



**GlobalWafers Co., Ltd.**

**GLOBALWAFERS !**

**GLOBAL FAMILY !**

**GLOBAL SOLUTIONS !**



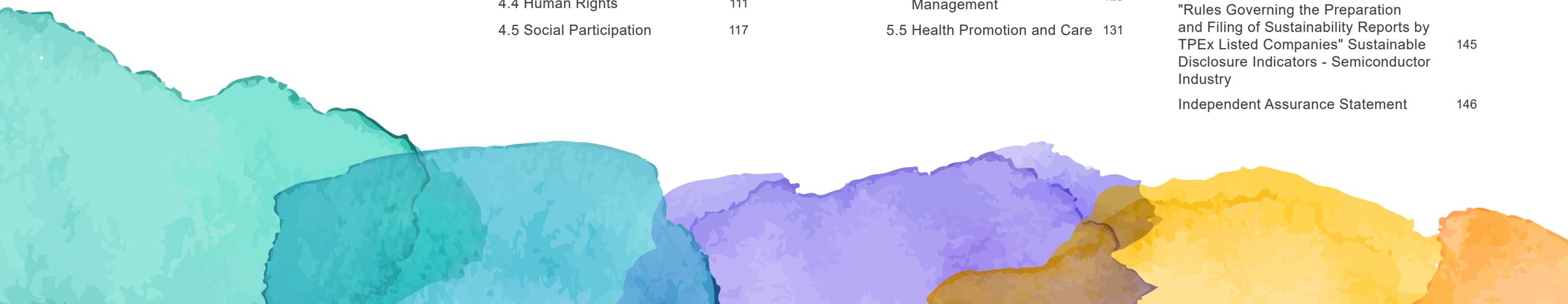
**2023**

Sustainability Report



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# About This Report

## Report Axis

GlobalWafers Co., Ltd. (hereinafter referred to as GlobalWafers) is a professional semiconductor wafer supplier and manufactures products for integrated circuit and power electronics applications. In response to global climate changes and corporate social responsibility (CSR) development trends, GlobalWafers has continued to independently compile CSR reports in recent years and officially changed the name to the Sustainability Report in 2021. Based on long-term, in-depth interactions with local communities and engagement with stakeholders, GlobalWafers discloses in the report relevant information on material issues in corporate governance, economy, environment, and people (including human rights), as well as execution & improvement results, in addition to presenting the future vision and goals in terms of sustainable development.

## Report Editing and Final Draft

GlobalWafers compiles and organizes relevant information and edits this report through the following procedures.

### Planning, Compiling, and Organizing

The principal members of the sustainability development promotion task force (comprising the President's Office and the Environment, Health & Safety Department) are in charge of the overall planning, information compilation & organization, communication & integration and editing & revisions.

### Editing Procedures, Review, and Final Draft

After the Corporate Sustainable Development Committee has collected all relevant information, written the report, and verified the data in the report by the heads of all departments, it is submitted to the Chairperson, serves as Chair of the Corporate Sustainable Development Committee, for review and finalization. The report is then submitted to the Board of Directors for approval before publication.

## Reporting Standards

The content structure of this report primarily refers to the "Sustainability Reporting Standards" issued by the Global Reporting Initiative (GRI) in accordance with the requirements and the "Sustainability Accounting Standards" issued by the Sustainability Accounting Standards Board (SASB), adhering to the indicators for the semiconductor industry category. In addition, this report is also formulated pursuant to the Rules Governing the Preparation and Filing of Sustainability Reports by TPEX Listed Companies, implementing the recommendations provided by the Task Force on Climate-related Financial Disclosures (TCFD). Key issues of concern to stakeholders are disclosed and responded to in relevant chapters based on materiality analysis results.

## Report Boundaries and Reporting Period

The period and scope covered by this report are as follows:

Publication time	Coverage period	Previous publication date
July 2024	From January 1, 2023 to December 31, 2023. If there are any significant updates, they will be noted within the text.	June 2023

## Reporting Scope

The scope of coverage for all GlobalWafers' operations and production bases based on performance are described as follows:

### Economic Performance:

The scope of coverage is the same as the scope of the 2023 consolidated financial report of GlobalWafers, including all of the company's operational production sites. Please refer to the "Summary of Affiliated Companies" in the Company's [2023 Annual Report](#) for details. The financial data is verified by KPMG according to International Financial Reporting Standards (IFRS), and the calculation unit is New Taiwan Dollar (NTD).

### Environmental performance:

Except for the office and the production sites newly included in November 2023 (Crystalwise Technology Inc., Yuan Hong Technical Materials Ltd., and Shanghai Sawyer Shenkai Technology Material Co. Ltd.), all other production sites were included in the scope of environmental performance disclosure. Each responsible department independently compiles and consolidates the data.

### People (including human rights) Performance:

This includes all of the Company's operational production sites, with each responsible department independently compiling and consolidating the data. However, due to incomplete data from some sites, the scope of disclosure will be separately noted in the statistical data within the text.

GlobalWafers has published its Sustainability Report each year, and offers electronic files on the GlobalWafers' website at the [Sustainability Report Download Area](#) for download and review.



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### Report Assurance

GlobalWafers' Enterprise Sustainability Committee is verified by a third-party independent verification agency in order to strengthen the GRI Standards compliance for this report while enhancing the transparency and credibility of the sustainable management information. This report has been verified by DNV Business Assurance Co., Ltd. to comply with the GRI Standards' compliance options as well as the DNV VeriSustain medium assurance level verification standard requirements. The verification statement is detailed in the [appendix](#).

### Contact

Should you have any comments or suggestions regarding this report, please feel free to contact us in one of the following ways:

GlobalWafers Co., Ltd.

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Tel: 03-578-3131 # 1772

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E-mail : [GWCIR@sas-globalwafers.com](mailto:GWCIR@sas-globalwafers.com)

Official website : <https://www.sas-globalwafers.com>

## 2023 Key Indicators and Recognitions

- The consolidated total revenue reached NT\$70.65 billion in Taiwan, with an annual growth rate of 0.52%. Yearly revenue increased for three consecutive years, reaching a new historical high.
- The operating gross margin rate was 37.42%
- The net profit margin before tax reached a record high of 37.5%.
- The net profit margin after tax reached a record high of 28.0%.
- The earnings per share (EPS) reached a record high of NT\$45.41.
- As of December 31, 2023, the cumulative number of valid patents obtained by GlobalWafers Group over the years had reached 2,310.
- GlobalWafers was confirmed with a long-term issuer's credit rating of "twAA-" and a short-term issuer's credit rating of "twA-1+" by Taiwan Ratings. The rating outlook for GlobalWafers' long-term rating is "Stable."
- Ranked in the "Top 5% among TPEX-listed companies in the 2023 Corporate Governance Evaluation of the tenth term."
- GlobalWafers was continuously elected as a constituent of the FTSE4Good Index Series.
- GlobalWafers Chairperson, Hsiu-Lan Hsu, won the annual "2023 Ernst & Young Global Entrepreneur Awards."
- GlobalWafers Taisil Branch won the Excellence Award in the "Best Practice Competition on Prevention of Ergonomic Hazards in the Workplace."
- Selected as one of the "Taiwan Top 100 for Foreign Investment in 2023" published by the Taiwan Institute of Directors
- Won the "2023 National Enterprise Environmental Protection Award"
- Won the "2023 Taiwan Corporate Sustainability Award"
- Listed among the top 100 companies in the 2023 CommonWealth Magazine's "Top 2000 Enterprise Survey"
- Won two Silver Tower Awards in the Unity Group for the "2023 Taiwan Continuous Improvement Competition" held by the Corporate Synergy Development Center
- In the 2023 CDP assessments, GlobalWafers received an A- leadership rating in the "Climate Change" questionnaire and maintained its B management rating in the "Water Security" questionnaire.



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## Economic Aspect

### Corporate Governance KPI

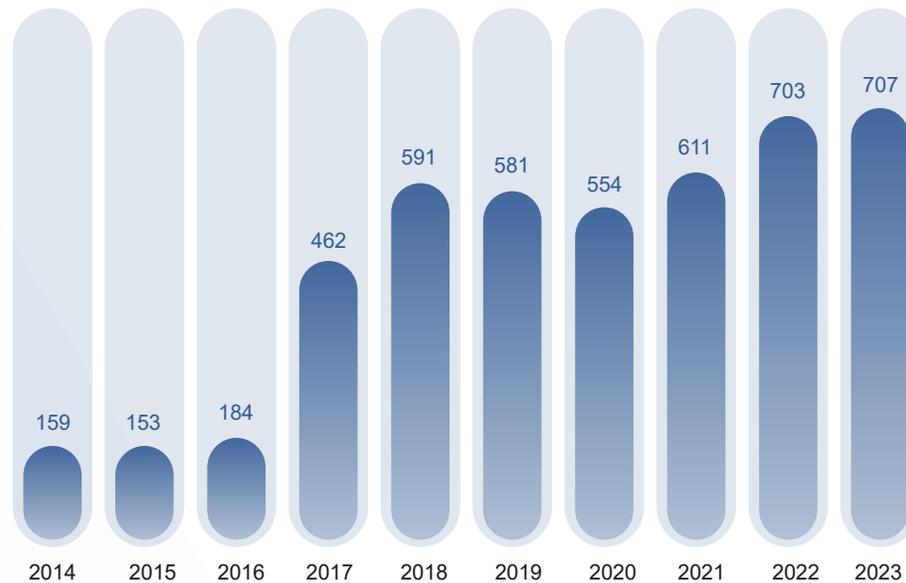
Information disclosure and corporate governance appraisal and rating of TPEX-listed companies

- Ranking in the top 5% of all TPEX-listed companies in the 10th corporate governance appraisal 2023
- Ranking in the top 5% of all TPEX-listed companies in the 9th corporate governance appraisal 2022
- Ranking in the top 5% of all TPEX-listed companies in the 8th corporate governance appraisal 2021
- Ranking in the top 5% of all TPEX-listed companies in the 7th corporate governance appraisal 2020
- Ranking in the top 5% of all TPEX-listed companies in the 6th corporate governance appraisal 2019
- Ranking in the top 5% of all TPEX-listed companies in the 5th corporate governance appraisal 2018
- Ranking in the top 20% of all TPEX-listed companies in the 4th corporate governance appraisal 2017
- Ranking in the top 20% of all TPEX-listed companies in the 3rd corporate governance appraisal 2016

### Economic Performance KPI

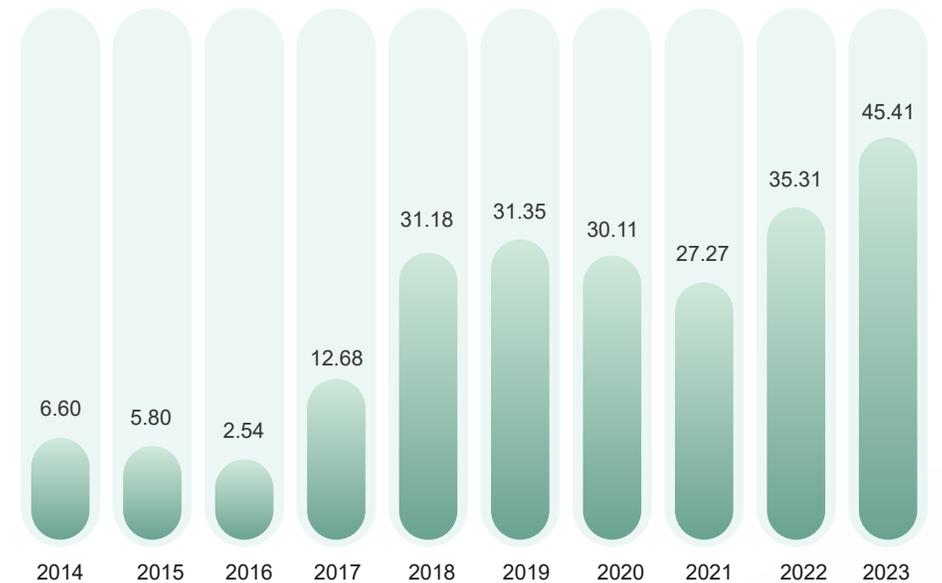
Operating Revenues

Unit: NTD 100 million



EPS

Unit: NTD





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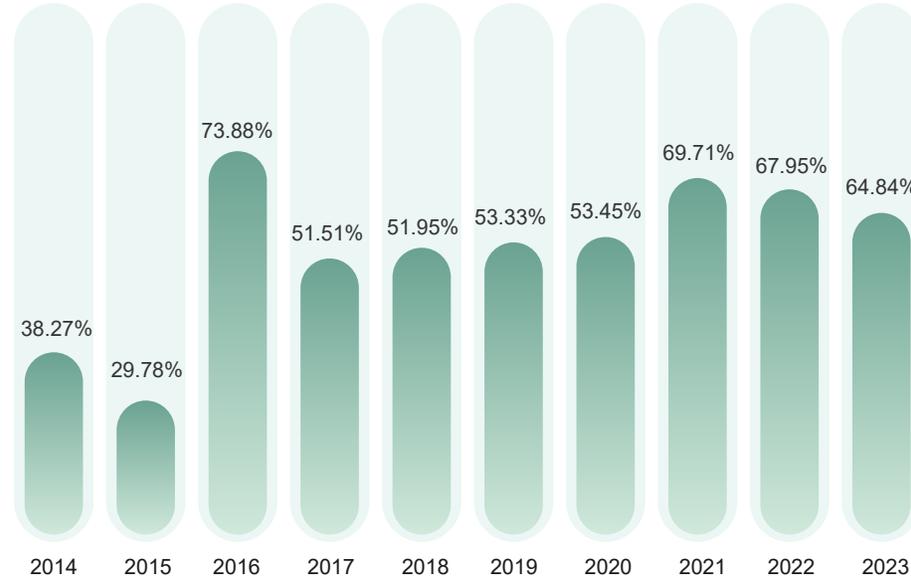
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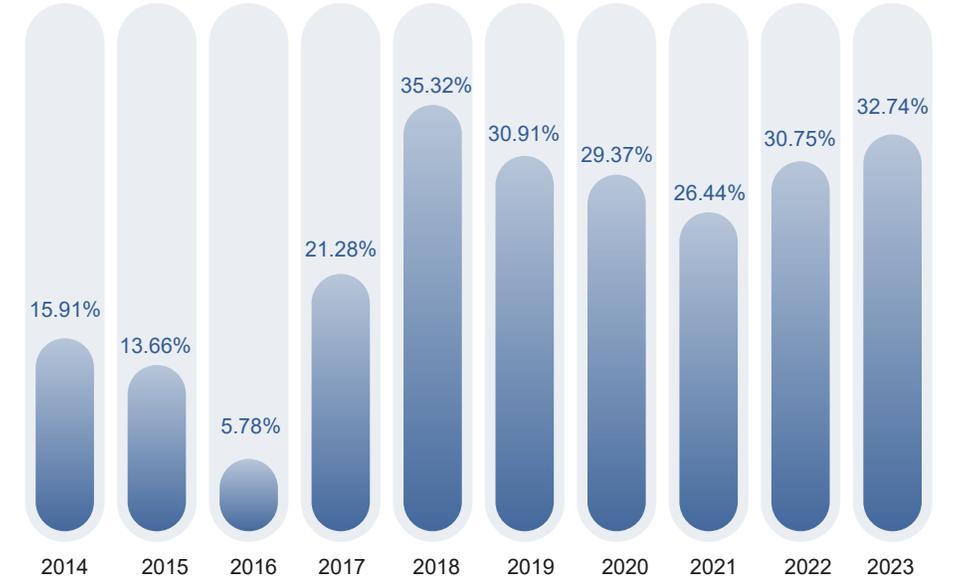
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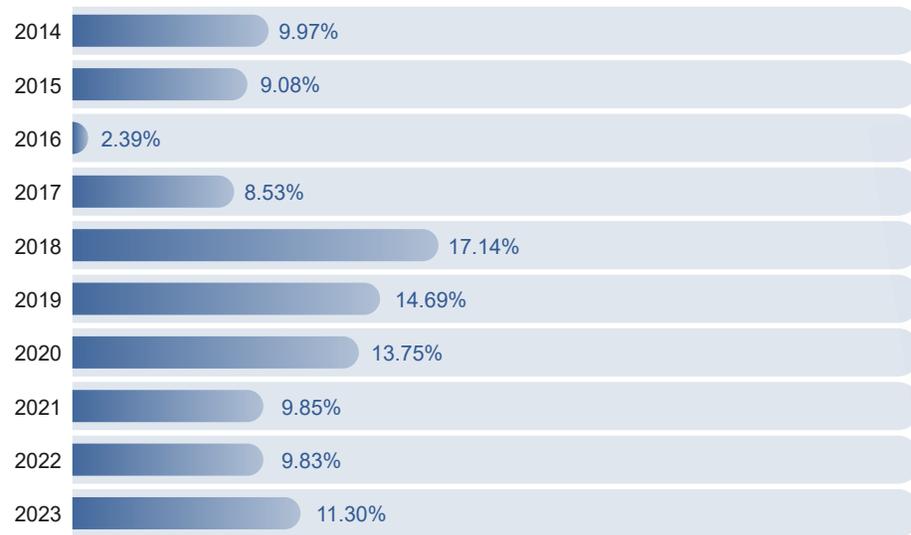
Debt to Asset Ratio



