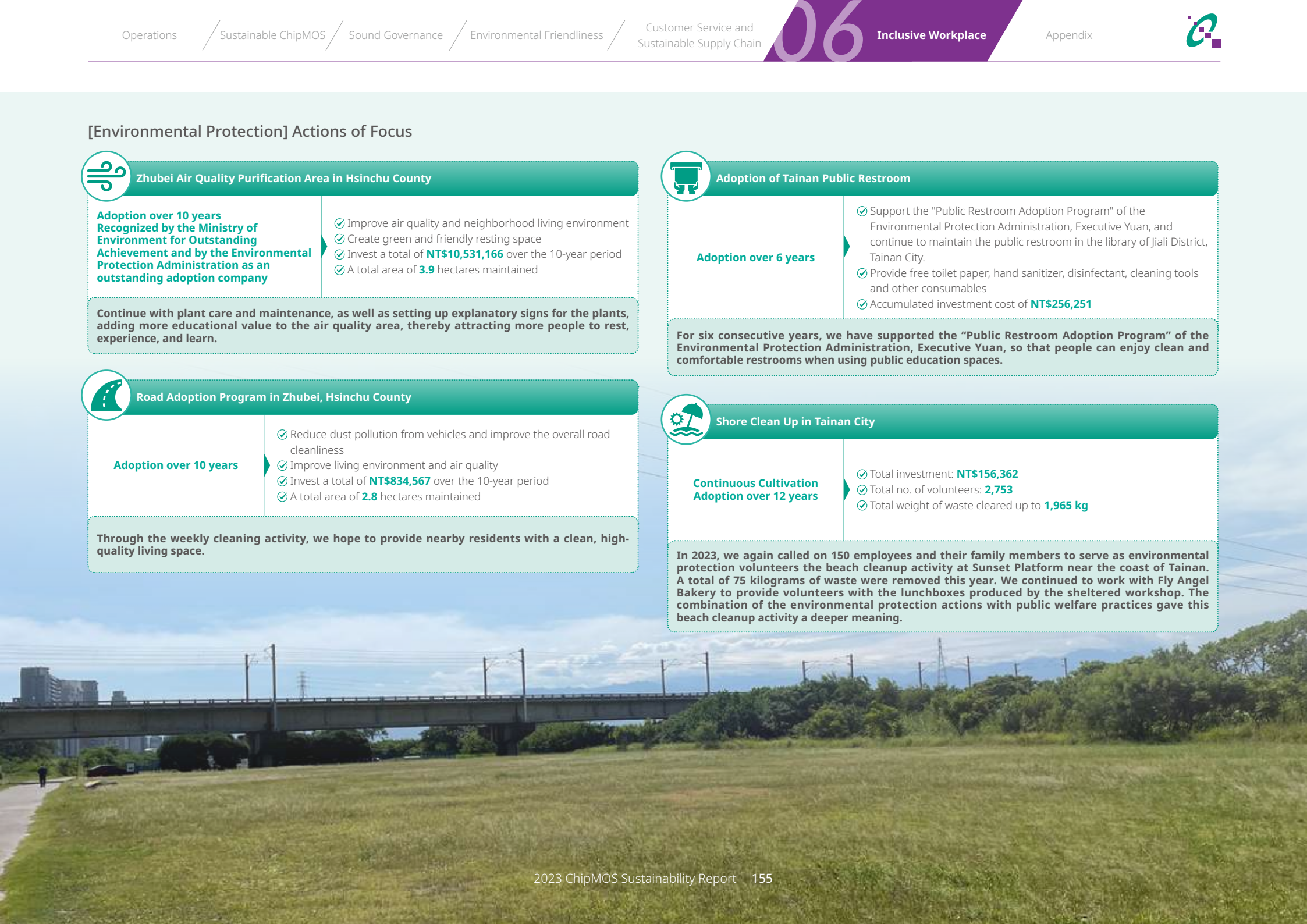
For six consecutive years, we have supported the "Public Restroom Adoption Program" of the Environmental Protection Administration, Executive Yuan, so that people can enjoy clean and comfortable restrooms when using public education spaces.

Shore Clean Up in Tainan City

Continuous Cultivation
Adoption over 12 years

- Total investment: **NT$156,362**
- Total no. of volunteers: **2,753**
- Total weight of waste cleared up to **1,965 kg**

In 2023, we again called on 150 employees and their family members to serve as environmental protection volunteers the beach cleanup activity at Sunset Platform near the coast of Tainan. A total of 75 kilograms of waste were removed this year. We continued to work with Fly Angel Bakery to provide volunteers with the lunchboxes produced by the sheltered workshop. The combination of the environmental protection actions with public welfare practices gave this beach cleanup activity a deeper meaning.



Action for Energy Saving and Carbon Reduction

Earth Hour 60+ Turning off Lights for the Earth

Targets: All the employees, 4 suppliers, and 3 schools in remote townships

We led all our employees to turn off unnecessary power supply equipment. This year, we invited 4 suppliers and 3 elementary schools in remote townships of Hsinchu to join our efforts in supporting the Earth Initiative. Looking forward to 2024, we will continue to exert our influence on society and invite more stakeholders to promote the awareness of energy saving and carbon reduction.

Walk for Your Health, Carbon Reduction and Green Initiatives

Targets: All the employees

Combine the health promotion activities with carbon reduction issues, and invite all the employees to support the green action for carbon reduction by launching the three-month activity of "Walk for Your Health to Get Younger". The Company promoted walking as an alternative to transportation. During the activity, a total of 174,693,032 steps (about 122,285 kilometers) were achieved and 24.8 tons of carbon emissions were reduced.

Note: With reference to the carbon emission calculation method provided by the Ministry of Health and Welfare, the calculation is based on the reduction of 1.42 kg of carbon emissions for every 10,000 steps.

Actions for Environmental Education

Climate Change Painting Competition

Targets: 26 employees and their family members

A total of 26 employees and their children were invited to participate in the climate change drawing competition held by the TCSA Taiwan Institute of Sustainable Energy, hoping to educate children about the importance of environmental protection and the impact of global warming on the earth through art.

Environmental Education Activity in Remote Township

Targets: Disadvantaged children at 4 remote elementary schools in Tainan

2023 Outcomes:
- Invested amount: **NT$20,884**
- Participation time: **270** minutes
- No. of volunteers: **35**
- No. of benefitted children: **138**

Tainan fab. actively responded to the environmental education activity for elementary schools in remote areas promoted by the Southern Taiwan Science Park Administration. A total of 138 students participated in the activity. Important concepts of environmental sustainability were introduced to the children and they were guided to cherish the earth and implement environmental protection.

Children's Day Wishes Adoption Event

Targets: Disadvantaged children at remote elementary schools in Hsinchu

Results over 2 years Outcomes:
- Total investment: **NT$122,982**
- Total no. of volunteers: **317**
- Total benefitted children: **317**

The Hsinchu fab once again combined the Children's Day activity with the World Earth Day in April to continue the packaging of gifts with reusable materials. Volunteers from ChipMOS were responsible for delivering 171 Children's Day gifts to 3 elementary schools in Wufeng Township, Hsinchu County and promoting environmental education. We hope that the children can learn the concepts of environmental protection and cherish the earth through the activities to make this festival more meaningful.





Further Reading:
Southern Taiwan Science Park Newsletter Issue 302 - The Creativity of the Enterprises in the Park - Environmental Education Takes Root From the Early Stage
https://www.stsp.gov.tw/attached/Letter/Ebook/302/mobile/index.html#p=7

Actions for Environmental Support

DIY Activity for Polar Bear Wool Felt Cup Sleeves

2023 Outcomes

- Invested amount: **NT$52,132**
- No. of volunteers: **100**

We collaborated with professional studios to make eco-friendly cup sleeves with the feathers of humanely raised sheep and give environmental conservation lectures, helping employees to understand more about the challenges to the earth while enjoying the handicraft DIY activity. The studio we collaborated with this time allocated 5% of the income for promotion of environmental education to enhance the benefits of the activity in the hope to make the earth a better place.