Return on Equity



Return on Assets





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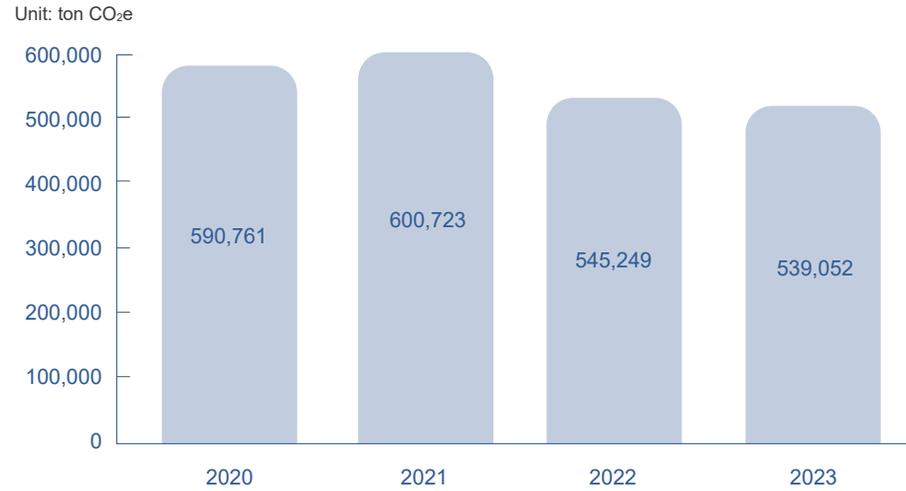
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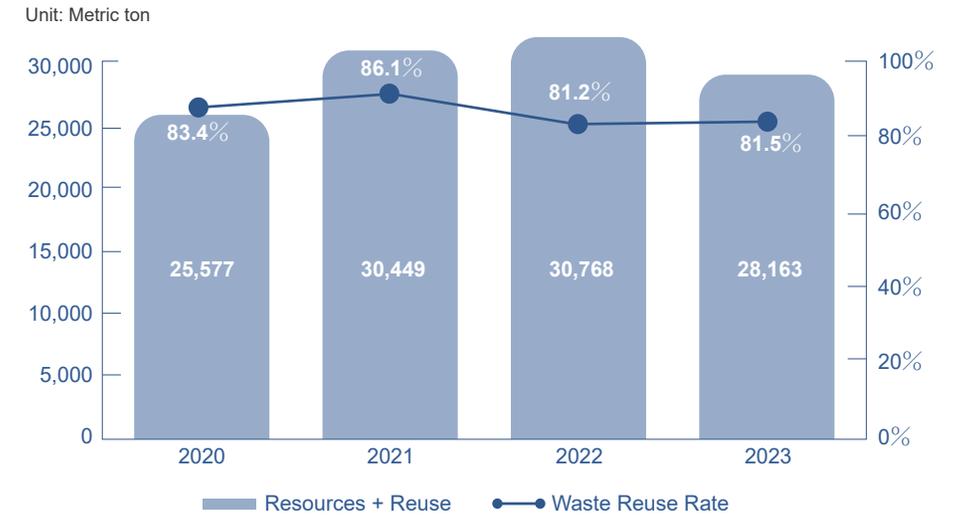
## Environmental Aspect

### Environment Performance KPI

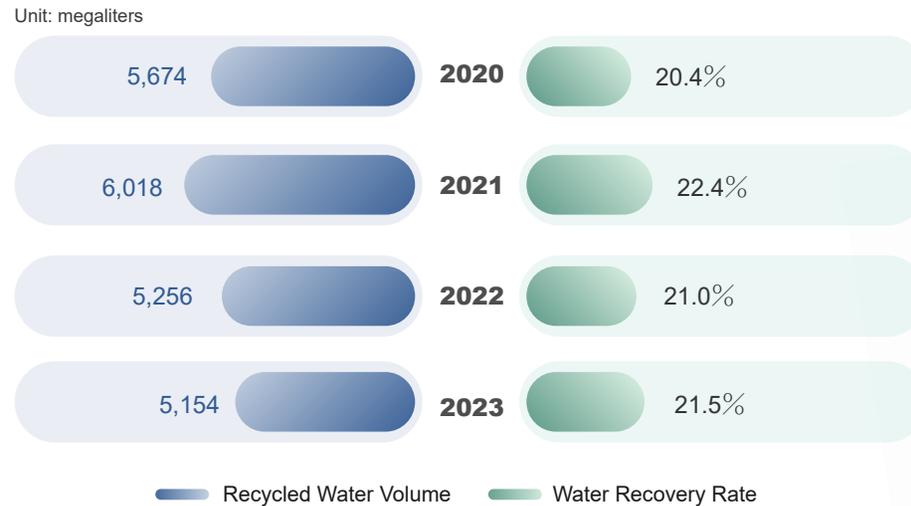
Carbon Dioxide Equivalent Emissions (category 1~2)



Waste Reused and Recycled



Water Resource Recycling





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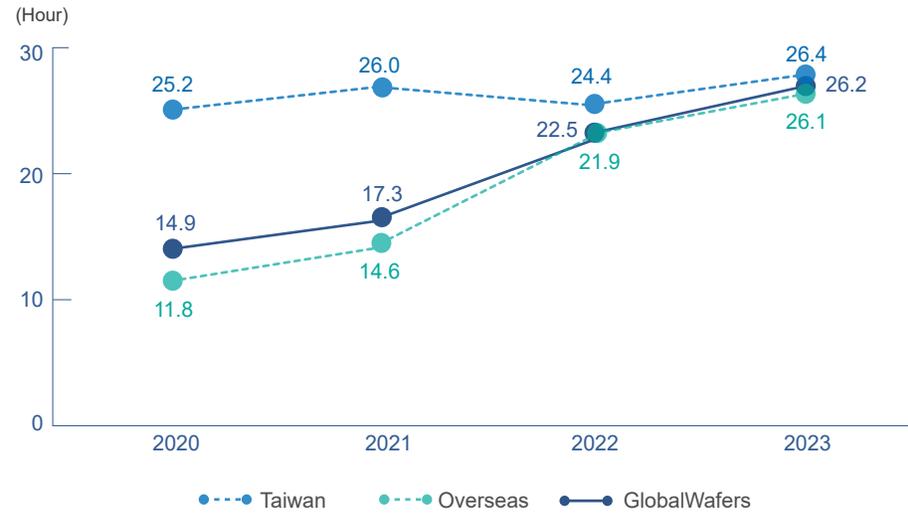
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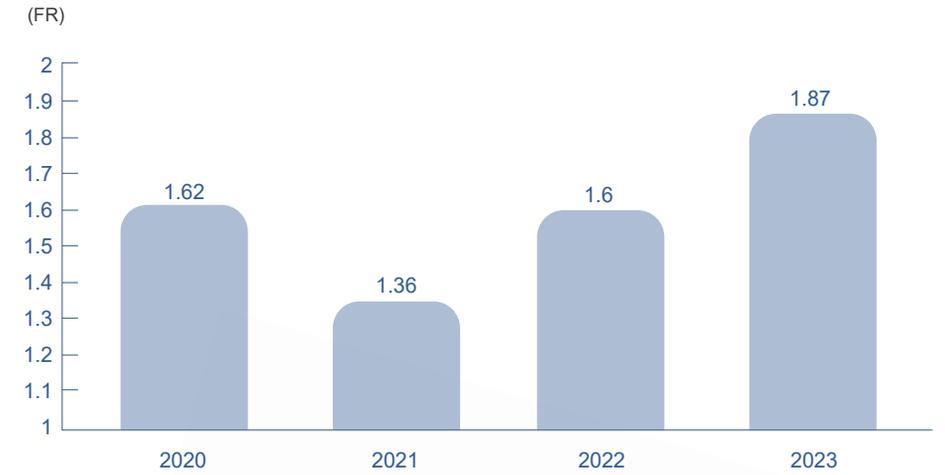
## People Aspect

### Key People Indicators

Average Training Hours per Employee



Disabling Frequency Rate



## Message from the Chairperson

The drastic changes in the world over the past few years have further highlighted the importance of corporate social responsibility. Facing global challenges such as the impact of the pandemic, geopolitical conflicts, and extreme weather, achieving a balance in economic, social, and environmental aspects is a critical issue for enterprises. As a member of the semiconductor industry, GlobalWafers understands that sustainable development is not just about corporate profitability but also about building a more stable and harmonious future for the next generation. GlobalWafers upholds the concept of responsible growth and is committed to striking a balance between economic, social, and environmental aspects. We will continuously work to embody these values, establishing a strong corporate foundation through sustainable practices in an uncertain environment.

GlobalWafers aspires to be a positive force in shaping a sustainable environment. Our series of measures include:

### ◉ Strengthen the ESG Implementation Framework

GlobalWafers' Corporate Sustainable Development Committee is the core driving force for promoting ESG initiatives, with the Chairperson serving as the Committee Chairperson and CFO Ming-Hui Chien as the Director General. The Corporate Sustainability Committee covers three aspects: environmental, social, and governance. To address various sustainability tasks and promote them more effectively, five subcommittees—the "Sustainable Operations Subcommittee," the "Green Manufacturing Subcommittee," the "Sustainable Supply Chain Subcommittee," the "Social and Corporate Care Subcommittee," and the "Corporate Governance and Risk Management Subcommittee"—were formed.

- Sustainable Operations Subcommittee
- Green Manufacturing Subcommittee
- Sustainable Supply Chain Subcommittee - Suppliers & Customers
- Social and Corporate Care Subcommittee
- Corporate Governance and Risk Management Subcommittee

Each subcommittee assigns a dedicated member to serve as part of the Sustainable Development Task Force. These members hold ad hoc meetings and discussions on ESG-related projects and issues, establishing smooth communication channels. When encountering cross-departmental and cross-group sustainability projects, the Sustainable Development Task Force coordinates and manages these initiatives.

Additionally, each year, all departments are invited to set ESG goals related to their operations and review the previous year's progress. Personnel from different departments brainstorm together, focusing on the company's green commitments, and develop diverse measures to jointly advance corporate sustainability.

Furthermore, GlobalWafers has appointed dedicated personnel with extensive knowledge and expertise in corporate governance to serve as the corporate governance officer, ensuring that the Company adheres to the latest regulations, standards, and best practices in governance.

### ◉ Continue to promote green manufacturing

GlobalWafers continues to promote green technology and energy-saving concepts. By introducing multiple energy-saving projects, we optimize the efficiency of energy and resource usage and achieve outstanding results. Through various improvements at GlobalWafers Zhunan Plant reduced the electricity consumption intensity and greenhouse gas emission intensity per unit product by 23.7% in 2022 compared to 2021. In 2023, energy-saving improvements were made by installing variable frequency drives on the air conditioning chillers and colling water circulation pumps, replacing the ingot pulling process chillers with high-temperature variable frequency chillers, and upgrading the monitoring systems. These upgrades allow the equipment to automatically adjust its operating frequency based on actual demand, thereby reducing energy consumption while further improving energy efficiency. This resulted in an impressive annual electricity savings of nearly 3.09 million kWh and a reduction of 1,530 tons of carbon emissions per year. In addition, we have focused on the most energy-intensive parts of the wafer manufacturing process by developing and introducing energy-efficient hot zone designs for ingot pullers, significantly reducing energy consumption in the manufacturing process.



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### ⦿ Proactive use of renewable energy

The semiconductor manufacturing process is highly energy-intensive. With recent international turmoil and frequent extreme weather events, energy shortage has become increasingly prominent issue. Countries are also actively setting net-zero carbon emission targets. In 2021, GlobalWafers proactively announced its goal for the entire Group to achieve 100% renewable energy use by 2050. In 2022, it officially joined the RE100 initiative. Regarding our energy blueprint, we are advancing through several measures, including the construction of our own solar power facilities, signing Power Purchase Agreements (PPAs), and purchasing Renewable Energy Certificates (RECs).

As a green energy total solution provider, the parent company, Sino-American Products Inc. (SAS), uses its advantages in rich experience and vertically integrated supply chains to assist the Group in building solar power plants to increase green energy power generation, and with its subsidiary Sustainable Energy Solution (SES) assisting in matching green electricity demand. GlobalWafers' new and expansion facilities are also being equipped with various energy-saving devices and solutions from the construction phase to reduce energy consumption and actively utilize renewable energy. Our Denmark plant, Topsil GlobalWafers A/S, is expected to become the first semiconductor crystal growth factory to use 100% self-generated green electricity by the second half of 2024. Additionally, the new 12-inch production line at our Italian plant and the new fab in the United States are also expected to achieve 100% renewable energy usage from the first day of mass production. GlobalWafers is committed to providing customers with environmentally friendly semiconductor wafers and becoming a reliable partner on the sustainable journey.

### ⦿ Meeting the global localization trend and reduce the carbon footprint of products

Since its establishment, GlobalWafers has been actively strengthening itself, with operational sites in Europe, the Americas, and Asia, providing localized services to customers. Once the new plant in the United States is completed, GlobalWafers will have a global presence with 18 operational production bases across 9 countries, encompassing one-stop solution from ingot growth to epitaxy on three continents. This distributed global production network brings multiple sustainability benefits. First, a short-distance supply chain helps reduce CO<sub>2</sub> emissions from transportation and lowers environmental costs. Secondly, dispersed production sites help to improve risk management and business continuity. Reducing the risks to the overall business caused by natural disasters, geopolitics, and other factors in a single region will help enhance the Company's business stability.

### ⦿ Sustainable Supply Chain

GlobalWafers places great emphasis on supply chain management to ensure sustainable and responsible operations in the global business environment.

#### ● Suppliers

We require all suppliers to sign the [Supplier Code of Conduct & Supplier's Declaration on Compliance with Supplier Code of Conduct](#) before commencing cooperation, clearly expressing their commitment to comply with relevant regulations and ethical standards. The Code includes provisions on anti-bribery, anti-corruption, social and environmental responsibilities, conflict-free minerals, compliance with trade laws, prohibition of infringing products or goods, prohibition of silicon products containing forced labor, and green procurement, among others. In addition, GlobalWafers also conducts supplier integrity assessments to assess transparency, accountability, and risk management capabilities in business practices of suppliers. Through the above measures, GlobalWafers expects its suppliers to engage in business activities with the same legal, ethical, environmental, and quality standards as GlobalWafers.

GlobalWafers practices [green procurement](#), including purchasing environmentally friendly products, local sourcing, and wooden pallet recycling. The Company continuously invites suppliers to join in carbon reduction efforts, implementing "Organizational Greenhouse Gas Inventory (ISO14064-1)" and "Product Carbon Footprint Calculation (ISO14067)" to monitor factory carbon distribution and calculate product carbon footprints. In the future, GlobalWafers will continue to promote the establishment of carbon reduction targets within the supply chain, working together with suppliers to advance sustainable development in the value chain.