Support Local Initiatives and Organize Farmers' Markets

In-depth effort for 6 years Accumulated accomplishments

- Total investment: **NT$146,206**

Since 2017, we have worked with local farmers in Tainan to set up stalls in the factory and invited employees to respond to public welfare actions. The total investment over the past 6 years has reached to NT$146,206. ChipMOS offers a platform for charitable organizations to show their achievements, while helping employees to gain a deeper understanding of these organizations and show their support for them.

Embrace the Earth, Enjoy the Jaunt

2023 Outcomes

- Invested amount: **NT$60,052**
- No. of volunteers: **97**

On the half-day tour organized by the Hsinchu fab, employees and their families were taken to Dadi Farm in Emei, Hsinchu County, to experience the beauty of ecology. They learned about different creatures and plants during the guide tour that the farm owner provided and thereby advocated the concept of cherishing the ecology.

Promote Low-carbon Diet

In-depth effort for 6 years Accumulated accomplishments

- Total no. of volunteers: **27,300**
- Volume of carbon reduced: **122** tons[Note 1]

Since 2017, ChipMOS has worked with canteen suppliers to introduce CAS organic vegetables into the Company's meals with guaranteed production and sales resumes. The Company provides a CAS Organic Vegetable Day and a Meatless Day every month. A total of 27,300 employees have participated in the activity in the past 6 years, reducing 122 tons of carbon emissions. We will continue to implement the low-carbon diet plan to implement the new concept of healthy diet with our employees.

Note: With reference to the carbon emission calculation method provided by the Ministry of Health and Welfare, the calculation is based on the generation of 36.4 kg carbon emissions for 1kg of meat produced.



Support local Farmers, Protect our Land, and Safeguard Taiwan

Targets	Local farmers in Hsinchu, Miaoli and Tainan
2023 Outcomes	✓ Invested amount: **NT$282,343** ✓ No. of volunteers: **587** ✓ No. of beneficiaries: **11**

Hsinchu fab.

A total of 400 employees purchased a total of 3,156 May peaches and 292 tkg of cherry tomatoes, and donated 36 May peaches and 6 tkg of cherry tomatoes to Hsinchu Ren-ai Children's Home, so that the children can eat fresh, locally toxic-free agricultural products.

- **Purchase May peaches in Jianshi Township, Hsinchu Country**
  The Company collaborated with the Maliguang tribe in Jianshih Township, Hsinchu County, to purchase the may peaches as a specialty of Jianshih Township, providing the indigenous women with the opportunity to support themselves, and contributed part of the proceeds to the tribe to set up the "Tribal Humanity Care Fund" for support of the tribe's sustainable development.
- **Purchase the cherry tomato in Zhuolan Township, Miaoli Country**
  We have collaborated with the Suan Lian Pear Corporation for 3 years to protect the income of disadvantaged industries through the fruit purchasing. At the same time, part of the proceeds is contributed to local elementary schools in Zhuolan to support the education of children in remote townships and build a pro-social cycle for the local area.

Tainan fab.

- **Purchase the pomelo in Madou District, Tainan City, to support friendly farming and protect pristine land**
  The Company collaborated with 5012 Pomelo Orchard and enabled 162 employees to purchase 750 pomelos. We also planned food and agricultural education activities. A total of 53 employees and their family members participated in the fruit picking experience event at the farm. Through demonstration and explanation by local farmers, the concept of food and agricultural education was promoted to support friendly farming. A total of 30 boxes of Madou pomelos were donated to Taiwan Fund for Children and Families, Northern Tainan Branch, for sharing with disadvantaged groups.

Community Feedback

Targets in 2023	Results Achieved in 2023 (target not met) Note 1	Targets in 2024
✓ The total number of social engagement volunteers increased by 5% comparing to the Base Year, 2018	**Continuous Cultivation** ➡ **Activity Donate Blood:** In 2023, we collected 340 bags of blood. Since 2001, we have accumulated a total of 6,333 bags of blood ➡ **Donation of COVID-19 rapid antigen tests to help the disadvantaged:** A total of 1,014 doses were donated in 2023 to protect the health of the physically and mentally disabled. **Annual Events** ➡ **Support the activity of [Sports in Tainan Science Park]: NT$29,986 was donated** ➡ **A total of NT$53,000 was donated for the [Christmas in Tainan Science Park] decoration activity.** ➡ **A total of NTD 250,000 was donated to support the "2024 Taiwan Lantern Festival in Tainan"**	✓ **1. 1,500 people were directly benefited from social engagement** ✓ **A total of 203,000 volunteers will participate in social engagement by 2025**

Note 1: Various public welfare activities were launched in 2023 when the epidemic situation stabilized. The number of volunteers increased by 2.6 times compared to last year. However, due to the changes in the work and life style of the employees, the number of employees participating in the massage services for the visually impaired and the public welfare cafe decreased. As a result, the expected growth rate could not be achieved.



Highlighted Actions for Community Feedback

Spreading Love amid the Pandemic, Rolling up Sleeves for Public Welfare - charity rapid screening kit/blood donation

Targets	Individuals with disabilities/community residents
Achievements in 2023	✓ Invested amount: **NT$212,940** Note 1 ✓ No. of volunteers: **229** ✓ No. of beneficiaries: **57**

➡ **Helping the disadvantaged with COVID-19 rapid antigen tests**
AS a donation of 1,014 COVID-19 rapid antigen tests to Shihguang's Home. ChipMOS took concrete actions to protect the health of people with disabilities.

➡ **Donate blood and extend your love**
Since 2001, we have made blood donations for 23 consecutive years and 4,578 employees have donated their blood to collect a total of 6,333 blood bags and benefit more people in need.

Note 1: The amount is calculated based on the cost of rapid screening kit purchased

Promoting neighborliness

Targets	Neighbors in the community/competent authority
Achievements in 2023	✓ Invested amount: **NT$332,986**

➡ **2023 Sports in Tainan Science Park**
In support of the "Sports in Tainan Science Park", a walk for the health event held by Tainan Science Park Administration, we set up a relay station to encourage the community and our employees to make good use of the sports facilities in the Tainan Science Park to promote the health of the employees and the public, and demonstrate the dynamic image of the Science Park.

➡ **2023 Christmas in Tainan Science Park**
In addition to maintaining good interactions with the community and neighborhood, we have supported the "Christmas in Tainan Science Park" event of the Tainan Science Park Administration by collaborating with other companies to plan Christmas decorations in the Science Park, in the hope to improve the quality of life and work in the Science Park through beautification of the working environment.

➡ **Support traditional lantern arts events in Taiwan - Sponsoring the "2024 Taiwan Lantern Festival in Tainan"**
In addition to investing resources for support of cultural and art events, we worked with Tainan Science Park Administration to inject sustainable energy to Tainan through the Taiwan Lantern Festival. We donated NT$250,000 to support the local history, culture, and traditional lantern arts of Tainan, thereby promoting arts and cultural innovation and development, promoting the vigorous development of the community, and jointly creating social value.

Fulfillment of Public Welfare

With active involvement in the issues of "Care for the Disadvantaged" and "Cultivation of Young Talents", ChipMOS has continued to work with local communities, schools and social welfare organizations to plan a series of charitable projects and activities. We have gathered the efforts of our employees to support charities and spread love to the society. We continue to support local cultural industries and sports events to promote sustainable development of culture and inject positive energy into the society. We hope to realize the spirit of corporate social citizenship and implement the concept of common good in the society through the power of the enterprise.



Care for the Disadvantaged

Targets in 2023	Results Achieved in 2023 (objective met)		Targets in 2024
✓ 9 Events of Continuous Welfare Fulfillment	Continuous Cultivation	**Christmas Adoption Program:** In the past 9 years, a total of 2,326 children's wishes have been fulfilled **Public welfare coffee program:** total income in 2023 was NT$40,000, and 1 rural elementary school was benefitted. **Uninterrupted incomes for visually impaired massagist during pandemic period:** 20 visually impaired massagist were benefitted in 2023. We invested total of NT$3,194,699	✓ 9 Events of Continuous Welfare Fulfillment
	Annual Events	**Supported the arts and cultural industries and local professional teams with 3 events, benefiting 4 social welfare organizations and rural schools.** **Integrated with the " Local Toxic-Free Products" campaign to further support disadvantaged groups.** 1. [Purchase May Peaches in Jianshi Township, Hsinchu] Supported the development of indigenous women, and contributed part of the proceeds to the tribe to set up the "Tribal Humanity Care Fund" 2. [Purchase the cherry tomato in Zhuolan Township, Miaoli Country] Ensured that the price is in line with market conditions and protect the income of the disadvantaged industry. Part of the proceeds were contributed to local primary schools in Zhuolan to support the education of children in rural areas. 3. [Purchase Tainan Madou Pomelo] A total of 30 boxes of Madou pomelo was donated to Taiwan Fund for Children and Families, Northern Tainan Branch, for the Moon Festival. **Charitable adoptions** 1. We spent a total of NT 69,410 on the desk calendar to support the Chensenmei Social Welfare Foundation. 2. Supported the charity sale of the "Heart of Taiwan Animal Care Association. Amount of money raised: NT$57,587 **Subsidized 1 disadvantaged by collecting 2,075 invoices, supported the charity sale and raised a total of NT$29,860.**	

Highlighted Actions for Cares to Underprivileged

Sending Love to Remote Areas

Targets	Underprivileged rural children in Hsinchu/Tainan
In-depth effort for 9 years Accumulated accomplishments	✓ Total investment: **NT$1,007,933** ✓ Total voluntary service hours: **1,402** ✓ No. of beneficiaries: **2,326**

ChipMOS has been concerned about the needs of school children in remote townships for many years. Since 2015, we have collaborated with local social welfare organizations and elementary schools in Hsinchu and Tainan to collect Christmas wishes from disadvantaged children. The Hsinchu factory mainly invests resources in rural primary schools and local social welfare groups. In Tainan area, 24 elementary schools in 16 administrative districts of Tainan were benefited. The wishes of 2,326 children have been fulfilled over the past 9 consecutive years.

The Donation of Charity Coffee Program

Targets	Rural townships/underprivileged children
In-depth effort for 8 years Accumulated accomplishments	✓ Total investment: **NT$678,653** ✓ No. of volunteers: **58,820** ✓ No. of beneficiaries: **394**

We have launched the public welfare coffee program for 8 years since 2016. We set up coffee machines in the office and invite employees to spend NT$10 to buy a cup of charity coffee. By accumulating the strength, we spread love to remote townships and help more disadvantaged children. In 2023, we continued to help a school in a rural area (Xiuluan Elementary School in Jianshi Township, Hsinchu County). After understanding the school's situation and needs, we used the profit of NT$40,000 from the charity coffee program in Hsinchu fab to purchase an interactive electronic whiteboard for the school children to create a better learning environment.



Support of Arts and Cultural Industries/ Local Professional Basketball Team x ChipMOS Film Festival and Family Day x Carbon Reduction, and Public Welfare

Targets	Underprivileged children in Hsinchu/Tainan
Achievements in 2023	✓ Invested amount: **NT$116,726** ✓ No. of volunteers: **392** ✓ Number of beneficiaries: **109**

2023 ChipMOS Film Festival

During the summer, ChipMOS organized the film festival for disadvantaged children from the " I-Link Community Services Association" and "Hsinchu Children's Home" in Hsinchu and the “Children Welfare Service Center” of Tainan to join the event. The stationery gifts and lunch boxes were given to the children. We spread love to more people in need in different forms. In the future, we will evaluate various ways and invest funds to support local arts and cultural industries in Taiwan.

In addition, the ChipMOS Film Festival continue to practice the concept of environmental protection. We encourage employees to use their own reusable bags and cup covers to reduce the consumption of disposable plastic bags; we also collect employees' actively feedback from the electronic questionnaires and are committed to implementing green actions in the daily lifes.

2023 FUN Family Day at ChipMOS

In 2023, we held the ChipMOS Family Day to support Hsinchu Lioneers, a local professional basketball team in Hsinchu. In response to the government's environmental protection and plastic reduction policy, we encourage employees to use their own tableware. We also provide reusable tableware and the Family Day gifts for employee are made of environmentally friendly materials. In addition, the students of the Jianshi Junior High School basketball team were invited to participate in the event to encouraged them to develop sportsmanship and a positive attitude of perseverance.

2023 Charity Sale Series Events

Targets	People with disabilities and stray animals
Achievements in 2023	✓ Invested amount: **NT$126,997** ✓ No. of volunteers: **693**

Public welfare desk calendar purchase activity

First collaboration with Chensenmei Social Welfare Foundation, we launch the activity to encourage employees to buy ChipMOS co-branded public welfare desk calendar, and 631 desk calendars totaling NT$69,410 were purchased. The income is used for the Foundation's operations to provide diverse services for more people with disabilities, comprehensively take care of the life of disadvantaged groups, and create a well-being world for people with mental disabilities.

Charity spring festival couplets and red envelopes adoption

ChipMOS has been concerned about the issue of stray dogs and cats for a long time. This year, we collaborated with the Heart of Taiwan Animal Care again to purchase charity commodities and raise NT$57,587 to promote the sterilization of stray animals in Taiwan and ensure compliance with animal protection laws and regulations. People should address the issue of stray animals from the source of the problem and make Taiwan an animal-friendly society.

Cultivation of Young Talents

Targets in 2023	Results Achieved in 2023 (objective met)	Targets in 2024
✓ 9 Events of Continuous Welfare Fulfillment	Continuous Cultivation ➡ NT$7,505,500 was invested in cultivating 434 students in 2023 ➡ NT$ 100,000 was donated to the FRC Robot Competition, National Nanke International Experimental High School	✓ Retention rate of Interns 40%-50%



Highlighted Actions for Cultivation of Young Talent

Cultivation in Campus and Training of Talents

Targets	College students
In-depth effort for 11 years Accumulated accomplishments	✓ Total investment: **NT$33,646,500** ✓ Total benefited students: **1,771**

Through summer internships and industry-academia programs, ChipMOS continues to assist young students to advance their career plans and align with the industry. In addition, an internship retention mechanism is in place to help young people seamlessly connect to the workplace with "employment upon graduation". In addition, we provide corporate internship awards. Substantial assistance is provided to disadvantaged students to reduce the financial burden of disadvantaged families. We have taken root on campus and closely created the relationship between enterprises and campuses. We have invested more than NT$30 million, and 1,771 students have been benefited so far. We hope to cultivate semiconductor packaging and testing professionals through courses, lectures, internships, and employment.

*For more details, please refer to Chapter 6.1.4 Cultivation in Campus and Recruitment for Young Students

Support Students to Bravely Pursue Their Dreams - Sponsored National Nanke International Experimental High School to participate in the 2023 FIRST Robotics Competition (FRC)

Targets	National Nanke International Experimental High School FRC team
Achievements in 2023	✓ Invested amount: **NT$100,000**

We have extended our program from universities to high school campus for inspiring outstanding young students in Taiwan to apply what they have learned for diversified development and encouraging them to bravely pursue their dreams. In 2023, we donated NT$100,000 the FRC6998 team and supported them go to the United States to participate in the FIRST Robotics Competition. The team won 3 major awards for Taiwan. We supported the students in fulfilling their dreams and encouraged students to develop the spirit of teamwork, the ability to execute projects and the spirit of innovative challenges to develop their careers in multiple ways.