#### ● Customers

GlobalWafers establishes close and long-term cooperative relations with customers. Before cooperating with customers, we sign non-disclosure agreements to fully protect the sensitive and confidential information of both parties. GlobalWafers is aggressively engaged in quality management activities for full-scale compliance with continued improvement as well as optimized manufacturing process technology in order to enhance product quality. Each plant has established a Quality Improvement Team (QIT) composed of members from all functional departments. The members of the QIT quality improvement team are committed to long-term process research and product quality improvement. The Company has also established the "Process of Customer Complaints Management" to maintain good communications with its customers, as well as effective appealing procedures regarding products and service. We also conduct annual customer satisfaction surveys, using customer feedback as a benchmark for continuous improvement and progress to enhance the competitiveness of our products.



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### ⦿ Social and Employee Care

GlobalWafers has established the [Human Rights Policy](#) and is committed to creating an equal, safe and dignified workplace. GlobalWafers continues to promote workplace equality and create a friendly workplace by implementing the values of diversity, equity, and inclusion within the Company to create a friendly workplace environment.

The Company's internal Employee Caring Program (ECP) provides comprehensive care for employees, including the introduction of the Employee Assistance Program Service Center (EAPC) of Hsinchu Lifeline Association. The services cover a wide range of areas including emotional management, interpersonal relationships, legal issues, career development, family and parenting, and financial consultations. The goal is to ensure employees feel secure and confident in their work. GlobalWafers' employee care measures have been highly recognized, earning the honor of the "2023 Excellent Organization for Promoting Work Equality in the Workplace in Hsinchu Science Park." Additionally, GlobalWafers' Japanese subsidiary, MEMC Japan Ltd. received the "Kirari" award from Utsunomiya City. This award recognizes the Company's active encouragement of female managers' development, support for childcare and work-life balance, and provision of job opportunities for workers over 65 years old.

The road to sustainable development is full of challenges, and I firmly believe that these challenges also bring opportunities. Technological innovation, changes in market demand, and regulatory trends will all serve as driving forces for our advancement. In the future, GlobalWafers will continue to strive to achieve higher sustainability goals to ensure continuous progress in the environment, society, and corporate governance. GlobalWafers remains committed to responsible growth, actively undertaking the Company's responsibilities towards society and the environment.



GlobalWafers Chairperson & CEO

徐秀蘭

# About GlobalWafers

## Company Profile

Established in October 18, 2011 and headquartered in Hsinchu Taiwan, GlobalWafers Co., Ltd. specializes in 3" to 12" silicon wafer manufacturing. Product applications are wide-ranging and include logic, memory, power management, automotive, IT, and MEMS. It is the world's third largest semiconductor silicon wafer supplier as well as the largest domestic and non-Japanese semiconductor silicon wafer supplier. GlobalWafers, previously the Semiconductor Business Unit of Sino-American Silicon Products Inc. (SAS) was separated into an independent company from SAS in 2011.

In 2012, GlobalWafers acquired Covalent, a subsidiary of Covalent Materials Corporation that ranked number 6 in the world. In 2016, GlobalWafers successfully acquired Denmark's Topsil Semiconductor Materials A/S (hereafter "Topsil") and SunEdison Semiconductor Limited (hereafter "SunEdison") to become the 3rd largest wafer supplier worldwide. Since then, its product field has successfully advanced from CZ to large-size epiwafers, polished wafer, SOI wafer, annealed wafer, and FZ semiconductor wafers. GlobalWafers has also combined its top-notch operating model, market advantages, diversified product supply, as well as the global bases and product R&D capabilities of SunEdison Semiconductor to establish a more comprehensive product line. Once the new plant in the United States is completed, the company will have 18 operational production sites strategically located in nine countries across Asia, Europe, and the United States. GlobalWafers has an absolutely comprehensive product portfolio to accelerate the development of new technologies and new products and to continue its focus on serving customers so as to create more value for customers, shareholders and staff.

	Wafer Diameter (Inches)				End-applications				
	<6"	6"	8"	12"					
Annealed Wafer			✓	✓	Memory	LCD Driver	Analog/Logic IC		
EPI Wafer (Epitaxial)	✓	✓	✓	✓	Power Device	Automobile	MPU/MCU	CMOS Image Sensor	
Polished Wafer	✓	✓	✓	✓	Communication	Power Device	Analog/Logic IC	Memory	
Diffused Wafer	✓	✓			Automobile	Electricity	Aerospace		
Non-polished Wafer	✓	✓	✓		Discrete Device				
FZ Wafer (Float Zone)	✓	✓	✓		Medical Equipment	Wind Turbine	High Speed Rail	Automobile	
SOI Wafer (Silicon on Insulator)	✓	✓	✓	✓	High Voltage Power	MEMS Sensor CMOS	CMOS	RF Device	Photonics
SiC Wafer (Silicon Carbide)	✓	✓	✓		Automobile	High Voltage Power	High Speed Rail	Wind Turbine	
GaN/Si, GaN/SiC		✓	✓		Solar Inverter	Power Supplies	RF Power		

GlobalWafers has improved its operating performance by strengthening its resource integration benefits via strategic industry alliances and foreign reinvestments in order to improve business performance, actively advance and gain a better position, and expand its business management deployment with the group's business model in a way that prioritizes shareholder equity maximization. GlobalWafers will continue to cultivate its existing core technologies, further implement product diversification and enterprise diversification operations, and actively increase its global market share in order to advance its global leading position in the wafer manufacturing field.



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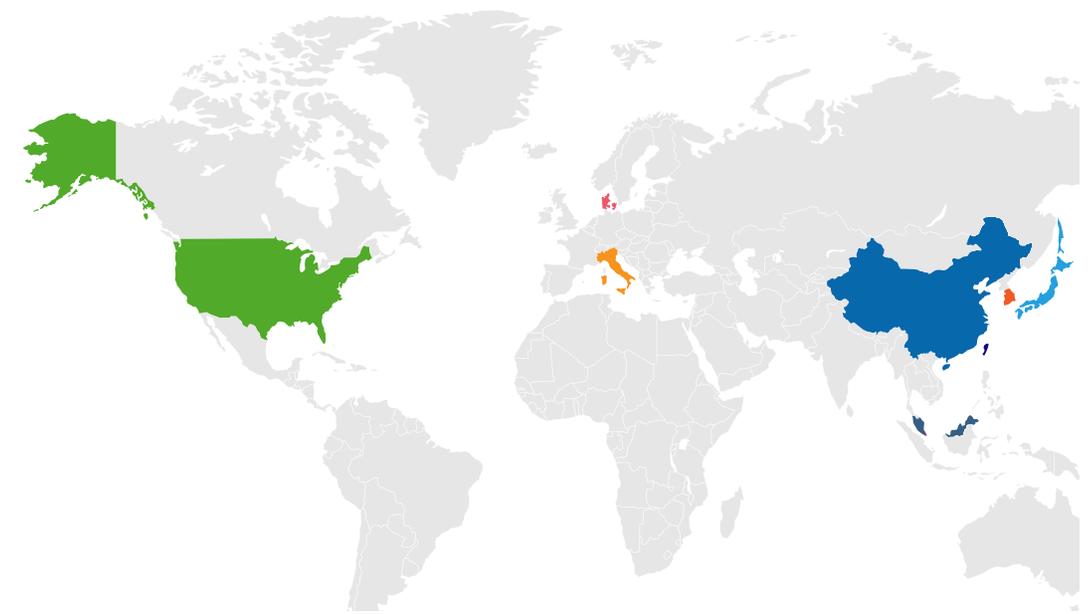
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### Basic Info of GlobalWafers

<b>Company Name</b>	GlobalWafers Co., Ltd.
<b>Date of Establishment</b>	October 18, 2011
<b>Capital</b>	NT\$4.781 billion <sup>Note</sup> Note: The Company has completed the change of registration on April 19, 2024, and the paid-in capital is updated to NT\$4.781 billion.
<b>Main Product and Technology</b>	3-inch to 12-inch Silicon Wafer
<b>No. of Employees *</b>	Taiwan: 1,701 employees; overseas: 5,604 employees
<b>Chairperson &amp; CEO</b>	Doris Hsu / Hsiu-Lan Hsu
<b>President</b>	Mark Lynn England
<b>Headquarters</b>	Hsinchu Science Park, No. 8, Industry East 2nd Road, East District, Hsinchu City, 300
<b>Countries of Operation</b>	Taiwan, China, Japan, South Korea, Malaysia, United States, Italy, Denmark, Singapore

The number of employees is based on statistical data as of December 31, 2023

The operational bases include locations in Taiwan, China, Japan, South Korea, Malaysia, the United States, Italy, Denmark, and Singapore. At present, its products are mainly sold in Asia, Europe, and the Americas. GlobalWafers has global and local supply advantages, can flexibly allocate global production capacity and shipments, and is a trustworthy partner of our clients.



<b>01</b>	<b>Taiwan(GlobalWafers Headquarters) :</b> • GlobalWafers Hsinchu Plant • GlobalWafers Zhunan Plant • GlobalWafers Taisil Branch • Crystalwise Technology Inc.	<b>06</b>	<b>US :</b> • GlobiTech Incorporated. • MEMC LLC • GlobalWafers America, LLC
<b>02</b>	<b>Mainland China :</b> • Kunshan Sino Silicon Technology Co., Ltd. • Shanghai Sawyer Shenkai Technology Material Co., Ltd. • Yuan Hong Technical Materials Ltd.	<b>07</b>	<b>Italy :</b> • MEMC Electronic Materials S.p.A.
<b>03</b>	<b>Japan :</b> • GlobalWafers Japan Co., Ltd. • MEMC Japan Ltd.	<b>08</b>	<b>Denmark :</b> • Topsil GlobalWafers A/S
<b>04</b>	<b>South Korea :</b> • MEMC Korea Company	<b>09</b>	<b>Singapore :</b> • GlobalWafers Singapore Pte. Ltd.
<b>05</b>	<b>Malaysia :</b> • MEMC Electronic Materials Sdn. Bhd.		

### Participation in External Associations

Association/organization	Participant	Member	Role
Taiwan Semiconductor Industry Association		●	
SEMI	●	●	Director
SEMI Silicon Manufacturers' Group	●	●	Vice Chair
Semiconductor Climate Consortium		●	Founding member
Japan Society of Newer Metals		●	
Federation of Malaysian Manufacturers (FMM)		●	
Malaysian Employers Federation (MEF)		●	
National Institute of Occupational Safety & Health (NIOSH)		●	
Local Industrial Association		●	
The Korea Chamber of Commerce & Industry		●	
Korea Environmental Preservation Association		●	
Korea Industrial Safety Association		●	
Korea Fire Safety Association		●	
High Power Device application and Research Alliance		●	
The Allied Association for Science Park Industries		●	Director
Institute of Internal Auditors (IIA)-Taiwan Chapter		●	
Computer Audit Association		●	
Taiwan Business Council for Sustainable Development		●	
Taiwan Compound Semiconductor and Equipment Industry-Academia Alliance	●	●	Chair
Taiwan Institute of Chemical Engineers		●	
Spring Foundation of National Chiao Tung University			Director

Association/organization	Participant	Member	Role
Taiwan Space Agency			Director
Korean Nurses Association		●	
Local Emergency Planning Committee (LEPC)		●	
Sherman Safety Leaders Forum		●	
Sherman HR Networking Team		●	
Kiyohara Industrial Park Association	●	●	Director
SEMI Electronic Materials Group	●	●	
SEMI Test Method Task Force	●	●	
Japan Society of Abrasive Technology	●	●	
RE100		●	
Semi Standards	●	●	
Korea Semiconductor Industry Association		●	
Daejeon Chungnam Enterprises Federation		●	
Samsung Electronics Association of Partnership		●	
SEMI Silicon Wafer	●	●	
SEMI Compound Semi Wafer	●		
SEMI SOI Task Force	●		
SEMI SOI Governing Council	●	●	
University of Arkansas MSEN IAB (Industrial Adv. Board)	●		
University of Illinois-Chicago IAB	●		



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## Company Chronology

### Development Profile

2011/10	Establishment of GlobalWafers Co., Ltd. (carved out from SAS semiconductor business unit)
2012/04	Acquired all the semiconductor silicon wafer-related business in the subsidiaries of the Japanese Covalent Materials Corp.
2013/08	ISO 14001 Certified
2013/12	Taiwan Intellectual Property Management System (TIPS) Certificate approved
2013/12	2013 Occupational Health initial mark certified by Ministry of Health and Welfare
2014/07	TS16949:2009 Quality Assurance Certificate granted
2014/09	IPO
2014/10	Emerging Stock Listing
2015/09	Listed on TPEX on September 25, 2015
2016/07	The acquisition of the semiconductor business of Topsil Semiconductor Materials A/S in Denmark ("Topsil")
2016/08	Occupational health and safety management system OHSAS 18001: 2007 certified
2016/08	Certified by TOSHMS/CNS 15506: 2011 Taiwan Occupational Health and Safety Management System Certification Passed
2016/08	ISO 14001:2015 Certified
2016/12	Acquisition of SunEdison Semiconductor Limited
2017/04	Ranked in the top 20% of all listed OTC companies in the 4th corporate governance appraisal by the Securities and Futures Institute
2017/05	Handled cash capital increase via new share issuance to participate in the issuance of overseas depository receipts
2017/07	IATF 16949: 2016 Certification
2018/04	Ranked in the top 20% of all listed OTC companies in the 3rd corporate governance appraisal by Securities and Futures Institute
2018/06	Passed the Cleaner Production Assessment System of the Green Factory Label
2018/07	Passed the 2017 Science Park R&D Intensive Industry-Academia Cooperation Project. Developed excellent dynamic and high breakdown voltage performance using 6 inch E-mode GaN on Novel SOI HEMT technology.

2019/05	Ranked in the top 5% of all listed OTC companies in the 5th corporate governance appraisal by the Securities and Futures Institute
2019/10	Awarded the green factory label from the Industrial Development Bureau
2020/02	Merged Taisil Electronic Materials Corp. as the Taisil Branch
2020/04	Ranking in the top 5% of all listed OTC companies in the 6th corporate governance appraisal by Securities and Futures Institute
2020/09	Certified by TOSHMS/CNS 45001: 2018 Taiwan Occupational Health and Safety Management System Certification Passed
2021/03	GlobalWafers was rated with a long-term issuer's credit rating of "twAA-" and short-term issuer's credit rating of "twA-1+;" with the outlook of "stable" by Taiwan Ratings.
2021/04	Ranked in the top 5% of all listed OTC companies in the 7th corporate governance appraisal by the Securities and Futures Institute
2021/05	Issued the 1st tranche of unsecured common corporate bonds
2021/05	Issued its debut unsecured Euro convertible bond offering of US\$1 billion
2021/08	Issued the 2nd tranche of unsecured common corporate bonds
2021/10	Voluntarily committed to using 100% renewable energy for all subsidiaries under the Group by 2050.
2022/03	GlobalWafers was confirmed with a long-term issuer's credit rating of "twAA-" and short-term issuer's credit rating of "twA-1+;" with the outlook of "stable" by Taiwan Ratings.
2022/04	Ranked in the top 5% of all listed OTC companies in the 8th corporate governance appraisal by the Securities and Futures Institute
2022/10	Formally joined the RE100 Initiative, reaffirming the commitment to use 100% renewable energy by 2050
2023/03	GlobalWafers was confirmed with a long-term issuer's credit rating of "twAA-" and short-term issuer's credit rating of "twA-1+;" with the outlook of "stable" by Taiwan Ratings.
2023/04	Ranked in the top 5% of all listed OTC companies in the 9th corporate governance appraisal by the Securities and Futures Institute
2023/04	GlobalWafers' subsidiary, Kunshan Sino, acquired 100% of Shanghai Sawyer Shenkai Technology Material Co. Ltd.'s equity on April 23, 2023, and completed the equity transfer.
2023/11	GlobalWafers swapped shares with Crystalwise Technology Inc. and acquired 100% of its equity on November 1, 2023.