Appendix 1: Index of GRI Standards

Statement of Use | ChipMOS has reported the contents for the period from January 1, 2023 to December 31, 2023 in accordance with the GRI Standards | **GRI 1 Used** | GRI 1: Foundation 2021 | **Applicable GRI industry Standards** | None

GRI Standards	Disclosure		Chapter/Explanation	Page
GRI 2 General Disclosures 2021	2-1	Organizational details	About This Report 1.1 About ChipMOS	3 16
	2-2	Entities included in the organization's sustainability reporting	About This Report	3
	2-3	Reporting period, frequency and contact point	About This Report	3
	2-4	Restatements of information	About This Report	3
	2-5	External assurance	About This Report Appendix 7	3 171
	2-6	Activities, value chain and other business relationships	1.2 Main Products and Services 5.3 Supply Chain Management	16 103
	2-7	Employees	6.1 Attraction and Retention of Talents	114
	2-8	Workers who are not employees	6.5 Healthy and Safe Workplace	138
	★ 2-9	Governance structure and composition	3.1 Corporate Governance	44
	2-10	Nomination and selection of the highest governance body	3.1 Corporate Governance	44
	2-11	Chair of the highest governance body	3.1 Corporate Governance	44
	2-12	Role of the highest governance body in overseeing the management of impacts	3.1 Corporate Governance	44
	2-13	Delegation of responsibility for managing impacts	2.1 Sustainability Policies and Actions	27
	2-14	Role of the highest governance body in sustainability reporting	2.1 Sustainability Policies and Actions 3.1 Corporate Governance	27 44
	2-15	Conflicts of interest	3.1 Corporate Governance	44
	2-16	Communication of critical concerns	2.1 Sustainability Policies and Actions 3.1 Corporate Governance	27 44
	2-17	Collective knowledge of the highest governance body	3.1 Corporate Governance	44
	2-18	Evaluation of the performance of the highest governance body	3.1 Corporate Governance	44
	2-19	Remuneration policies	3.1 Corporate Governance	44
	2-20	Process to determine remuneration	3.1 Corporate Governance	44
	2-21	Annual total compensation ratio	Omission Reason: Confidentiality constraints. It is the confidentiality of the individual's remuneration. We will continue to evaluate information disclosure andthe trends in the corporate governance.	-
	2-22	Statement on sustainable development strategy	Message from the Chairman 2.1 Sustainability Policies and Actions	4 27
	2-23	Policy commitments	3.3 Risk Management 4.1 Climate Governance 6.4 Safeguarding Human Rights	51 63 134
	2-24	Embedding policy commitments	3.3 Risk Management 4.1 Climate Governance 6.4 Safeguarding Human Rights	51 63 134
	2-25	Processes to remediate negative impacts	3.2 Ethical Management 6.4 Safeguarding Human Rights	50 134
	2-26	Mechanisms for seeking advice and raising concerns	3.2 Ethical Management 6.4 Safeguarding Human Rights	50 134
	2-27	Compliance with laws and regulations	3.2 Ethical Management	50
	2-28	Membership associations	1.4 External Initiatives and Organizational Engagement	24
	2-29	Approach to stakeholder engagement	2.2 Materiality Analysis	30
	2-30	Collective bargaining agreements	6.4 Safeguarding Human Rights	134
GRI 3 Material Topics 2021	3-1	Process to determine material topics	2.2 Materiality Analysis	30
	3-2	List of material topics	2.2 Materiality Analysis	30
	3-3	Management of material topics	2.2 Materiality Analysis	30

Notes: ★ ChipMOS Material Topics, * is the management approach of the topic

GRI Standards	Disclosure		Chapter/Explanation	Page
GRI 200: Economic Disclosures				
★ GRI 201 Economic Performance 2016	201-1	Direct economic value generated and distributed	1.3 Operational Performance and Tax Governance 6.6 Social Engagement	21 151
	201-3	Defined benefit plan obligations and other retirement plans	1.3 Operational Performance and Tax Governance 6.2 Employee Incentives and Benefits	21 121
GRI 202 Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	6.1 Attraction and Retention of Talents	114
	202-2	Proportion of senior management hired from the local community	6.1 Attraction and Retention of Talents	114
GRI 204 Procurement Practices 2016	204-1	Proportion of spending on local suppliers	5.3 Supply Chain Management	103
★ GRI 205 Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	3.2 Ethical Management	50
	205-2	Communication and training about anti-corruption policies and procedures	3.2 Ethical Management	50
	205-3	Confirmed incidents of corruption and actions taken	3.2 Ethical Management	50
★ GRI 206 Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	3.2 Ethical Management	50
GRI 207: Tax 2019	207-1	Approach to tax	1.3.2 Tax Governance	23
	207-2	Tax governance, control, and risk management	1.3.2 Tax Governance	23
	207-3	Stakeholder engagement and management of concerns related to tax	1.3.2 Tax Governance	23
GRI 300: Environmental Disclosures				
★ GRI 301 Materials 2016	301-1	Materials used by weight or volume	4.5 Recycling	87
	301-3	Reclaimed products and their packaging materials	4.5 Recycling	87

GRI Standards	Disclosure		Chapter/Explanation	Page
★ GRI 302 Energy 2016	302-1	Energy consumption within the organization	4.2.4 Energy Management and Efficiency	73
	302-3	Energy intensity	4.2.4 Energy Management and Efficiency	73
	302-4	Reduction of energy consumption	4.2.4 Energy Management and Efficiency	73
★ GRI 303 Water and Effluents 2018	303-1*	Mutual influences of shared water resources	4.4 Water Resources Management	80
	303-2*	Management of discharge-related impacts	4.4 Water Resources Management	80
	303-3	Water withdrawal	4.4 Water Resources Management	80
	303-4	Water discharge	4.4 Water Resources Management	80
	303-5	Water consumption	4.4 Water Resources Management	80
GRI 305 Emissions 2016	305-1	Direct (Scope 1) GHG emissions	4.2 Climate Change and Energy Management	67
	305-2	Energy indirect (Scope 2) GHG emissions	4.2 Climate Change and Energy Management	67
	305-4	GHG emissions intensity	4.2 Climate Change and Energy Management	67
	305-5	Reduction of GHG emissions	4.2 Climate Change and Energy Management	67
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	4.2 Climate Change and Energy Management	67
★ GRI 306 Waste 2020	306-1*	Waste generation and significant waste-related impacts	4.5 Recycling	87
	306-2*	Management of significant waste-related impacts	4.5 Recycling	87
	306-3	Waste generated	4.5 Recycling	87
	306-4	Waste diverted from disposal	4.5 Recycling	87
	306-5	Waste directed to disposal	4.5 Recycling	87
GRI 308 Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	5.3 Supply Chain Management	103
	308-2	Negative environmental impacts in the supply chain and actions taken	5.3 Supply Chain Management	103

GRI Standards	Disclosure		Chapter/Explanation	Page
GRI 400: Social Disclosures				
GRI 401 Employment 2016	401-1	New employees hire and employee turnover	6.1 Attraction and Retention of Talents	114
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	6.2 Employee Incentives and Benefits	121
	401-3	Parental leave	6.2 Employee Incentives and Benefits	121
GRI 402 Labor/ Management Relations 2016	402-1	Minimum notice periods regarding operational changes	6.4 Safeguarding Human Rights	134
★ GRI 403 Occupational Health and Safety 2018	403-1*	Occupational health and safety management system	6.5 Healthy and Safe Workplace	138
	403-2*	Hazard identification, risk assessment, and incident investigation	6.5 Healthy and Safe Workplace	138
	403-3*	Occupational health services	6.5 Healthy and Safe Workplace	138
	403-4*	Worker participation, consultation, and communication on occupational health and safety	6.5 Healthy and Safe Workplace	138
	403-5*	Worker training on occupational health and safety	6.5 Healthy and Safe Workplace	138
	403-6*	Promotion of worker health	6.5 Healthy and Safe Workplace	138
	403-7*	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	6.5 Healthy and Safe Workplace	138
	403-8	Workers covered by an occupational health and safety management system	6.5 Healthy and Safe Workplace	138
	403-9	Work-related injuries	6.5 Healthy and Safe Workplace	138
	403-10	Work-related ill health	6.5 Healthy and Safe Workplace	138
★ GRI 404 Training and Education 2016	404-1	Average hours of training per year per employee	6.3 Talent Development	129
	404-3	Percentage of employees receiving regular performance and career development reviews	6.3 Talent Development	129

GRI Standards	Disclosure		Chapter/Explanation	Page
GRI 405 Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	3.1 Corporate Governance 6.1 Attraction and Retention of Talents	44 114
	405-2	Ratio of basic salary and remuneration of women to men	6.2 Employee Incentives and Benefits	121
GRI 406 Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	6.4 Safeguarding Human Rights	134
GRI 408 Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	6.4 Safeguarding Human Rights	134
GRI 409 Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	6.4 Safeguarding Human Rights	134
GRI 413 Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	6.6 Social Engagement	151
GRI 414 Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	5.3 Supply Chain Management	103
	414-2	Negative social impacts in the supply chain and actions taken	5.3 Supply Chain Management	103
★ GRI 416 Customer Health and Safety 2016	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	There is no health and safety violation for ChipMOS products and services in 2023.	-
★ GRI 417 Marketing and Labeling 2016	417-2	Incidents of non-compliance concerning product and service information and labeling	There is no information and labeling violation for ChipMOS products and services in 2023.	-
	417-3	Incidents of non-compliance concerning marketing communications	ChipMOS did not violate marketing-related regulations in 2023.	-
GRI 418 Customer Privacy 2016	418-1	Substantiated complaints regarding concerning breaches of customer privacy and losses of customer data	3.4 Information Security Management 5.1 Customer Service	55 98

Appendix 2: SASB Standards Index _ Semiconductors

Topic	Code	Unit	Accounting Metric	Chapter/Explanation	Page
Greenhouse Gas Emissions	TC-SC-110a.1	Tonnes CO_2e	1. Gross global Scope 1 emissions 2. Total emissions from perfluorinated compounds	4.2.3 Greenhouse Gas Check	70
	TC-SC-110a.2	-	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	4.2.3 Greenhouse Gas Check	70
Energy Management in Manufacturing	TC-SC-130a.1	Gigajoules; %	1. Total energy consumed 2. Percentage grid electricity 3. Percentage renewable	4.2.4 Energy Management and Efficiency	73
Water Management	TC-SC-140a.1	M^3; %	1. Total water withdrawn 2. Total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	ChipMOS all fabs are not located in high or extremely high baseline water stress	-
Waste Management	TC-SC-150a.1	Ton; %	Amount of hazardous waste from manufacturing, percentage recycled	4.5.3 Proper Disposal of Wastes	89
Employee Health & Safety	TC-SC-320a.1	-	Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards	6.5.1 Healthy and Safe Workplace	138
	TC-SC-320a.2	NT$	Total amount of monetary losses as a result of legal proceedings associated with employee safety and health violations	There are no incidents of such employee safety and health violations in 2023.	-
Recruiting & Managing a Global & Skilled Workforce	TC-SC-330a.1	%	Percentage of employees that are 1. Foreign nationals 2. Located offshore	6.1.1 An Equal Employment Environment 6.1.2 Diversity and Inclusion	114 116
Product Lifecycle Management	TC-SC-410a.1	%	Percentage of products by revenue that contain IEC 62474 declarable substances	ChipMOS is not an end product manufacturer, no applicable content	-
	TC-SC-410a.2	By Product	Processor energy efficiency at a system level for: (1) servers, (2) desktops, and (3) laptops	ChipMOS is not an end product manufacturer, no applicable content	-
Materials Sourcing	TC-SC-440a.1	-	Description of the management of risks associated with the use of critical materials	4.6 Green Products 5.4 Conflict Mineral Management	93 110
Intellectual Property Protection & Competitive Behavior	TC-SC-520a.1	NT$	Total monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	3.2 Ethical Management	50
Activity Metrics	TC-SC-000.A	thousand wafers/piece	Total production	1.3.1 Operational Performance	21
	TC-SC-000.B	%	Percentage of production from owned facilities		

Appendix 3: Sustainability disclosure indicators for the semi-conductor industry

Indicator	Type	Unit	Chapter/Note	Page
1 Total energy consumption, percentage of purchased electricity and renewable energy usage rate	Quantified data	GJ, %	4.2.4 Energy Management and Efficiency	73
2 Total water intake and total water consumption	Quantified data	Cubic meter	4.4.2 Water Resources Risk Management 4.4.3 Recycling of Process Water	82 85
3 Weight of hazardous waste generated and recycling percentage of hazardous waste	Quantified data	Ton, %	4.5.3 Proper Disposal of Wastes	89
4 Description of occupational accident categories, number of incidents and percentage	Quantified data	%, number of incidents	6.5.1 Safe Working Place with Thorough and Continuous Improvements	138
5 Disclosure of product lifecycle management: including the weight of scrapped products, weight of electronic waste and recycling percentage	Quantified data	Ton, %	ChipMOS is not an end product manufacturer, no applicable content	-
6 Description of critical material related risk management	Qualitative description	N/A	4.6 Green Products 5.4 Conflict Mineral Management	93 110
7 Total amount of monetary losses resulting from legal litigation related to anti-competitive behaviors	Quantified data	Reporting currency	In 2023, ChipMOS was not involved in any legal litigations relating to anti-competitive behaviors	-
8 Output of key products by category	Quantified data	Varies for different product categories	1.3 Operational Performance and Tax Governance	21

Appendix 4: Climate related information for Listed Companies

Item	Chapter/Note
1 Illustrate the Board of Directors and the Management's oversight and governance of climate-related risks and opportunities.	4.2 Climate Change and Energy Management For more information, please refer to ChipMOS Climate and Environmental Report https://www.chipmos.com/english/csr/report.aspx
2 Illustrate how the identified climate-related risks and opportunities affect the company's business, strategies and finances (over short, mid and long-term).	
3 Illustrate the impact of extreme climate incidents and transitional initiatives on the company's finances.	
4 Illustrate how the identification, assessment and management of climate risks are integrated into the organization's overall risk management system.	
5 If scenario analysis is employed to assess resilience to climate change risks, describe the scenario, parameters, assumptions, analysis factors, and key financial impacts utilized in the analysis.	
6 If there is a transition plan in place to address climate-related risks, describe the plan's contents, as well as the indicators and goals used to identify and manage physical risks and transition risks.	
7 If internal carbon pricing is used as a planning tool, describe the basis on which the pricing is established.	
8 If climate-related goals are established, describe the activities covered, the scope of greenhouse gas emissions, the timeline for implementation, and annual progress towards achieving these goals. If carbon offsets or Renewable Energy Certificates (RECs) are utilized to meet the objectives, it should be clarified the source and quantity of the carbon offsets or the number of RECs to demonstrate the achieved carbon reduction or the amount of renewable energy procured.	
9 Greenhouse Gas Check and status of verification.	