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## Award Record



2011/12

Awarded the Taiwanese Entrepreneur President Excellence Award from the 29th Chinese Professional Management Association



2012/09

The parent company Sino-American Silicon's acquisition of Japan's Covalent was awarded the MAPECT Taiwan's 2012 Most Representative M&A Excellence Award.



2013/12

Awarded Healthy Work Environment Label



2016/06

Recognized for excellent performance in energy conservation by the Bureau of Energy, MOEA



2016/08

Passed the TOSHMS/CNS 15506:2011 certification



2016/08

Passed the ISO14001:2015 certification.



2016/08

Passed the Occupational Safety and Health System OHSAS 18001:2007 certification.



2017/05

Received the Excellent Vendor Award from HHGrace.



2017/06

Received the Front End Direct Materials Supplier of the Year Award from ON Semiconductor.



2017/07

Passed the IATF 16949:2016 certification.



2017/12

VP C.W. Lee awarded certificate of appreciation from SEMI SMG



2017/12

The acquisition of SunEdison Semiconductor Limited was honored with the Most Representative Award by MAPECT Taiwan, along with the Best Cross-border M&A Award.



2018/01

GlobalWafers received The Asset Triple A Country Award Taiwan-Best GDR in 2017.



2018/06

Passed the Cleaner Production Assessment System of the Green Factory Label certification.



2018/11

Awarded 1 Gold Tower, 2 Silver Towers & 1 Bronze Tower from Corporate Synergy Development Center on the 31st OCC competition



2018/12

Awarded Excellent President Award from 36th Chinese Professional Management Association



2019/01

GlobalWafers Hsinchu Plant passed the golden award certification for Green Building.



2019/05

Awarded 2019 Happy Enterprise Award of Technology Industries



2019/05

Ranked in the top 5% of all listed OTC companies in the 5th corporate governance appraisal by the Securities and Futures Institute



2019/07

Awarded the Outstanding Cooperation Supplier Award from HHGrace



2019/10

Certified with the Green Factory Label by the Industry Development Bureau



2019/11

SGS ISO 45001 Plus Award



2019/12

Received the Golden Tower Award of the "2019 Taiwan Continuous Improvement Award" organized by the Corporate Synergy Development Center.



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<b>2019/12</b>	<b>2020/04</b>	<b>2020/09</b>	<b>2020/09</b>	<b>2020/09</b>	<b>2020/12</b>	<b>2021/03</b>
The materials from the subsidiary of GlobalWafers, Taisil Electronic, received the Golden Tower Award of the "2019 Taiwan Continuous Improvement Award" organized by the Corporate Synergy Development Center.	Ranking in the Top 5% among TPEX-listed companies in the 2019 Corporate Governance Evaluation of sixth term	Enthusiastically assisted in the 2020 Hsinchu Science Park Industrial Safety and Environmental Protection Month Event	Certified by CNS 45001: 2018 Taiwan Occupational Health and Safety Management System Certification Passed	GlobalWafers' Hsinchu and Zhunan plants both won the 2020 Annual Waste Reduction and Circular Economy Outstanding Enterprise Award	Received the Golden and Silver Tower Award in "2020 Taiwan Continuous Improvement Awards" organized by the Corporate Synergy Development Center.	The Utsunomiya Factory (MJL) was awarded the "Eruboshi" label for businesses promoting female participation and career advancement in the workplace.
<b>2021/04</b>	<b>2021/05</b>	<b>2021/11</b>	<b>2021/11</b>	<b>2021/12</b>	<b>2021/12</b>	<b>2022/01</b>
Ranking in the Top 5% among TPEX-listed companies in the 2020 Corporate Governance Evaluation of the seventh term	Ranked among the top 100 companies by Commonwealth Magazine in 2020	Awarded the Copper Award of the "Third Term of National Enterprise Environmental Protection Award" from the Environmental Protection Administration, Executive Yuan	Awarded the Best Trading Contribution in the 2021 "Awards for Excellent Trading Businesses" from the Bureau of Foreign Trade, MOEA	Mr. Ming-Hui Chien, CFO, was awarded the "Excellent Manager Award - CFO" from the 39th Chinese Professional Management Association	Received the Golden Tower Award of the "2021 Taiwan Continuous Improvement Award" organized by the Corporate Synergy Development Center.	Both the Hsinchu Plant and Zhunan Plant received "the Badge of Accredited Healthy Workplace" by Health Promotion Administration, Ministry of Health and Welfare
<b>2022/04</b>	<b>2022/04</b>	<b>2022/05</b>	<b>2022/09</b>	<b>2022/11</b>	<b>2022/11</b>	<b>2022/11</b>
Awarded as 2021 Supplier Excellence Award by Texas Instruments (the picture below is last year's picture, please help to redesign the trophy picture because there is no picture)	Ranking in the Top 5% among TPEX-listed companies in the 2021 Corporate Governance Evaluation of eighth term organized by Securities and Futures Bureau	Ranked among the top 100 companies by Commonwealth Magazine in 2021	Received the Outstanding Supplier Award from HHGrace, Shanghai	Chairperson, Hsiu-Lan Hsu, was ranked among the top 20 of the 2022 Asia's Power Business List by Forbes Asia by Forbes Magazine	Won the Taiwan Corporate Sustainability Awards	Won the 2022 National Enterprise Environmental Protection Bronze Award



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2022/12

Won three Silver Tower Awards for the "2022 Taiwan Continuous Improvement Competition" held by the Corporate Synergy Development Center



2022/12

Mr. Huang, Chun-Rong, VP of manufacturing in Taisil Branch, was awarded the "Excellent Manager Award – Manufacturing Manager" from the 40th Chinese Professional Management Association



2022/12

Zhunán Plant was awarded as the 2022 Energy Saving Excellence Award for its intensive cultivation in green production process.



2022/12

GlobalWafers elected in "2022 Taiwan Best-in-Class 100" by Foreign Investors



2023/01

Won the Best Front-end Supplier Award from NEXPERIA



2023/01

Won the Best Supplier Award from Diodes Incorporated



2023/04

Recognized as one of the top 5% in the "Corporate Governance Evaluation" category organized by the Taipei Exchange, ranking in the top 5% for five consecutive years.



2023/05

Listed among the top 100 companies in the 2023 CommonWealth Magazine's "Top 2000 Enterprise Survey" of 2022



2023/06

Chairperson, Hsiu-Lan Hsu, won "EY World Entrepreneur of The Year (2023)" from Ernst & Young



2023/06

Acknowledged by Bosch 2023 Global Supplier Award



2023/06

Elected continuously as a constituent of the FTSE4Good Index Series



2023/08

Chairperson, Hsiu-Lan Hsu, was awarded as the "Best Female CEO in Public Listed Companies in Taiwan of the 2nd Term" by Harvard Business Review, Traditional Chinese Edition



2023/09

Named "2023 Taiwan Best-in-Class 100" by Foreign Investors



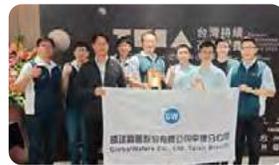
2023/10

GlobalWafers Taisil Branch Won the Excellence Award in the "Best Practice Competition on Prevention of Ergonomic Hazards in the Workplace"



2023/11

Won 2023 Taiwan Corporate Sustainability Award



2023/11

Won two "Silver Tower Awards in the Unity Category" of Taiwan Continuous Improvement Awards in 2023



2023/11

Won the "National Enterprise Environmental Protection Award of the 5th Term"



2023/12

Chairperson, Hsiu-Lan Hsu, received the "National Achievement Award for Excellence" by Chinese Professional Management Association; Liang-Ching Chen, Vice President of Engineering and R&D of GlobalWafers Taisil Branch, was awarded the "National Outstanding Manager Award"



2023/12

Honored with the Excellent Award in "2023 Best Equality Workplace" in Hsinchu Science Park



2023/12

Awarded by TSMC as 2023 Best Carbon Reduction Partner

# Sustainable Management

## Corporate Sustainability Policy

GlobalWafers is a world-leading supplier of semiconductor wafers, continuously providing high-quality products to meet our customers' needs. GlobalWafers adheres to the core values of people, integrity, passion, excellence and innovation, and proactively practices sustainable development. GlobalWafers pursues operational performance while taking into account the interests of our stakeholders. We follow the global sustainability trends and consider their relevance to our core business. With incorporating environmental, social, and corporate governance factors into the company's policies, management system, and operational plans, GlobalWafers is committed to achieving responsible growth and create sustainable values for the society.

Strategies	Implementation Guidelines
<b>Implement Corporate Governance</b>	GlobalWafers regards integrity as our core corporate value and complies with the law and ethical principles. We establish an effective framework for a sound corporate governance and actively balance the interests of our stakeholders, ensuring the transparency of sustainable information disclosure, and fulfilling corporate citizenship responsibilities.
<b>Develop Sustainable Environment</b>	GlobalWafers makes our green commitment to address the challenges of climate change. GlobalWafers upholds environmental regulations and international standards, dedicating efforts to improve energy efficiency, adopt renewable energy, purchase carbon offset products, support carbon removal projects, use recycled materials with low environmental impact, implement circular economy practices, construct a green supply chain, and take measures such as waste reduction and pollution control to achieve GlobalWafers' environmental sustainability goals.
<b>Establish Friendly Workplace</b>	Employees are GlobalWafers' most valued partners. GlobalWafers adheres to a people-oriented philosophy, following international human rights conventions and related regulations, striving to create a diverse, equal, safe, and dignified working environment. We emphasize talent development, providing effective training programs to foster career skills which are conducive to the development of employees' careers, and establishing open communication channels for our employees.
<b>Preserve Social Welfare</b>	GlobalWafers continues to engage in community participation, caring for the disadvantaged in rural areas, and encouraging group companies and employees to participate in events regarding social care and environmental conservation. By leveraging our expertise and influence, GlobalWafers responds to the United Nations Sustainable Development Goals and devotes itself to realizing the vision of social well-being.

## Sustainable Organization

GlobalWafers' Board of Directors has passed the "[Sustainable Development Best Practice Principles](#)" as a gesture to declare the formidable determination of our highest management body in the implementation of sustainable corporate development. We hope to impact the industry using our expansive participation, awareness, and concerted efforts toward a sustainable society. To strengthen and implement sustainable governance, GlobalWafers established the "Corporate Sustainable Development Committee" in 2017. It is the highest-level sustainable development decision-making center within the Company and reports to the Board of Directors on a regular basis. The Corporate Sustainable Development Committee is composed of the executives of various departments and is chaired by Chairperson, leads the formulation of the Company's corporate social responsibility and sustainable development directions and goals. The Chief Financial Officer serves as director general and is responsible for coordinating related affairs of the Committee. The Company has an Audit Office responsible for supervision. Additionally, the Company has also established the Audit Committee, Remuneration Committee, and Nomination Committee to assist in overseeing related affairs, enhancing the functions of the Board of Directors and corporate governance.

To implement various ESG initiatives, the Corporate Sustainability Committee covers three aspects: environmental, social, and governance. Based on business functions, five subcommittees—the "Sustainable Operations Subcommittee," the "Green Manufacturing Subcommittee," the "Sustainable Supply Chain Subcommittee," the "Social and Corporate Care Subcommittee," and the "Corporate Governance and Risk Management Subcommittee"—were formed. Each subcommittee is led by the executives of various units to formulate related strategies and management policies. They work on cross-departmental integration and execution of relevant issues, as well as reviewing implementation effectiveness and making continuous improvements. Regarding their corresponding stakeholders, the subcommittees aim to seek various communication and engagement channels to understand stakeholders' issues of concern and expectations for the corporate governance, environmental and social aspects of GlobalWafers. Through the Corporate Sustainable Development Committee, the Company promotes the continuous implementation of its sustainability commitments and ESG strategies. The Corporate Sustainable Development Committee is under the supervision of the Board of Directors. In addition to reporting to the Board of Directors every year on the committee's implementation status, setting goals, and implementation performance, it also reports to the Board of Directors quarterly on the trends in laws and policies on environmental issues and implementation performance data (the most recent report to the Board was on May 7, 2024), and the Sustainability Report is prepared and approved by the Board of Directors every year.



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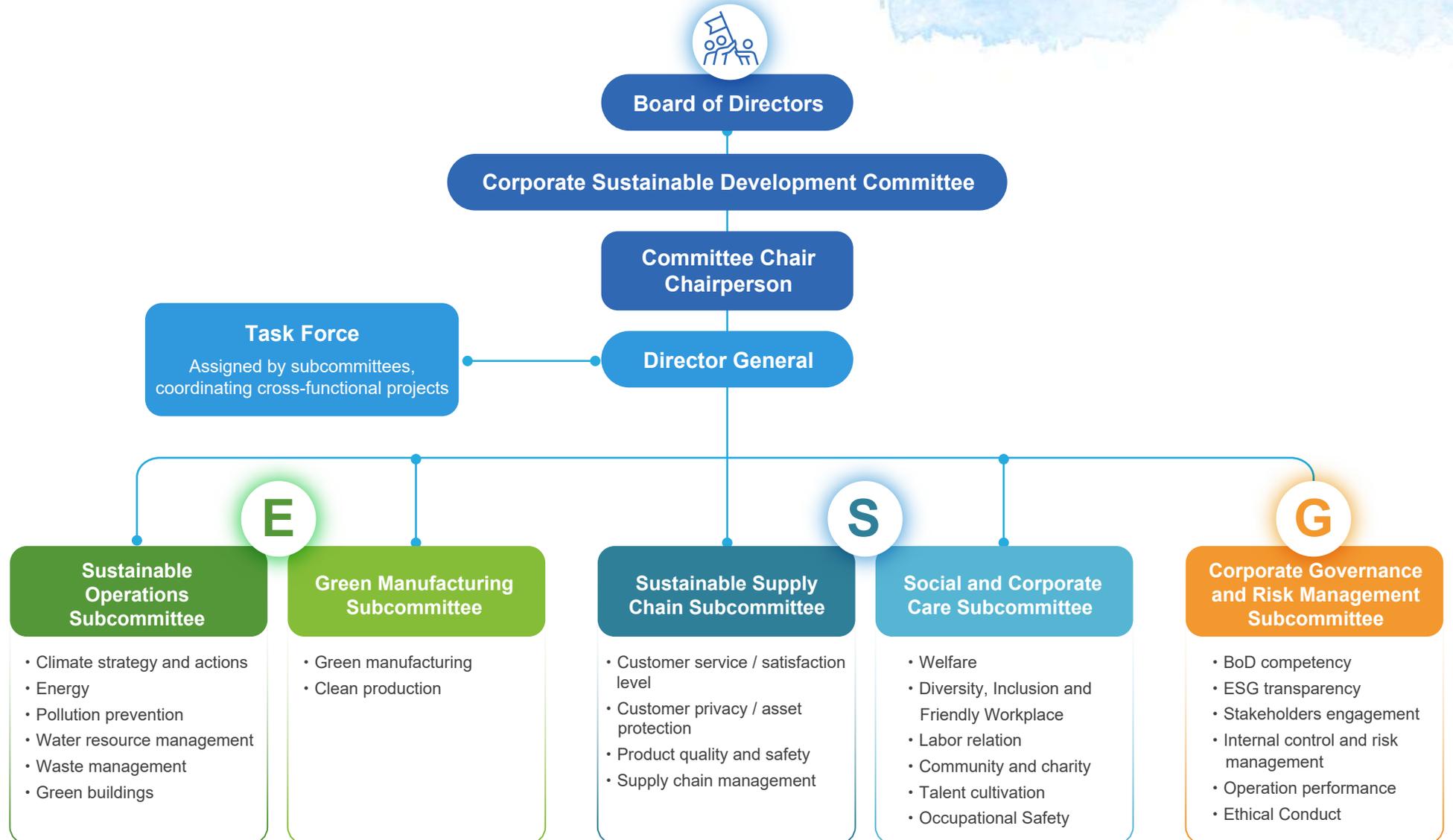
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## GlobalWafers Corporate Sustainable Development Committee