Appendix 5: Sustainable Development Goals (SDGs) Index

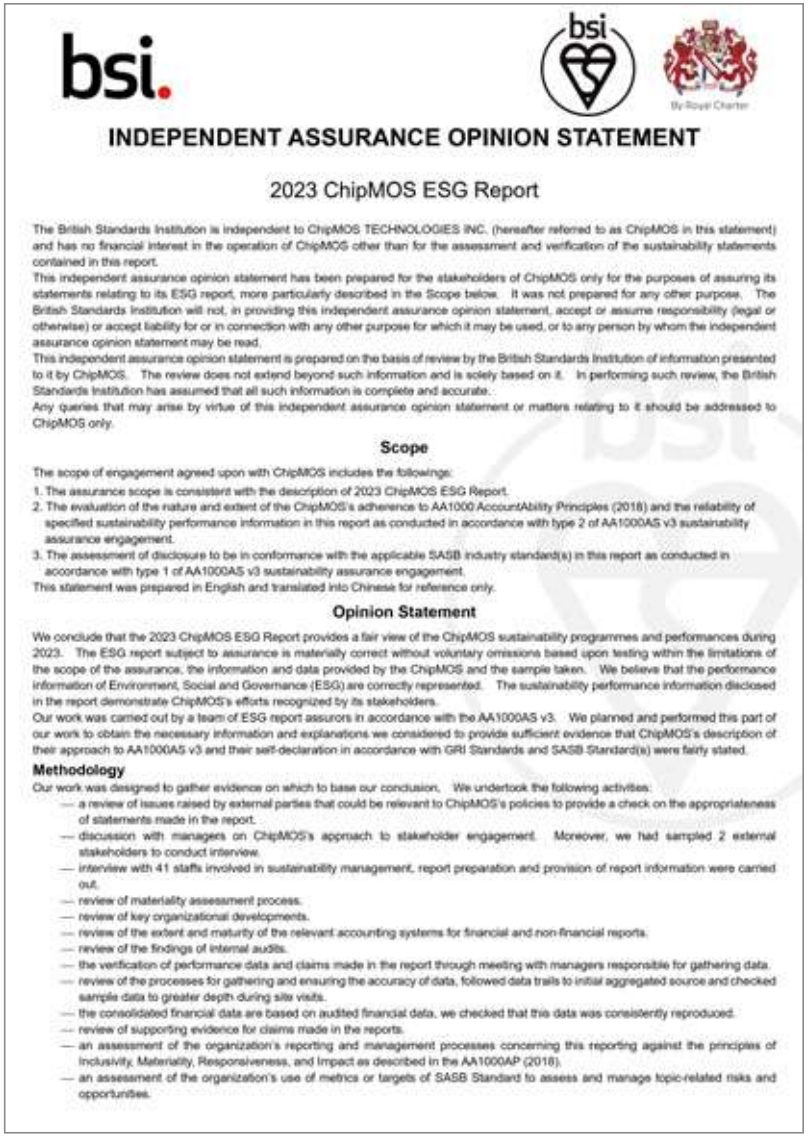
Sustainable Development Goals (SDGs)		Target	Chapter	Page
SDG3 Good Health and Well-Being	Ensure healthy lives and promote well-being for all at all ages	3.8 Access to quality essential health-care services 3.d Early warning, risk reduction and management of national and global health risks	6.2 Employee Incentives and Benefits 6.5 Healthy and Safe Workplace 6.6 Social Engagement	121 138 151
SDG4 Quality Education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	4.4 Increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment 4.7 Ensure that all learners acquire the knowledge and skills needed to promote sustainable development 4.a Upgrade education facilities	6.1 Attraction and Retention of Talents 6.3 Talent Development 6.6 Social Engagement	114 129 151
SDG6 Clean Water and Sanitation	Ensure availability and sustainable management of water and sanitation for all	6.3 Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials 6.4 Increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater 6.a Wastewater treatment and recycling	4.4 Water Resources Management	80
SDG7 Affordable and clean energy	Ensure access to affordable, reliable, sustainable and modern energy for all	7.3 Improvement in energy efficiency every year.	4.2 Climate Change and Energy Management	67
SDG8 Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	8.3 Promote development-oriented policies that support productive activities and creativity and innovation 8.5 Achieve full and productive employment and decent work, including for young people and persons with disabilities, and equal pay for work of equal value 8.7 Take immediate and effective measures to eradicate all forms of child labor 8.8 Protect labor rights and promote safe and secure working environments for all workers	3.1 Corporate Governance 6.2 Employee Incentives and Benefits 6.1 Attraction and Retention of Talents 6.4 Safeguarding Human Rights 6.5 Healthy and Safe Workplace	44 121 114 134 138
SDG11 Sustainable Cities and Communities	Make cities and human settlements inclusive, safe, resilient and sustainable	11.6 Reduce the adverse per capita environmental impact of cities, including air quality and more	6.6 Social Engagement	151
SDG12 Responsible Consumption and Production	Ensure sustainable consumption and production patterns	12.2 Achieve the sustainable management and efficient use of natural resources 12.5 Substantially reduce waste generation through prevention, reduction, recycling and reuse 12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities.	4.2 Climate Change and Energy Management 4.5 Recycling 5.3 Supply Chain Management	67 87 103
SDG13 Climate Action	Take urgent action to combat climate change and its impacts	13.3 Introduced TCFD for early response to climate change and mitigation actions	4.2 Climate Change and Energy Management	67
SDG16 Peace, Justice and Strong Institutions	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	16.5 Substantially reduce corruption and bribery in all their forms 16.6 Formulated "Regulations Governing Professional Moral Conduct"	3.2 Ethical Management	50
SDG17 Partnerships for the Goals	Strengthen the means of implementation and revitalize the global partnership for sustainable development	17.14 Enhance policy coherence for sustainable development 17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships	3.1 Corporate Governance 5.1 Customer Service 5.3 Supply Chain Management	44 98 103



Appendix 6: Measurement and Implementation of Stakeholder Capitalism Metrics

Aspect	Topic	Indicator	Chapter
Governance	Governance Purpose	Setting purpose	3.1 Corporate Governance
	Quality of Governing Body	Governance body composition	3.1.2 Giving Full Play to the Functions of the Board of Directors
	Stakeholder Engagement	Material issues impacting stakeholders	2.2.3.2 Stakeholder Communication
	Ethical Behavior	Anti-corruption	3.2 Ethical Management
		Protected ethics advice and reporting mechanisms	3.2 Ethical Management
	Risk and Opportunity Oversight	Integrating risk and opportunity into business process	3.3 Risk Management
Environment	Climate Change	Greenhouse gas inventory	4.2.3 Greenhouse Gas Inventory
		TCFD implementation	4.2.1 TCFD Imported
	Nature Loss	Land use and ecological sensitivity	4.3 Maintaining Biodiversity
	Water Resources	Water consumption and withdrawal in water-stressed areas	4.4 Water Resources Management
People	Dignity and Equality	Diversity and Inclusion	6.1 Attraction and Retention of Talents
		Pay equality	6.2 Employee Incentives and Benefits
		Wage level	6.2 Employee Incentives and Benefits
		Risk for incidents of child, forced or compulsory labour	6.4 Safeguarding Human Rights
	Good Health and We-Being	Good Health and We-Being	6.5 Healthy and Safe Workplace
	Skills for the Future	Education & training	6.3 Talent Development
Prosperity	Employment and Wealth Generation	Absolute number and rate of employment	6.1.1 An Equal Employment Environment
		Economic contribution	1.3.1 Operational Performance
		Financial investment contribution	1.3.1 Operational Performance
	Innovation of Better Products and Services	Total R&D expenses	1.2.2 Growth Momentum of Future Operations
	Community and Social Vitality	Total tax paid	1.3.2 Tax Governance

Appendix 7: Independent Third Party Assurance Statement GRI 2-5



bsi.

INDEPENDENT ASSURANCE OPINION STATEMENT

2023 ChipMOS ESG Report

The British Standards Institution is independent to ChipMOS TECHNOLOGIES INC. (hereafter referred to as ChipMOS in this statement) and has no financial interest in the operation of ChipMOS other than for the assessment and verification of the sustainability statements contained in this report.

This independent assurance opinion statement has been prepared for the stakeholders of ChipMOS only for the purposes of assuring its statements relating to its ESG report, more particularly described in the Scope below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the independent assurance opinion statement may be read.

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by ChipMOS. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate.

Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to ChipMOS only.