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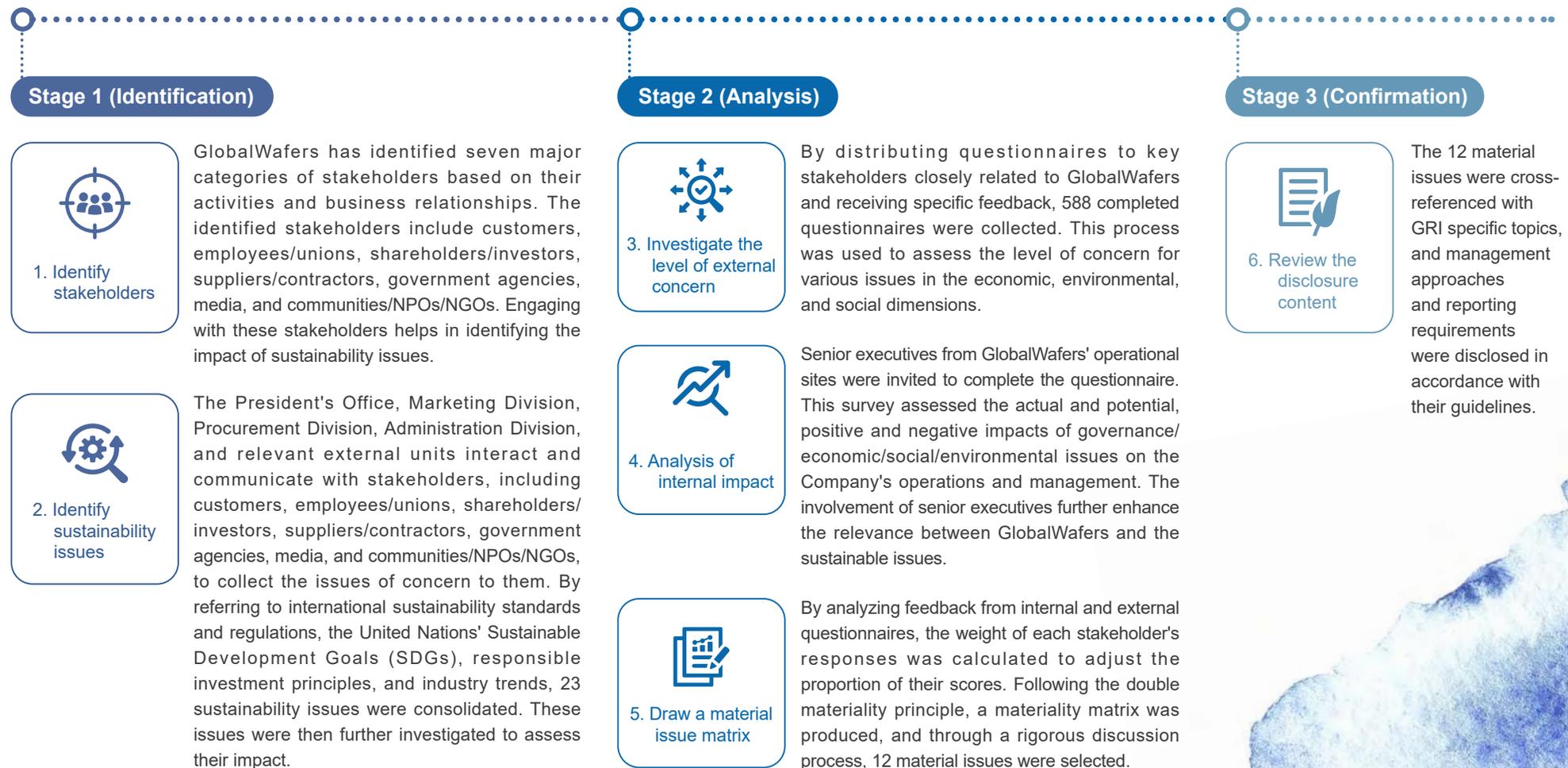
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## Material Issues and Stakeholder Engagement

In compliance with the latest version of the GRI Standards (2021) and with reference to the material issues of global sustainability-related guidelines, the Corporate Sustainable Development Committee discussed and identified 23 sustainability issues. Using the double materiality principle, which considers the actual/potential impact and positive/negative assessments, GlobalWafers conducted surveys and questionnaires covering social, environmental, and people dimensions and distributed them to internal and external stakeholders closely related to the Company (including customers, employees/unions, shareholders/investors, suppliers/contractors, government agencies, media, communities/NPOs/NGOs) to assess and rank these issues. This process led to the identification of 12 material sustainability issues for GlobalWafers in 2023, with management guidelines for each material issue were formulated accordingly. The Corporate Sustainable Development Committee reports the result of materiality analysis and the status of stakeholder engagement to the Board of Directors annually.

### Materiality Analysis



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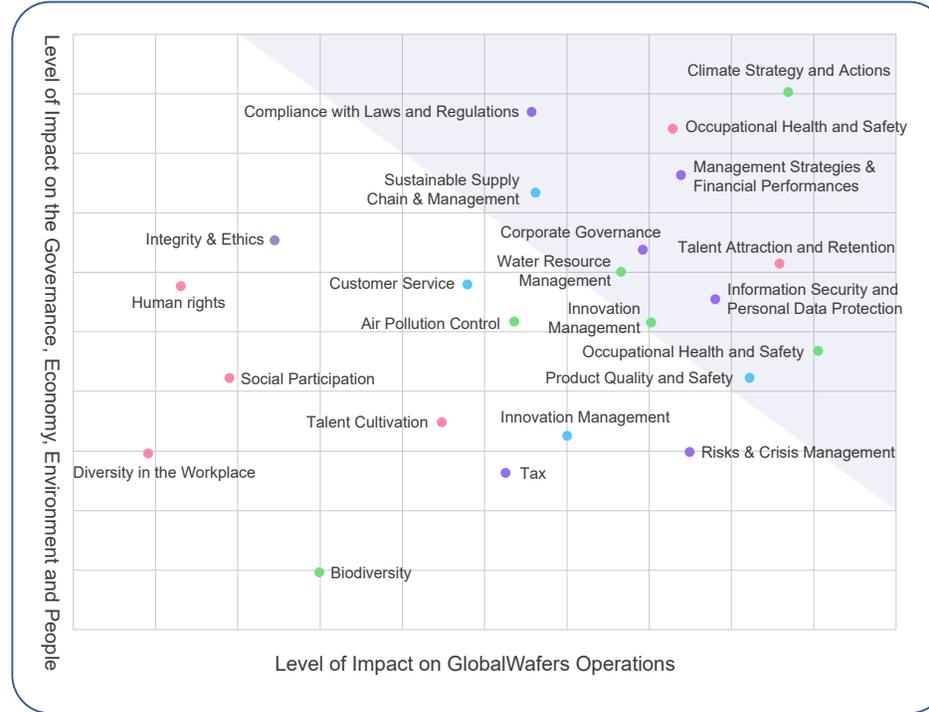
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Material Topics Matrix



GlobalWafers conducted an online survey to collect feedback from stakeholders. In 2023, a total of 588 valid questionnaires was received, including 192 from employees, 376 from suppliers/contractors, 6 from customers, 8 from shareholders/investors, 4 from government agencies, 1 from community/NGOs/NPOs, and 1 from media. A total of 96 valid questionnaires was collected by the Group's senior executives. After evaluation and analysis, four new material issues were added in 2023 compared to the previous year: "Corporate Governance," "Sustainable Supply Chain and Management," "Information security and Personal Data Protection," and "Energy Management."

Aspects	Sustainability Topic
Governance Aspect	Corporate Governance
	Management Strategies & Financial Performances
	Integrity & Ethics
	Risks & Crisis Management
	Compliance with Laws and Regulations
	Information Security and Personal Data Protection
	Tax

Aspects	Sustainability Topic
Economic Aspect	Innovation Management
	Product Quality and Safety
	Customer Service
	Sustainable Supply Chain & Management

Aspects	Sustainability Topic
Social Aspect	Occupational Health and Safety
	Talent Cultivation
	Talent Attraction and Retention
	Human rights
	Diversity in the Workplace
Social Participation	

Aspects	Sustainability Topic
Environmental Aspect	Climate Strategy and Actions
	Energy Management
	Waste Management
	Water Resource Management
	Air Pollution Control
Biodiversity	



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Material Issues in 2022 and 2023

Year	1	2	3	4	5	6	7	8	9	10	11	12
2023	Climate Strategy and Actions	Compliance with Laws and Regulations	Occupational Health and Safety	Management Strategies & Financial Performances	Talent Attraction and Retention	Water Resource Management	Waste Management	Product Quality and Safety	Sustainable Supply Chain & Management	Corporate Governance	Energy Management	Information Security and Personal Data Protection
2022	Risks and Opportunities of Climate Change	Compliance with Laws and Regulations	Occupational Health and Safety	Management strategies & financial goals	Talent Cultivation	Water Resource Management	Waste Management	Product Quality	Customer Service	Financial Performance & Sound Finance	Reduction at the source	

Stakeholder Engagement and Responses

Primary Stakeholders	Significance to Globalwafers	Communication Channel	Communication Frequency	Issues of Concern	Our Responses
Customers	Company's main source of revenue	Operation meetings	Occasional	<ul style="list-style-type: none"> <li>• Customer Service</li> <li>• Product Quality and Safety</li> <li>• Integrity &amp; Ethics</li> <li>• Information Security and Personal Data Protection</li> <li>• Innovation Management</li> </ul>	<ul style="list-style-type: none"> <li>• Adhere to the spirit of "customer satisfaction." The quality assurance unit must conduct interviews and propose corresponding improvement plans for customer survey items with lower satisfaction.</li> <li>• Actively understand customer voices. When customers make various demands, the organization must evaluate and discuss feasible solutions to "meet the requirements."</li> </ul>
		Annual customer satisfaction survey	Once a year		
		Customer audit	Occasional		
		Appeal/complaints telephone or email	Occasional		



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Primary stakeholders	Significance to GlobalWafers	Communication channel	Communication frequency	Issues of concern	Our responses
Employees/ Union	Employees are the Company's most important asset. Only by taking good care of employees can the two grow synergistically	Internal website and emails	Occasional	<ul style="list-style-type: none"> <li>• Occupational Health and Safety</li> <li>• Human rights</li> <li>• Talent cultivation</li> <li>• Talent Attraction and Retention</li> <li>• Diversity in the Workplace</li> <li>• Management Strategies &amp; Financial Performances</li> </ul>	<ul style="list-style-type: none"> <li>• We believe that employees are GlobalWafers' most important assets, and only through a good and long-term labor-management relationship can we create sustainable development for the organization. We have formulated formal provisions and continued to provide bilateral communication via an internal website, a complaint mailbox, labor conferences, and face-to-face meetings to ensure the employees' voices are valued.</li> <li>• To attract and retain outstanding talents, the Company offers competitive salaries and sets the salary adjustment standards yearly according to the relevant data.</li> <li>• The Company has staff restaurant to provide meals for employees. In addition to the statutory labor and health insurance, the Company also provides group insurance superior to that required by the law. It offers relevant insurance to enhance employees' protection and protect their right to work depending on the social development circumstances. For example: providing epidemic prevention insurance to employees during the epidemic. Moreover, we have also established a welfare committee and additional employee care programs according to the law. They include employee travel, festival allowances, health examinations, and community activities. Employees can fully participate in the Company's welfare improvement and innovation process and help the Company to formulate creative welfare measures.</li> <li>• The Company adheres to the concept of "Ensuring the Safety and Health of the Employee Work Environment" and uses the organization system operation to create a healthy and safe working environment for employees.</li> </ul>
		Company notice board	Occasional		
		Labor-management consultation meetings (Taiwan)	Four meetings per year		
		Complaint boxes or hotlines	Occasional		
		Performance appraisal interviews	Once a year		
		All organizational meetings	Occasional		
		Union member meetings (Japan, Korea, Italy, USA)	Occasional		
Shareholders/ Investors	All shareholders are investors of the Company, and the information that should be disclosed shall be handled in a fair manner	Shareholders' meetings, institutional investors conferences, domestic and foreign investment institute seminars, and face-to-face communication meetings.	In 2023, a total of 1 general shareholders' meeting, 4 earnings calls, and 7 investor conferences invited by domestic and international investment institutions were held.	<ul style="list-style-type: none"> <li>• Corporate Governance</li> <li>• Management Strategies &amp; Financial Performances</li> <li>• Integrity &amp; Ethics</li> <li>• Risks &amp; Crisis Management</li> <li>• Tax</li> <li>• Innovation Management</li> <li>• Climate Strategy and Actions</li> </ul>	<ul style="list-style-type: none"> <li>• Continue using our stable financial structure and rich management experience to practice performance management and operational improvement, improving overall operational performance.</li> <li>• Establish and strengthen close interaction and communication channels with investors, domestic and foreign media, cooperation, and shareholders.</li> <li>• Continue improving corporate governance performance and realize the commitment to sustainable operation.</li> <li>• Integrity management is achieved by compliance with laws and regulations. So, the Company has actively organized education and training and integrity management policy advocacy, promoting the integrity policy and its importance to directors and employees.</li> </ul>
		Company annual report	Once a year		
		Information released on the Company's official website, press releases, and the Market Observation Post System	Occasional		
		Collecting and replying to messages via telephone or emails	Occasional		



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Primary stakeholders	Significance to GlobalWafers	Communication channel	Communication frequency	Issues of concern	Our responses
Suppliers/ Contractors	They are the Company's partners and must maintain the same ideals as ours in order to provide services in line with our needs.	Operation meetings	Occasional	<ul style="list-style-type: none"> <li>• Integrity &amp; Ethics</li> <li>• Management Strategies &amp; Financial Performances</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce costs by implementing supplier localization.</li> <li>• Establish a supplier evaluation management process.</li> <li>• Formulate contractor management procedures and establish a contractor construction management system to manage all contractors who have entered the plants.</li> </ul>
		On-site audit	Occasional		
		Collecting and replying to messages via telephone or emails	Occasional		
Government Agencies	Maintain a smooth and positive relationship, and express the company's determination to comply with legal requirements	Correspondence of official documents, meetings (public hearings or conferences), and surveys are conducted to gather feedback	Occasional	<ul style="list-style-type: none"> <li>• Compliance with Laws and Regulations</li> <li>• Occupational Health and Safety</li> <li>• Climate Strategy and Actions</li> <li>• Waste Management</li> <li>• Water Resource Management</li> <li>• Air Pollution Control</li> <li>• Energy Management</li> </ul>	<ul style="list-style-type: none"> <li>• Regularly review the regulation contents, and keep abreast of the latest trends in regulations.</li> <li>• Participate in competent authority regulatory meetings and understand the requirements.</li> <li>• Provide industry opinions and feedback on government policies through industry association channels.</li> <li>• Cooperate with the competent authority for plant visits or unscheduled plant audits.</li> </ul>
		Communication through industry associations meetings or opinion survey	Occasional		
The Media	We establish a contact channel with the media to provide timely, accurate, fair, and objective industry and corporate news.	Releasing news We receive interviews by the media and provide timely industry information.	• Issues an average of 2 to 3 press releases per quarter	<ul style="list-style-type: none"> <li>• Climate Strategy and Actions</li> <li>• Management Strategies &amp; Financial Performances</li> <li>• Compliance with laws and regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Contact the media and let the press and related professionals understand the Company's industry and operating performances through interviews.</li> <li>• Issue a press release on revenue and financial reports.</li> <li>• Provide transparent information disclosure to comply with the completeness, real-time, and fairness principles.</li> </ul>
Community/ NPO/NGO	Establish good partnerships with communities/NPOs/NGOs, combining resources and strengths from both sides to use the invested resources effectively and create a more positive impact for people.	Meetings with communities/NPOs/NGOs Charity projects, volunteer activities Press releases Company website	Occasional	<ul style="list-style-type: none"> <li>• Social Participation</li> <li>• Climate Strategy and Actions</li> <li>• Risks &amp; Crisis Management</li> <li>• Air Pollution Control</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborate with public welfare organizations to care for and donate to local disadvantaged groups.</li> <li>• Adopt coastal clean-up initiatives and collaborate with local communities to organize environmental education tours, regularly encouraging employees to participate in environmental protection activities.</li> <li>• Collaborate with various community groups and non-profit organizations to support relevant social engagement projects, such as the promotion of arts and culture and the cultivation of technological talent.</li> </ul>