Scope

The scope of engagement agreed upon with ChipMOS includes the followings:

1. The assurance scope is consistent with the description of 2023 ChipMOS ESG Report.
2. The evaluation of the nature and extent of the ChipMOS's adherence to AA1000 AccountAbility Principles (2018) and the reliability of specified sustainability performance information in this report as conducted in accordance with type 2 of AA1000AS v3 sustainability assurance engagement.
3. The assessment of disclosure to be in conformance with the applicable SASB industry standard(s) in this report as conducted in accordance with type 1 of AA1000AS v3 sustainability assurance engagement.

This statement was prepared in English and translated into Chinese for reference only.

Opinion Statement

We conclude that the 2023 ChipMOS ESG Report provides a fair view of the ChipMOS sustainability programmes and performances during 2023. The ESG report subject to assurance is materially correct without voluntary omissions based upon testing within the limitations of the scope of the assurance, the information and data provided by the ChipMOS and the sample taken. We believe that the performance information of Environment, Social and Governance (ESG) are correctly represented. The sustainability performance information disclosed in the report demonstrate ChipMOS's efforts recognized by its stakeholders.

Our work was carried out by a team of ESG report assurors in accordance with the AA1000AS v3. We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that ChipMOS's description of their approach to AA1000AS v3 and their self-declaration in accordance with GRI Standards and SASB Standard(s) were fairly stated.

Methodology

Our work was designed to gather evidence on which to base our conclusion. We undertook the following activities:

- a review of issues raised by external parties that could be relevant to ChipMOS's policies to provide a check on the appropriateness of statements made in the report.
- discussion with managers on ChipMOS's approach to stakeholder engagement. Moreover, we had sampled 2 external stakeholders to conduct interview.
- interview with 41 staffs involved in sustainability management, report preparation and provision of report information were carried out.
- review of materiality assessment process.
- review of key organizational developments.
- review of the extent and maturity of the relevant accounting systems for financial and non-financial reports.
- review of the findings of internal audits.
- the verification of performance data and claims made in the report through meeting with managers responsible for gathering data.
- review of the processes for gathering and ensuring the accuracy of data, followed data trails to initial aggregated source and checked sample data to greater depth during site visits.
- the consolidated financial data are based on audited financial data, we checked that this data was consistently reproduced.
- review of supporting evidence for claims made in the reports.
- an assessment of the organization's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness, and Impact as described in the AA1000AP (2018).
- an assessment of the organization's use of metrics or targets of SASB Standard to assess and manage topic-related risks and opportunities.

Conclusions

A detailed review against the Inclusivity, Materiality, Responsiveness, and Impact of AA1000AP (2018) and sustainability performance information as well as GRI Standards and SASB Standard(s) is set out below:

Inclusivity

In this report, it reflects that ChipMOS has continually sought the engagement of its stakeholders and established material sustainability topics, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. There are fair reporting and disclosures for the information of Environment, Social and Governance (ESG) in this report, so that appropriate planning and target-setting can be supported. In our professional opinion the report covers the ChipMOS's inclusivity issues and has demonstrated sustainable conduct supported by top management and implemented in all levels among organization.

Materiality

The ChipMOS publishes material topics that will substantively influence and impact the assessments, decisions, actions and performance of ChipMOS and its stakeholders. The sustainability information disclosed enables its stakeholders to make informed judgements about the ChipMOS's management and performance. In our professional opinion the report covers the ChipMOS's materiality assessment process and material issues.

Responsiveness

ChipMOS has implemented the practice to respond to the expectations and perceptions of its stakeholders. An Ethical Policy for the ChipMOS is developed and continually provides the opportunity to further enhance ChipMOS's responsiveness to stakeholder concerns. Topics that stakeholder concern about have been responded timely. In our professional opinion the report covers the ChipMOS's responsiveness issues.

Impact

ChipMOS has identified and fairly represented impacts that were measured and disclosed in probably balanced and effective way. ChipMOS has established processes to monitor, measure, evaluate, and manage impacts that lead to more effective decision-making and results-based management within an organization. In our professional opinion the report covers the ChipMOS's impact issues.

Performance information

Based on our work described in this statement, specified sustainability performance information such as GRI Standards disclosures disclosed in this report, ChipMOS and BSI have agreed upon to include in the scope. In our view, the data and information contained within 2023 ChipMOS ESG Report are reliable.

GRI Sustainability Reporting Standards (GRI Standards)

ChipMOS provided us with their self-declaration of in accordance with GRI Standards 2021 (For each material topic covered in the applicable GRI Sector Standard and relevant GRI Topic Standard, including the disclosures of applicable economic, environmental, and social information, comply with all reporting requirements for disclosures). Based on our review, we confirm that sustainable development disclosures with reference to GRI Standards' disclosures are reported, partially reported, or omitted. In our professional opinion the self-declaration covers the ChipMOS's sustainability topics. However, the future report will be improved by the following areas:

- It is encouraged not to use "confidentiality constraints" as a reason for omitting the disclosure of GRI 2-21 annual total compensation ratio. The organization should consider referring to international peer' practices to respond to the requirements of the standards and increase the credibility and transparence of the ESG report.

SASB Standards

ChipMOS provided us with their self-declaration of in accordance with SASB Standard(s) (Semiconductors Sustainability Accounting Standard, version 2023-12). Based on our review, we confirm that the sustainability disclosure topics & accounting metrics of SASB Standard(s) (Semiconductors Sustainability Accounting Standard, version 2023-12) are reported, partially reported, or omitted. In our professional opinion the self-declaration covers disclosure topics, associated accounting metrics and activity metrics for applicable SASB industry standard(s).

Assurance level

The high level assurance provided is in accordance with AA1000AS v3 in our review, as defined by the scope and methodology described in this statement.

The moderate level assurance provided is in accordance with AA1000AS v3 in our review of SASB Standard(s).

Responsibility

This ESG report is the responsibility of the ChipMOS's chairman as declared in his responsibility letter. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

Competency and Independence

The assurance team was composed of auditors experienced in relevant sectors, and trained in a range of sustainability, environmental and social standards including AA1000AS, ISO 14001, ISO 45001, ISO 14064, and ISO 9001. BSI is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

For and on behalf of BSI:

Peter Pu, Managing Director BSI Taiwan

AA1000 Licensed Report 000-4/V3-I9BJH

Statement No: SRA-TW-806934

2024-05-29

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Appendix 8: ISO-Certified Fabs at ChipMOS

Item	Hsinchu fab.	Zhubei fab.	Zhubei fab. 2	Hukou fab.	Tainan fab.
ISO/IEC 27001:2013 Information Security Management System	✓	✓	✓	✓	✓
ISO 9001 Quality Management System	✓	✓	✓	✓	✓
IATF 16949 Automotive Quality Management System	✓	✓	✓	✓	✓
ISO 26262 Road Vehicles - Functional Safety Standard System	✓	✓	✓	✓	✓
IECQ QC 080000 Hazardous Substance Process Management System	✓	✓	✓	✓	✓
ISO 17025 Laboratory Management System (Calibration)					✓
ISO 17025 Laboratory Management System (Reliability)					✓
ISO 17025 Laboratory Management System (Chemical)		✓			
ANSI/ESD S20.20	✓	✓	✓	✓	✓
SONY Green Partner		✓			✓
ISO 14001 Environmental Management System	✓	✓	✓	✓	✓
ISO 14064-1 Greenhouse Gas Emission	✓	✓	✓	✓	✓
ISO 50001 Energy Management System	✓				✓
ISO 45001 Occupational Safety and Health Management System	✓	✓	✓	✓	✓
ISO 14051 Material Flow Cost Accounting					✓
ISO 14067 / PAS 2050 Carbon Footprint					✓
ISO 14046 / Water Footprint		✓			✓
Taiwan Green Building Label (from the Ministry of Interior)	✓ (Qualified Grade)				✓ (Silver Grade)
Taiwan Green Factory Label (from the Ministry of Economic Affairs)	✓				✓

Note 1: The boundaries of assurance for Tainan fab also covers Tainan fab. 2
Note 2: Certification of ISO 17025 Laboratory Management System is only implemented on Zhubei fab and Tainan fab, which are the only two fabs with laboratories
Note 3: Hsinchu fab, Zhubei fab. 2 and Hukou fab are testing plants, and due to the nature of their products, they are excluded from the scope of assurance for SONY Green Partner
Note 4: For the certification date, certificate validity period, and certificate files of third-party verifications, please refer to the ChipMOS website.