◉ GlobalWafers Material Issue Management Policy

Issue Aspects	Material Sustainability Issue	Management Policy	Management Approach	Value Chain Impact Boundary			Responsible Unit	Corresponding Chapter	Corresponding GRI Specific Topics	Corresponding SASB Standards
				Upstream	Operations	Downstream				
<b>Economic Aspect</b>	Corporate Governance	<ul style="list-style-type: none"> <li>Articles of Incorporation</li> <li>Corporate Governance Best Practice Principles</li> <li>Code of Ethical Conduct</li> <li>Rules of Board of Directors Meetings</li> <li>Audit Committee Charter</li> <li>Remuneration Committee Charter</li> <li>Nomination Committee Charter</li> <li>Board of Directors and Functional Committee Performance Evaluation Measures</li> <li>Rules for Election of Directors</li> <li>Rules Governing the Scope of Powers of Independent Directors</li> <li>Procedures for Handling Material Inside Information</li> <li>Governing Financial and Business Matters Between this Corporation and its Affiliated Enterprises</li> </ul>	<ul style="list-style-type: none"> <li>Established the Corporate Governance Officer to lead and supervise the President's Office in handling corporate governance-related affairs and assist directors in exercising their powers.</li> <li>Assist the Board of Directors in formulating policies for board diversity and independence.</li> <li>Assist directors in taking office, arranged continuing education courses for directors, and conducted the performance evaluation of the Board of Directors and functional committees.</li> <li>Keep track of the latest announcements and amendments of laws and regulations announced by the competent authorities to ensure the normal operation of the corporate governance system.</li> <li>Regularly update/announce the Company's operational and financial information, and hold quarterly institutional investor conferences to maintain smooth communication channels with shareholders and investors.</li> <li>Participate in important domestic and international evaluations, regularly review the performance of various corporate governance indicators, and continue to improve.</li> </ul>				President's office	1.1 Corporate Governance		



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				Upstream	Operations	Downstream				
Economic Aspect	Management Strategies & Financial Performances	<ul style="list-style-type: none"> <li>• Procedures for Handling Material Inside Information</li> <li>• Procedures for Lending Funds to Other parties</li> <li>• Procedures for Endorsement and Guarantee</li> <li>• Policies and Procedures for Financial Derivatives Transactions</li> <li>• Acquisition or Disposal of Assets Procedure</li> <li>• Regulations Governing the Preparation of Financial Statements</li> </ul>	<ul style="list-style-type: none"> <li>• Hold board meetings at least quarterly to confirm operational strategies and execution plans.</li> <li>• Continue to monitor market trends, expand production capacity, and diversify production sites to develop products that meet market demand and ensure ongoing profitability.</li> <li>• Regularly hold management meetings to review the operational performance of each production site and the implementation of annual plans, ensuring progress towards achieving targets.</li> <li>• Utilize various financing tools to maintain a sound financial structure, responding to market volatility and generate profits through stable operations.</li> <li>• Disclose financial information in accordance with International Financial Reporting Standards (IFRSs) recognized by competent authorities.</li> </ul>	●	●		President's Office, Finance Division, Accounting Division	1.2 Operation performance	GRI 201 Economic Performance	





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Economic Aspect	Compliance with laws and regulations	The Company has established the "Ethical Corporate Management Best Practice Principles " and "Procedures for Ethical Management and Guidelines for Conduct" as the main policy documents and the basis for practical operations.	<ul style="list-style-type: none"> <li>The Legal Affairs Office shall be responsible for formulating, supervising, and implementing the integrity management policy and prevention plan. We use the mail system management, access control, reporting system, legal compliance inventory, interview human resources &amp; intellectual property team (non-competition violation, unlawful infringement of business secret, bribe, and intellectual property infringement risks), and conduct investigations into specific cases. These efforts ensure that the company's operations comply with integrity management principles, and existing measures are reviewed during audits. The Legal Affairs Office reports the aforesaid implementation status to the Board of Directors every year.</li> <li>Each year, departments are required to complete a "Departmental Compliance Checklist" to ensure the completeness and accuracy of the information provided. This process confirms that employees understand and comply with applicable laws and regulations related to their work. If any deficiencies are identified, appropriate improvement plans will be developed and the results of these improvements will be tracked. The Compliance Unit will also take the initiative as needed to assist all departments in responding to regulatory changes by amending or establishing relevant internal procedures. When necessary, it will conduct education and training as well as awareness campaigns to ensure effective implementation of the compliance system.</li> <li>Regular inventory and education and training of personal data involved in business operations to ensure that the unit responsible for data collection, processing, and utilization of personal data follows the Personal Data Protection Act.</li> </ul>	●	●	●	Legal Affairs Office	1.1.2 Integrity & Ethics 1.1.4 Legal Compliance 1.3.2 Personal Data Protection	GRI 206 Anti-competitive Behavior (Ethical Integrity)	-



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				Upstream	Operations	Downstream				
Economic Aspect	Information Security and Personal Data Protection	The Company attaches great importance to information security and has established an information security policy that is reviewed at least once a year to reflect government regulations, information security incidents, information technology, and the development of the Company's business.	<ul style="list-style-type: none"> <li>The Chief Information Security Officer convenes information security meetings every six months to set the goals for a new round of improvement plans.</li> <li>Each quarter, the highest-ranking information or cybersecurity officers from each plant hold information security promotion meetings and continue improvement efforts.</li> <li>Establish the "Information Security Management Procedures Manual" and plan to implement the international information security standard (ISO 27001) in 2024.</li> </ul>		●	●	Chief Information Security Officer Information Security Division	1.3.1 Information security	-	-
	Product Quality and Safety	Based on compliance with the international quality system standard (IATF 16949) and meeting specific customer requirements, we aim to become the customers' first priority business partner.	Establish a quality management and environmental management system, with high-ranking executives regularly reviewing the performance of the management system and providing necessary decisions in a timely manner to improve system performance and respond to changes in material internal and external issues.		●	●	Quality Assurance Division Environmental Safety and Hygiene Unit	2.2 Product Quality 2.3 Customer Satisfaction	-	TC-SC-410a.1
	Sustainable Supply Chain Management	Work with suppliers in long-term partnerships to build and develop strong relationships, urging them to commit to responsible operational models regarding environmental, social, and corporate governance aspects.	<ul style="list-style-type: none"> <li>Procurement Management Procedures</li> <li>GlobalWafers Co., Ltd. Supplier Code of Conduct for</li> </ul>	●	●	●	Procurement Dept.	2.4 Sustainable Supply Chain & Management	GRI 204 Procurement Practices	TC-SC-440a.1



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				Upstream	Operations	Downstream				
Environmental Aspect	Climate Strategy and Actions	Continue to improve the GHG verification coverage of GlobalWafers Group's sites. Regularly conduct climate risk assessments to identify transformation opportunities, and keep abreast of international climate-related initiatives and standards (RE100, ISO 14068:2023, SBTi, etc.). Additionally, we actively participate in relevant climate initiative organizations (RE100, Semiconductor Climate Consortium (SCC)).	<ul style="list-style-type: none"> <li>The climate change governance and management framework of GlobalWafers consists of a three-tier management structure involving the Board of Directors, Corporate Sustainable Development Committee, and relevant executive teams. This structure facilitates the top-down control of operational status and related material issues.</li> <li>Review mechanism: monthly, quarterly, semi-annually, and annually.</li> <li>By increasing the verification coverage of the organization's greenhouse gas emissions (ISO 14064-1:2018), we can monitor the greenhouse gas emissions at our operational sites. This analysis helps identify the sources of greenhouse gas emissions within the organization and develop management strategies for the greenhouse gas emissions across the value chain.</li> </ul>	●	●	●	Environmental and Sustainable Development Committee	Climate Strategy and Actions/ Greenhouse Gas Inventory	GRI 305 Emissions	TC-SC-110a.1 TC-SC-110a.2
	Energy Management	Continue to increase the coverage of energy management systems (ISO 50001:2018) within the Group's operational factories. To achieve the RE100 goal, strategies such as building renewable energy power generation installations, signing supply contracts with local power companies, and purchasing external renewable energy certificates were adopted to increase the proportion of renewable energy use at GlobalWafers Group's sites.	<ul style="list-style-type: none"> <li>The climate change governance and management framework of GlobalWafers consists of a three-tier management structure involving the Board of Directors, Corporate Sustainable Development Committee, and relevant executive teams. This structure facilitates the top-down control of operational status and related material issues.</li> <li>Review mechanism: monthly, quarterly, semi-annually, and annually.</li> <li>The main energy-consuming equipment is monitored through the energy management system and its energy monitoring and measurement management procedures.</li> </ul>	●	●	●	Environmental and Sustainable Development Committee	3.1 Energy Management	GRI 302 Energy	TC-SC-130a.1



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Issue Aspects	Material Sustainability Issue	Management Policy	Management Approach	Value Chain Impact Boundary			Responsible Unit	Corresponding Chapter	Corresponding GRI Specific Topics	Corresponding SASB Standards
				Upstream	Operations	Downstream				
Environmental Aspect	Waste Management	Establish management procedures for industrial waste and disposal organizations	<ul style="list-style-type: none"> <li>• The climate change governance and management framework of GlobalWafers Co., Ltd. consists of a three-tier management structure involving the Board of Directors, Corporate Sustainable Development Committee, and relevant executive teams. This structure facilitates the top-down control of operational status and related material issues.</li> <li>• Review mechanism: monthly, quarterly, semi-annually, and annually.</li> <li>• Improve in-plant waste management processes through continuous monitoring of the environmental management system (ISO 14001:2015) and the periodic audits of waste disposal organizations.</li> </ul>	●	●		Environmental and Sustainable Development Committee	3.3 Waste Management	GRI 306 Waste	TC-SC-150a.1
	Water Resource Management	Continuously monitor the water withdrawal status and special climatic disasters (flood, tsunami, drought, etc.) We examine the water withdrawal status of the Company's operating locations according to the GRI standards and the Aqueduct Water Risk Atlas. For plants with an assessment result of medium or higher risk, the water withdrawal sources and possible risk impacts shall be monitored.	<ul style="list-style-type: none"> <li>• The climate change governance and management framework of GlobalWafers Co., Ltd. consists of a three-tier management structure involving the Board of Directors, Corporate Sustainable Development Committee, and relevant executive teams. This structure facilitates the top-down control of operational status and related material issues.</li> <li>• Review mechanism: monthly, quarterly, semi-annually, and annually.</li> <li>• Increase the water recycling ratio of the operating plants or change the process design to reduce the water withdrawal volume from third parties and the water consumption volume in the production process.</li> </ul>	●	●	●	Environmental and Sustainable Development Committee	3.2 Water Resource Management	GRI 303 Water and Effluents	TC-SC-140a.1



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				Upstream	Operations	Downstream				
People Aspect	Talent Attraction and Retention	Regularly review the remuneration structure to maintain competitiveness in the talent market; establish a talent development system to train professional and management talents required by the Company.	<ul style="list-style-type: none"> <li>• Provide a welfare system that complies with laws and regulations and the needs of colleagues.</li> <li>• Enhance the career development of employees through succession planning and internal transfer or promotion.</li> <li>• Provide diverse labor-management communication channels for employees to freely make suggestions.</li> </ul>		●	●	Human Resources Unit Environmental Safety and Hygiene Unit	4.1 Human Resources 4.2 Talent Attraction and Retention 4.3 Talent Cultivation and Development	GRI 401 Employment GRI 405 Diversity and Equal Opportunity	TC-SC-330a.1
	Occupational Health and Safety	Formulate occupational health and safety policies and establish an occupational health and safety management system (ISO 45001)	Following ISO 45001 standards, establish a quality management and environmental management system, with high-ranking executives regularly reviewing the performance of the management system and providing necessary decisions in a timely manner to improve system performance and respond to changes in material internal and external issues.	●	●	●	Human Resources Unit Environmental Safety and Hygiene Unit	5.2 Occupational Health and Safety Worker Training 5.4 Occupational Disaster Management	GRI 403 Occupational Health and Safety	TC-SC-320a.1 TC-SC-320a.2





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### ⦿ Risk Management of GlobalWafers' Material Issues

GlobalWafers invites internal managers to participate in completing questionnaires, considering the potential risks and crises that may be encountered by each department and the overall enterprise in terms of sustainability issues. The impact and frequency of these material issues on operations are evaluated, and risks are categorized accordingly to facilitate corporate management.

### ⦿ The impact (risk) management for material issues in 2023 is as follows:

Material issues	Actual/potential and negative/positive impacts of GlobalWafers in economic, environmental, and people (human rights) aspects	Risk Scope	Risk Assessment		
			Likelihood	Severity	Risk Grade
<b>Corporate Governance</b>	By establishing a sound corporate governance structure and enhancing the functions of the Board of Directors, the Company can effectively form and execute comprehensive operational decisions and plans, ensuring stable operations. Additionally, improving the timeliness and transparency of information disclosure maintains open communication channels with regulatory authorities, shareholders, and other stakeholders. This approach reduces the risk of penalties for non-compliance with relevant regulations and mitigates the negative impact of information asymmetry on customer and investor confidence in the Company's operations.	Compliance Risk	4	3	Medium
<b>Management Strategies &amp; Financial Performances</b>	Pursue continuous profitability, maintain a sound financial structure, and make good use of the Company's economic scale and global presence to create long-term stable economic values and achieve the sustainable management goal of "responsible growth." Maintain a good credit rating to strengthen the confidence of shareholders and investors in the Company's operating performance. In addition, we make good use of profits to contribute to environmental sustainability, employee care, and social welfare to bring about positive influence.	Financial Risk	3	4	Medium
<b>Compliance with laws and regulations</b>	Implementing ethical corporate management and complying with applicable laws and regulations helps stabilize market competition, maintain corporate competitiveness, and protect the rights and interests of stakeholders.	Compliance Risk	2	4	Medium
<b>Information Security and Personal Data Protection</b>	The Company emphasizes the protection of information value to gain the trust of business partners and enhance economic value. The Company values privacy protection and has implemented a data leakage prevention system to maintain our competitive advantages and avoid impacts on human rights.	Operational Risk	3	4	Medium
<b>Product Quality and Safety</b>	High-quality and safe products help improve the Company's reputation, increase customer loyalty, and have a longer service life, reducing waste and resource consumption, and helping protect the health and safety of consumers. On the contrary, low-quality or unsafe products may lead to product recalls, wastes of resources, pollution and excess energy consumption. This can damage the Company's image and harm its revenue and profits.	Operational Risk	3	5	High



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Material issues	Actual/potential and negative/positive impacts of GlobalWafers in economic, environmental, and people (human rights) aspects	Risk Scope	Risk Assessment		
			Likelihood	Severity	Risk Grade
<b>Sustainable Supply Chain Management</b>	By continuously improving supplier quality, reducing costs, shortening delivery times, promoting sustainable development, and strengthening cooperative relationships with suppliers to maximize profits, positive impacts can be achieved in the economic aspect.	Operational Risk	2	4	Medium
<b>Climate Strategy and Actions</b>	The impact of extreme weather and increasingly stringent international carbon regulations (such as trade carbon tariffs and carbon leakage prevention) will bring significant operational challenges to businesses. This drives companies to adopt more proactive climate actions and response measures to meet the expectations of stakeholders. Achieving corporate sustainable development based on risk management, energy resource impact, and green production considerations involves complying with government regulations and customer requirements. This commitment includes improving energy resource efficiency, setting energy-saving targets to advance sustainable development, and reducing operational costs associated with related operational impacts, thus minimizing negative effects on the environment and the economy.	Environmental Risk	4	4	High
<b>Energy Management</b>	Extreme climates and high temperatures will affect the demand for electricity in the business operations of enterprises, increasing the cost of operating electricity. Forcing enterprises to take more active climate actions and countermeasures to respond to the expectations of stakeholders. Achieving corporate sustainable development based on risk management, energy resource impact, and green production considerations involves complying with government regulations and customer requirements. This commitment includes improving energy resource efficiency, setting energy-saving targets to advance sustainable development, and reducing operational costs associated with related operational impacts, thus minimizing negative effects on the environment and the economy.	Environmental Risk	4	5	Extreme
<b>Waste Management</b>	Promoting good waste management can effectively reduce the waste generated during the Company's operations. If the amount of recyclable or reusable waste disposed or the efficiency of reuse is enhanced, the related disposal costs can be reduced and the reuse of energy resources can be promoted. This will have a positive impact on GlobalWafers in terms of economy and environment.	Environmental Risk	3	4	Medium