Appendix 9: 2021-2023 Awards and Honors

#	Year	Name of Award	Organizer
		Economic & Social	
1	2021	**8th Corporate Governance Evaluation: Ranked among the top 5% of all TWSE-listed companies, Ranked among the top 10% of all electronics companies with market cap above NT$10 billion.**	Taiwan Stock Exchange (TWSE)
2	2021	**Taiwan Corporate Sustainability Awards, The Best Sustainable Corporate Sustainability Awards**	Taiwan Institute for Sustainable Energy (TAISE)
3	2021	**Taiwan Corporate Sustainability Awards, Top 50 Corporate Sustainability Report Awards, Gold Medal**	Taiwan Institute for Sustainable Energy (TAISE)
4	2021	**Corporate Sustainability Outstanding Award**	BSI British Standards Institution Taiwan
5	2021	**2020 Award of Excellence for the Promotion of Workplace Equality**	Southern Taiwan Science Park Bureau
6	2022	**9th Corporate Governance Evaluation: Top 5% among listed companies; top 11-20% in the electronic category with market value of NT$ 10 billion or more**	Taiwan Stock Exchange
7	2022	**2022 National Sustainable Development Awards**	National Council for Sustainable Development, Executive Yuan
8	2022	**Sustainability Report - Platinum Grade in the Electronic Information Manufacturing Industry**	Taiwan Sustainable Energy Research Foundation
9	2022	**Taiwan Corporate Sustainability Awards: Top 100 Corporations**	Taiwan Sustainable Energy Research Foundation
10	2022	**Excellence in Corporate Social Responsibility - Top 100 Performing Companies**	CommonWealth Magazine
11	2022	**Top 25% of publicly listed companies in the 2022 Taiwan Sustainability Evaluation**	Taiwan Index Plus Corporation
12	2022	**Taiwan Employment Creation 99 Constituent**	Taiwan Index Plus Corporation
13	2022	**TWSE Corporate Governance 100 Index**	Taiwan Index Plus Corporation
14	2022	**Engineering Technology Award**	MXIC
15	2023	**10th Corporate Governance Evaluation: Top 6%-20% among TWS listed companies; top 11%-20% of TWSE/TPEx listed companies in the electronic category with market value of NT$10 billion or more**	Taiwan Stock Exchange (TWSE)
16	2023	**Top 100 Corporations**	Taiwan Institute for Sustainable Energy (TAISE)
17	2023	**Corporate Sustainability Report - Platinum Grade in the Electronic Information Manufacturing Industry**	Taiwan Institute for Sustainable Energy (TAISE)
18	2023	**TWSE Corporate Governance 100 Index**	Taiwan Index Plus Corporation
19	2023	**Taiwan Employment Creation 99 Constituent**	Taiwan Index Plus Corporation
20	2023	**Best Testing Supplier**	MXIC
21	2023	**Outstanding Supplier**	CHIPONE
22	2023	**Engineering Support Award**	CHIPONE
23	2023	**Best Partner Award**	AsahiKASEI

Appendix 9: 2021-2023 Awards and Honors

#	Year	Name of Award	Organizer
		Environmental	
1	2021	**Special Contribution Award for Sponsoring Air Quality Purification Zone**	Environmental Protection Administration, Executive Yuan
2	2021	**Excellent Enterprise for Green Procurement**	Environmental Protection Bureau of Hsinchu County and Tainan City
3	2021	**Occupational Safety and Health Excellent Company**	Hsinchu Science Park Bureau
4	2021	**Southern Taiwan Science Park- The Best Company for Saving Energy**	Southern Taiwan Science Park Bureau
5	2021	**The Best Company for Saving Energy**	Tainan City Government
6	2021	**Air Quality Purification Zones - Excellent Sponsor**	Hsinchu County Government
7	2021	**Air Quality Purification Zones - Excellent Company- Diesel Vehicle Emission Inspection**	Tainan City Government
8	2022	**Air Quality Purification Area Recognition – Special Contribution Award**	EPA, Executive Yuan
9	2022	**Top 10% Outstanding Corporate in the Listing Electronic Companies under the "2022 Occupational Health and Safety Indicators Disclosed in the Corporate Sustainable Reports"**	Occupational Safety and Health Administration, Ministry of Labor
10	2022	**Top 25% of publicly listed companies in the 2022 Taiwan Sustainability Evaluation**	Taiwan Index Plus Corporation
11	2022	**Occupational Safety and Health – Outstanding Organization**	Hsinchu Science Park Administration
12	2022	**Promotion of Occupational Safety and Health Personnel – Outstanding Organization**	Hsinchu Science Park Administration
13	2022	**Promotion of Occupational Safety and Health Personnel – Outstanding Organization**	Southern Taiwan Science Park Administration
14	2022	**2021 Outstanding Private Enterprise and Organization of Green Consumption Promotion**	Hsinchu County Government
15	2022	**2021 Outstanding Unit of Green Procurement and Promotion of Green Consumption Promotion (Environmental Protection Administration, Executive Yuan)**	EPA, Executive Yuan
16	2022	**2022 Air Quality Purification Area Performance Recognition Organization**	Hsinchu County Government
17	2022	**2022 Outstanding Private Enterprise and Organization of Green Consumption Promotion**	Tainan City Environmental Protection Bureau
18	2023	**2022 Outstanding Unit of Green Procurement and Promotion of Green Consumption Promotion (Environmental Protection Administration, Executive Yuan)**	Ministry of Environment, Executive Yuan
19	2023	**Top 10% Outstanding Corporate in the Listing Electronic Companies under the 2023 "Active Rating of Occupational Health and Safety Indicators Disclosed in the Corporate Sustainability Report"**	Occupational Safety and Health Administration. Ministry of Labor
20	2023	**2022 Private Enterprise Green Procurement - Special Contribution Award**	Hsinchu County Government
21	2023	**2023 Air Quality Purification Area Performance Recognition Organization**	Hsinchu County Government
22	2023	**2023 Environment-Friendly Enterprise Fleet**	Hsinchu County Government
23	2023	**2023 Outstanding Private Enterprise and Organization of Green Consumption Promotion**	Tainan City Government
24	2023	**2023 Environmental Protection Outstanding Unit - Net Zero Benchmark Award**	Tainan City Government
25	2023	**Occupational Safety and Health - Outstanding Organization**	Hsinchu Science Park Administration, Ministry of Science and Technology
26	2023	**Personnel for Promotions of Occupational Safety and Health**	Hsinchu Science Park Administration, Ministry of Science and Technology
27	2023	**2023 Air Quality Purification Area Performance Recognition Organization [Merit Award - Excellence Award]**	Ministry of Environment, Executive Yuan

ChipMOS
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No. 1, Yanfa 1st Rd., Hsinchu Science Park,
Hsinchu County

Zhubei fab.
No. 37, Xintai Rd., Zhubei City,
Hsinchu County

Zhubei fab. 2
No. 112, Zhonghe St., Zhubei City,
Hsinchu County, Taiwan

Hukou fab.
No. 4, Rende Rd.,
Hukou Township, Hsinchu County

Tainan fab.
No. 5, Nanke 7th Rd., Southern Taiwan Science Park,
Tainan City, Taiwan

Tainan fab. 2
No. 3, Nanke 7th Rd., Southern Taiwan Science Park,
Tainan City, Taiwan

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ChipMOS website
ESG section

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Environmental Report