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Material issues	Actual/potential and negative/positive impacts of GlobalWafers in economic, environmental, and people (human rights) aspects	Risk Scope	Risk Assessment		
			Likelihood	Severity	Risk Grade
<b>Water Resource Management</b>	Under the increasing impact of extreme weather, the issue of securing a stable and clean water supply (water resource security) has become a major concern for businesses. Downstream value chain partners are also concerned about whether climate disasters could disrupt business operations. This drives companies to propose reasonable and effective actions and response measures to address stakeholder concerns.	Environmental Risk	3	4	Medium
<b>Talent Attraction and Retention</b>	Failure to attract and retain sufficient talent may affect operational production and technological development. Negative impact on the economy.	Operational Risk	5	3	High
<b>Occupational Health and Safety</b>	Occupational health and safety management helps ensure the physical and mental health of employees, which will improve their productivity, morale and work efficiency and help reduce work interruption or absenteeism caused by health risks.	Operational Risk	3	4	Medium

**GlobalWafers Risk Assessment Scale**

Score		1	2	3	4	5
Likelihood		None in the past/next 10 years	Occurrence in the past/next 1 - 10 years	Occurrence in the past/next year	Occurrences in the past/next month	Occurrences in the past/next week
Severity	Loss amount (USD)	<100,000	100,000 - 1 million	1 million - 5 million	5 million - 10 million	>10 million
	Production disruption (time)	<1 hour	1 hour - 1 day	1 - 2 days	2 - 5 days	>5 days

# Climate Strategy and Actions

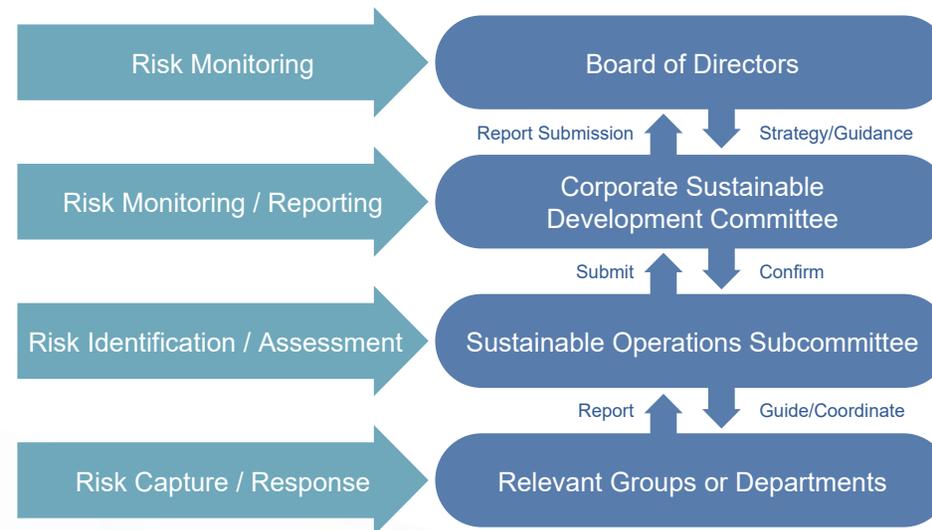
Climate change is one of the key environmental issues that the United Nations, governments, societies, and enterprises worldwide are most concerned about. The Financial Stability Board (FSB) established the Task Force on Climate-related Financial Disclosures (TCFD) to assist public and private sectors in developing relevant information disclosures, and provided a clear, comparable, and consistent set of guidelines for information disclosure in June 2017. Based on the promotion focus of FSC's "Corporate Governance 3.0 - Sustainable Development Roadmap", GlobalWafers strengthens the information disclosure in the sustainability report with reference to the TCFD framework, and identifies and assesses the risks and opportunities of climate change for the Company. The review and update are conducted every year. Disclose climate change-related information based on 4 core elements: governance, strategy, risk management, and metrics and targets.

## Governance Structure and Responsibilities

The Company has established the "Risk Management Policy and Procedures." The Board of Directors is the highest decision-making unit for risk management. The Audit Committee assists in supervising the risk management-related matters. Regarding the issue of climate change, the Board of Directors is responsible for supervising the Company's development strategies, short-, medium- and long-term goals, and overall management actions for climate-related risks and opportunities, as well as providing opinions and feedback. In consideration of the importance and particularity of the climate change issue, the Board of Directors supervises the Company's response strategies and the performance of key environmental indicators on a quarterly basis.

The "Corporate Sustainable Development Committee" is the highest-level climate risk and opportunity management organization in the world. It is composed of executives of each unit, chaired by the Chairperson while the Chief Financial Officer serves as the director general. It is responsible for coordinating related affairs of the committee and reporting to the Board of Directors on a regular basis. The Corporate Sustainability Development Committee oversees the "Sustainable Operations Subcommittee," which operates under the supervision of the Chairperson. This subcommittee reviews the Company's climate change goals, strategies, and specific action plans, supervises the management of climate change risks and opportunities, and regularly evaluates the climate management implementation status and environmental performance of each operating site. These evaluations serve as important references for the formulation of the Company's sustainability policies.

### Climate Governance Structure



### GlobalWafers' Climate Risks and Organizational Division of Responsibilities

<b>Board of Directors</b>	<ul style="list-style-type: none"> <li>Decision of strategies/targets for climate change management</li> <li>Supervise GlobalWafers' overall climate change management</li> </ul>
<b>Sustainable Development Committee</b>	<ul style="list-style-type: none"> <li>Review and revise the Company's Sustainable Development Best Practice Principles to continuously optimize the Company's sustainable development policy</li> <li>Deliberate over the corporate sustainability report and submit it to the board of directors</li> <li>Guide and approve climate change risk control and supervise the continuous improvement of related management measures</li> </ul>
<b>Sustainable Operations Subcommittee</b>	<ul style="list-style-type: none"> <li>Strategic planning for cross-departmental communication, climate change risks, and opportunities</li> <li>Climate change risk and opportunity strategic program/action plan management</li> <li>Measure the assessed risks and opportunities related to climate change</li> <li>Supervise the implementation of various energy-saving, carbon-reduction, and water-saving plans/greenhouse gas inventory check</li> <li>Communicate climate change issues internally and externally</li> </ul>
<b>Relevant Task Forces or Departments</b>	<ul style="list-style-type: none"> <li>Collection, analysis, and compilation of climate change and energy risk and opportunity information</li> <li>Identification and assessment of risks and opportunities related to climate change</li> <li>Development of strategic/action plans for climate change risks and opportunities</li> </ul>



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## Climate Change Strategy

To effectively implement energy conservation and carbon reduction, GlobalWafers has set 2019 as the base year to set short, medium, and long-term carbon emission reduction targets. Among the adaptation strategies, the Company has implemented simulation exercises as well as education and training for the physical risks brought by climate change to the Company's assets and established extensive and rigorous preventive measures and emergency response plans. Should a crisis or disaster occur, the Company will immediately propose the most appropriate response and recovery plan to minimize uncertainty and the possible impact of the disaster.

In terms of transition risks, the Company has followed the energy diversification trend, complied with the "Renewable Energy Development Act" related specifications and goals, invested heavily to cope with the pressures of a low-carbon economy brought by climate change, and the relevant departments have started to plan and purchase renewable energy and green power certificates. Our reduction strategies planned to achieve short-, medium-, and long-term goals:

1. Renewable energy adoption: Continuing increasing the proportion of renewable energy via self-built solar power generation systems and purchased renewable energy (e.g., PPA, RECs).
2. Improve energy efficiency: Reducing equipment energy consumption by improving equipment.
3. Purchase carbon offset products: Offsetting carbon emissions by purchasing carbon credits.
4. Carbon removal: Supporting tree planting programs and participating in other Nature-based Solutions (NbS) and conservation programs.

Additionally, to respond to carbon management policies and regulations set by various countries, such as the imposition of carbon fees/taxes, and to more effectively track and control greenhouse gas emissions at all production and operational sites, GlobalWafers aims to achieve its RE100 and carbon reduction targets. The Company plans to incorporate carbon emissions from operating activities into internal cost considerations. In 2023, GlobalWafers reviewed the implementation methods and verification points of internal carbon pricing. It was decided to base the internal carbon fee on Scope 1 and Scope 2 emissions at each production and operating site, adjusting the price by referencing the European Union's Carbon Border Adjustment Mechanism (CBAM). This internal carbon pricing benchmark was introduced to all production and operating sites within the Group in 2024.

## Identification and Assessment of Climate Risks and Opportunities

### Climate Scenario Analysis

The Company has established its climate scenario analysis based on the Task Force on Climate-related.

Financial Disclosures (TCFD) framework and refers to the latest scientific assessment reports issued by the International Energy Agency (IEA) and the United Nations Intergovernmental Panel on Climate Change (IPCC).

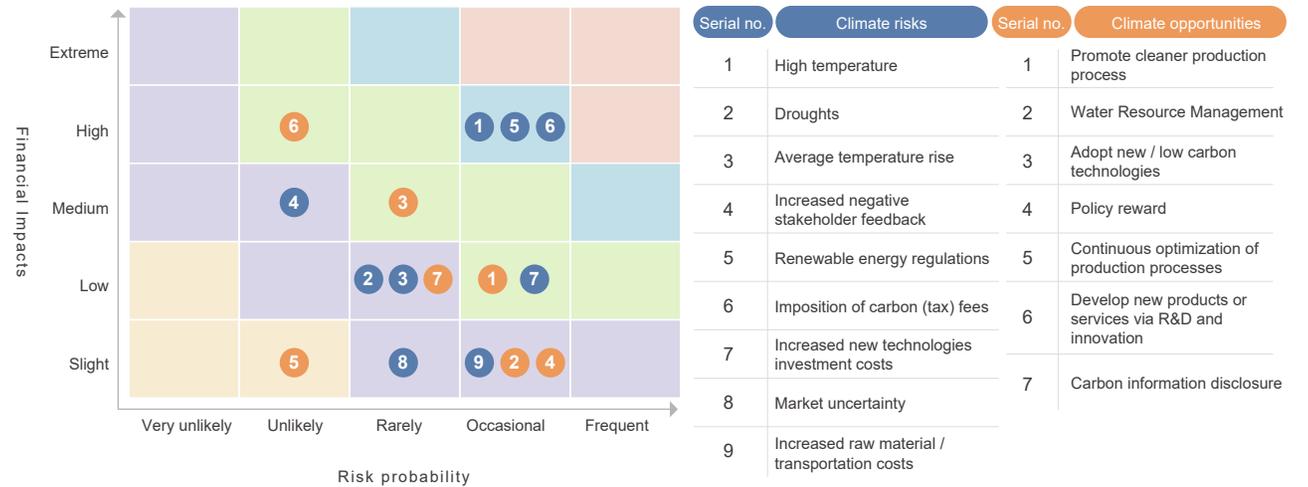
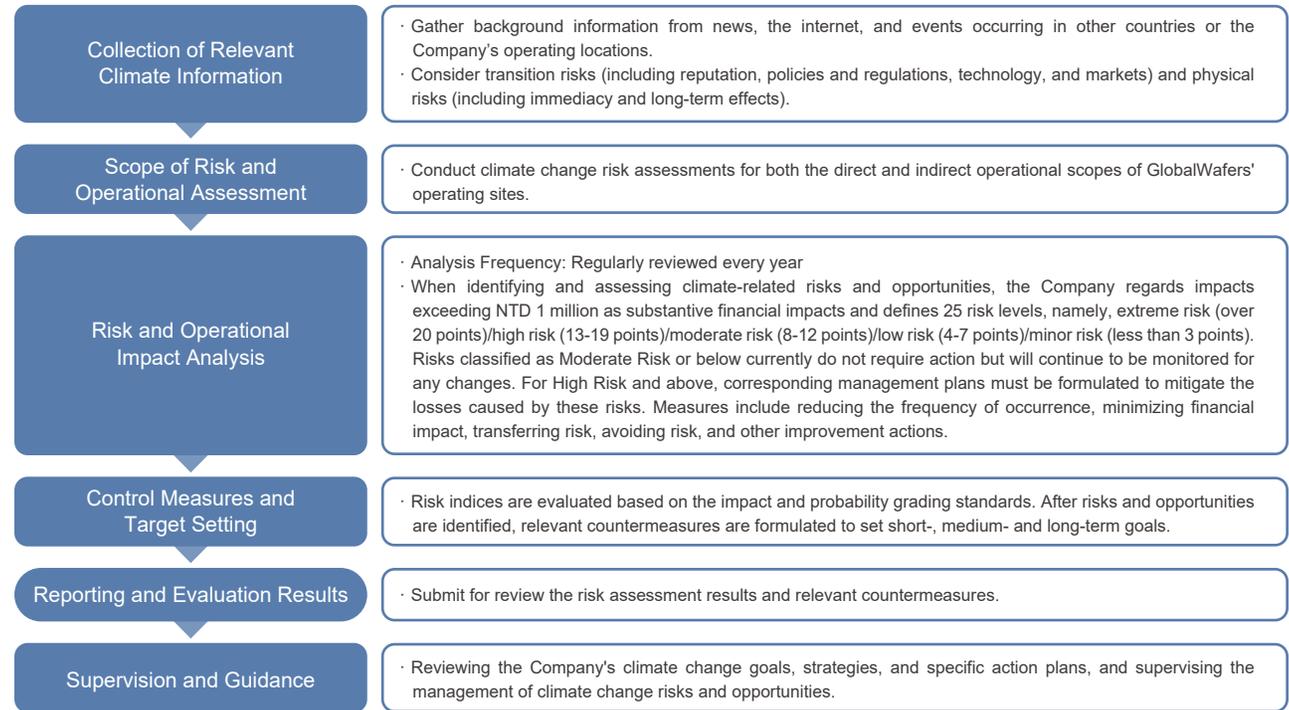
Risk Type	Scenario	Scenario Summary Description
Physical Risk	IPCC-AR6 SSP1-2.6 (Global efforts to achieve sustainability goals are progressing slowly)	<ul style="list-style-type: none"> <li>• With reference to the IPCC Sixth Assessment Report, the simulation results according to this scenario show that global temperatures are projected to increase by 1.5°C in the near term (2021-2040), by 1.7°C in the mid-term (2041-2060), and by approximately 1.8°C by the end of the century (2081-2100).</li> <li>• With reference to the National Science and Technology Council's "Taiwan Climate Change Projection Information and Adaptation Knowledge Platform," using 2019 as the base year, the risk estimation for GlobalWafers' Taiwan plant shows an average temperature increase of 0.7°C and a decrease in annual average rainfall of 0.2 mm/day by 2030 compared to the base year. By 2050, the annual average temperature will increase by 0.8°C, and the annual average rainfall will decrease by 1.9mm/day.</li> </ul>
	IPCC-AR6 SSP5-8.5 (Almost no emissions scenarios under climate policy)	<ul style="list-style-type: none"> <li>• With reference to the IPCC Sixth Assessment Report, the simulation results according to this scenario Global temperatures are projected to increase by 1.6°C in the near term (2021-2040), by 2.4°C in the mid-term (2041-2060), and by approximately 4.4°C by the end of the century (2081-2100).</li> <li>• With reference to the Ministry of Science and Technology's "Taiwan Climate Change Projection Information and Adaptation Knowledge Platform," taking 2019 as the base year, the risk estimation for GlobalWafers' Taiwan plant shows an average temperature increase of 0.5°C and a decrease in annual average rainfall of 1.9 mm/day by 2030 compared to the base year. By 2050, the annual average temperature will increase by 1.6°C, and the annual average rainfall will decrease by 1.6mm/day.</li> </ul>
Transition Risk	Stated Policies Scenario (STEPS) of the International Energy Agency (IEA) (Stated Policies Scenario, STEPS)	<ul style="list-style-type: none"> <li>• IEA STEPS focuses on the development of the energy system with existing and pending policies and measures and possible future trends if additional policies are not implemented.</li> <li>• GlobalWafers conducted assessments based on the scenario of maintaining current operational conditions.</li> </ul>
	Announced Pledges Scenario (APS) and Stated Policies Scenario (STEPS) of the International Energy Agency (IEA)	<ul style="list-style-type: none"> <li>• IEA APS considers all government climate commitments, including Nationally Determined Contributions (NDCs) and long-term net-zero emissions targets, and assumes that governments achieve all of their climate commitments on time.</li> <li>• GlobalWafers referenced the Nationally Determined Contributions (NDC) of the regions where it operates, including Taiwan, China, Japan, South Korea, Malaysia, the United States, Italy, and Denmark, to conduct reduction response assessments.</li> </ul>

## Process for Identifying and Evaluating Risks and Opportunities

The Company continuously focuses on addressing and managing climate change through regular risk identification, measurement, monitoring, reporting, and response procedures. These risk management processes integrate climate change issues into the Company's overall risk management framework. To implement the risk management mechanism, the Company's Corporate Sustainable Development Committee reports annually to the Board of Directors and the Audit Committee (composed of four independent directors) on material environmental, social, and corporate governance issues and risk-related strategies, management operations, and execution related to the Company's operations. In consideration of the importance and particularity of the climate change issue, the Corporate Sustainability Development Committee additionally reports to the Board of Directors each quarter on environmental performance indicators and targets, as well as climate change response and management.

Climate change is having a significant impact on both the planet and businesses. To reduce the impact of climate change on GlobalWafers, the Company has conducted a financial impact assessment for certain climate change risks and continues to improve management. The 2023 climate risk assessment was completed, focusing on the following nine risks and seven opportunities and explaining the impact and response of each risk or opportunity, such as renewable energy regulations, market uncertainties, increased investment costs for new technologies, rising raw material/transportation costs, impact on company image, increased severity of extreme weather events, and rising average temperatures. GlobalWafers has also identified feasible opportunities and developed countermeasures to reduce the preceding risk factors. The goal is to promote cleaner production, water resources management, carbon information disclosure, new/low-carbon technologies, and other project development measures.

GlobalWafers' process for risk identification and climate-related risk assessment is as follows:



Note: The financial impact index is divided into 5 grades, and the economic impact score is 1-5 points.  
 Note: The likelihood is divided into 5 levels: frequent - 5 points, occasional - 4 points, rarely - 3 points, unlikely - 2 points, and very unlikely - 1 point.

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## Risk and Opportunity Financial Impact Analysis and Response

Climate Change Risks and Opportunities with Major Financial or Strategic Impacts							
Type	Climate risks	Description of potential financial impacts	Timeframe	Impact level	Coping Strategies / Cases	Financial Impact of the Strategy	
Physical Risk	Acute	High temperature	Extreme climates lead to frequent occurrences of abnormally high temperatures. Maintaining optimal production conditions in the plant leads to an increase in operating electricity consumption and greenhouse gas emissions and, subsequently, increases electricity costs and carbon taxes/fees	Short	High	Promote the implementation of energy management systems to execute various energy-saving initiatives, led by high-ranking executives to drive greenhouse gas reduction actions	Promote various energy-saving measures, resulting in increased operating costs
		Droughts	The impact of droughts caused by abnormal climate conditions leads to production disruptions, resulting in financial losses and decreased revenue	Short	Low	Timely adjustment of water supply systems to promote water-saving measures at each plant, evaluate drought risks at manufacturing sites, and develop and implement risk mitigation measures (such as renting water trucks for water transport)	Invest in water recycling systems, resulting in increased operating costs
	Chronic	Average temperature rise	Increased electricity consumption at the plants leads to higher electricity costs and carbon emissions, which in turn result in increased operational costs.	Long	Medium	The factories worldwide are scheduled to fully implement the greenhouse gas inventory and energy management system, and high-ranking executives will execute greenhouse gas emission reduction	Introduce management systems, resulting in increased operating costs
Transition Risk	Reputation	Increased negative stakeholder feedback	Failure to meet stakeholder expectations, resulting in company reputation damage and market sales loss	Short	Low	Promote clean production and recycling, and regularly publish sustainability reports to let stakeholders understand the Company's energy conservation and carbon reduction efforts	Promote various energy-saving and waste reduction measures, resulting in increased operating costs
	Regulatory/ Legal	Imposition of carbon (tax) fees	Increased greenhouse gas emission costs	Short	High	Promote various energy-saving measures to reduce carbon emissions	Promote various energy-saving measures, resulting in increased operating costs

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**Climate Change Risks and Opportunities with Major Financial or Strategic Impacts**

Type	Climate risks	Description of potential financial impacts	Timeframe	Impact level	Coping Strategies/Cases	Financial Impact of the Strategy	
Transition Risk	Regulatory/ Legal	Renewable energy regulations	Policies that lead to increased operating costs	Short	High	Sign green power purchase agreements (PPAs) and purchase renewable energy certificates (RECs), supplemented by the Climate Blueprint Roadmap, to achieve targets in phases.	Purchase renewable energy to replace existing energy, resulting in increased operating costs
	Technology	Increased new technologies investment costs	It takes time to develop new technologies and introduce mass production to maximize production capacity, including to achieve optimal cost control in production and sales. Failure to break even in the early stage of development may cause financial burdens	Medium	Medium	Integrate internal and external resources to accelerate the development of new technologies. Externally, collaborate with academic and research institutions to jointly address technical challenges; internally, integrate group resources to achieve optimal cost control in production and sales	Develop new processes increasing R&D costs
	Market	Market uncertainty	Risks arising from market demand or price fluctuations may result in lower shipments and lower revenues	Medium	Low	Develop more diversified and environmentally friendly products in response to market changes to meet market demand	The new process technology will increase the electricity consumption of the production line, resulting in increased operating costs
		Increased raw material/ transportation costs	Increased operating costs	Medium	Low	Seek backup and alternative material suppliers to improve supply chain resilience	Finding backup and replacement material suppliers requires time and the relevant verification process, resulting in increased operating costs



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Type	Climate opportunities	Description of potential financial impacts	Timeframe	Impact level	Coping Strategies/Cases	Financial Impact of the Strategy
Resource efficiency	Promote cleaner production process	Reduce water/power consumption and lower operating costs	Short	Medium	Continue to promote various water/power conservation measures	Invest in various energy/water conservation/waste reduction solutions, resulting in increased equipment investment costs.
	Water Resource Management	Improve water resource utilization efficiency, reduce water withdrawal volume and related expenses	Short	Low	Improve factory process wastewater recovery rate	Promoting process improvements and related recycling equipment leads to increased costs.
Energy	Adopt new/low carbon technologies	Reduce operating costs	Medium	Medium	Accelerate the design and development of crystal growth thermal field	Increased R&D costs for process improvements
Market	Policy reward	Receive government grants, reduce capital expenditures	Short	Low	Evaluate policy subsidy programs (using a large-to-small mechanism) to enhance carbon management within the supply chain, reducing the carbon footprint of the Company's products	Implementation of policy plans is expected to increase labor costs.
Resilience	Continuous optimization of production processes	Strengthen basic measures, build sustainable operation capabilities and take advantage of high-efficiency materials to reduce costs	Short	Slight	Evaluate the use of high-efficiency raw materials and reduce resource usage	Increased R&D costs for process improvements
Products and services	Develop new products or services via R&D and innovation	Research and develop low-power and low-energy consumption products to meet customer demand for energy-saving products and increase revenue	Medium	Medium	Continue to invest in R&D resources to develop energy-conservation products	Meet customer demand for energy-saving products and increase revenue
	Carbon information disclosure	Regularly report the Company's carbon management information and performance to enhance corporate image, increasing the willingness of investors and financial institutions to invest in the Company and increase credit limits.	Short	Low	Optimize the Company's carbon information disclosure platform (the Company's official website) to facilitate external stakeholders to obtain relevant information in a timely manner and to develop a sense of identity with the Company	Increased expenditure on optimization and maintenance of the Company's official website

## Climate Change Indicators and Targets

Based on the evaluation results of climate change risks and opportunities in 2023, GlobalWafers identified that the climate risk issues with an impact rating of High or greater include: the increasing severity of extreme weather events, the imposition of carbon taxes/fees, and regulations related to renewable energy. To effectively manage the impact of climate change-related risks and opportunities on GlobalWafers, GlobalWafers actively supports the transition to net-zero emissions. GlobalWafers has joined the RE100 initiative, committing to the long-term goal of using 100% renewable energy by 2050. This commitment was complemented by signing power purchase agreements (PPA) and purchasing renewable energy certificates (RECs). The Company has also set the phased goals for the climate blueprint: achieve 20% by 2030, 35% by 2035, and 50% by 2040 in terms of renewable energy adoption. We aim to gradually accomplish the long-term goal of using 100% renewable energy by 2050 to reduce carbon emissions from power generation.

### Renewable energy certificate

Regarding renewable energy, some GlobalWafers plants have solar power systems for self-use. Additionally, some plants purchase external energy sources such as hydropower and biomass fuels. Our renewable energy certificates are sourced from the rooftop solar self-use system at GlobalWafers Zhunan Plant.

Year	2019	2020	2021	2022	2023	Total
Number of certificates	8	7	12	48	21	96

### Climate Action Targets

GlobalWafers' production sites worldwide are scheduled to fully implement ISO 14064 greenhouse gas inventory with third-party verification and the ISO 50001 energy management system with third-party verification by 2024. Additionally, we are setting short-, medium-, and long-term greenhouse gas reduction targets. We aim to achieve these reduction targets through four main carbon reduction actions: optimizing processes to improve product efficiency, improving equipment energy efficiency, replacing outdated equipment and maintaining/optimizing existing facilities, and purchasing renewable energy.

In addition, GlobalWafers continues to focus on energy-saving and carbon reduction issues. The Company's wholly-owned energy subsidiaries, Sunrise PV Four Co., Ltd. and Sunrise PV Electric Power Five Co., Ltd. are dedicated to renewable energy services and technology development, actively investing in the development, construction, and operation of solar power plants. In 2023, GlobalWafers newly invested NTD 740 million in developing renewable energy plants, with power capacity of 15.872MW and an estimated annual power generation of 20.46 million kWh, which is expected to reduce about 10,127 tons of carbon emissions. As of the end of 2023, our cumulative solar power capacity totaled 45.8MW, which is estimated to generate 55.54 million kWh of electricity per year and reduce about 27,493 tons of carbon emissions per year, equivalent to the carbon absorbed by 71 Taipei Daan Forest Parks. The cumulative total investment amount is NT\$1.12 billion (including plants that have signed a contract but have not a meter installed yet).

Timeline	Short-term 1-3 years	Medium-term 3-10 years	Long-term Over 10 years
Target goals	<ol style="list-style-type: none"> <li>Reduce unit energy consumption of electricity by 1-3% compared to 2019.</li> <li>Reduce unit greenhouse gas emissions (Scope 2) by 1-3% compared to 2019</li> </ol>	<ol style="list-style-type: none"> <li>Reduce unit energy consumption electricity by 4-10% compared to 2019</li> <li>Reduce unit greenhouse gas emissions (Scope 2) by 4-10% compared to 2019</li> </ol>	<ol style="list-style-type: none"> <li>Reduce unit energy consumption of electricity by <math>\geq 10\%</math> compared to 2019</li> <li>Reduce unit greenhouse gas emissions (Scope 2) by <math>\geq 10\%</math> compared to 2019</li> </ol>

### Target Achievements

Timeline	Short-term 1-3 years	Medium-term 3-10 years	Long-term Over 10 years
Unit consumption of electricity (Baseline year: 2019)	<ul style="list-style-type: none"> <li>Reduce by 1.2% compared to the baseline year in 2020 (Taiwan)</li> <li>Reduce by 7.1% compared to the baseline year in 2021</li> <li>Reduce by 9.38% compared to the baseline year in 2022</li> </ul>	Reduce by 8.17% compared to the baseline year in 2023	—
GHG unit emission (scope 2) (Baseline year: 2019)	<ul style="list-style-type: none"> <li>Reduce by 1.2% compared to the baseline year in 2020 (Taiwan)</li> <li>Reduce by 8.2% compared to the baseline year in 2021</li> <li>Reduce by 15.69% compared to the baseline year in 2022</li> </ul>	Reduce by 16.72% compared to the baseline year in 2023	—



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## Greenhouse Gas Inventory

In collaboration with the country's overall greenhouse gas reduction strategy and the global net-zero transition action goal, GlobalWafers has voluntarily promoted and completed the systematic greenhouse gas emissions inventory (ISO 14064-1:2018) and established an inventory report. The goal is to manage greenhouse gas risks and identify reduction opportunities effectively. GlobalWafers (Taiwan) has obtained a third-party verification statement for its greenhouse gas emissions. The overseas factories have voluntarily implemented greenhouse gas emissions inventory. The goal is to implement an effective voluntary emissions reduction action plan, slow down global warming, and fulfill the obligations of being a part of the global village.

The Company has adopted the "Operational Control Criterion" for its organizational boundaries. The greenhouse gas emissions related to the organization's operations include direct (Scope 1: greenhouse gases from process use & fuel use, septic tanks and firefighting equipment, and other emission sources), indirect energy (Scope 2: purchased energy), and other indirect sources of greenhouse gas emissions (Scope 3). In this report, we have disclosed the direct (Scope 1), indirect energy (Scope 2), and other indirect emission sources. The gas types included in the calculation cover CO<sub>2</sub>, CH<sub>4</sub>, NO<sub>2</sub>, HFCs, PFCs, SF<sub>6</sub>, and NF<sub>3</sub>. The source of the GWP value used is from the 6th IPCC Assessment Report, illustrating that no PFCs were emitted in 2023.

GlobalWafers' total greenhouse gas emissions for Scope 1 and Scope 2 in 2023 are approximately 539,100 metric tons. This mainly came from Scope 2 electricity emissions, which have slightly decreased compared to 2022 primarily due to the changes in production capacity. However, the plants have continued to implement internal energy consumption management and improvement, achieving energy conservation and carbon reduction effects. Our CO<sub>2</sub>e emissions in decreased by 1.1% compared to 2022, approximately 6200 metric tons. Among them, direct emissions (Scope 1) CO<sub>2</sub>e accounted for 4.11% of total emissions, and indirect energy emissions (Scope 2) accounted for 95.89%. GlobalWafers Taiwan's CO<sub>2</sub>e emissions accounted for 27.82% of the total emissions.

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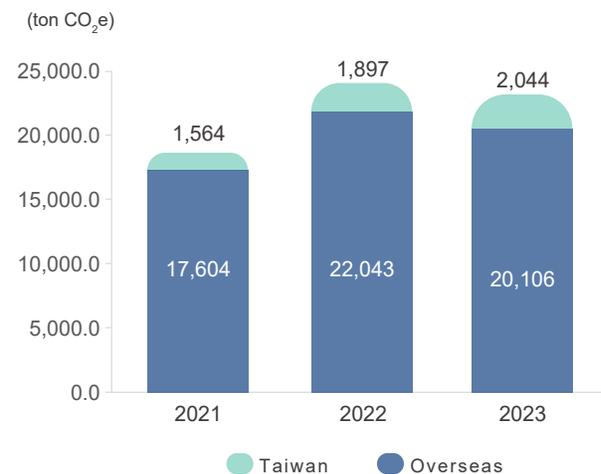
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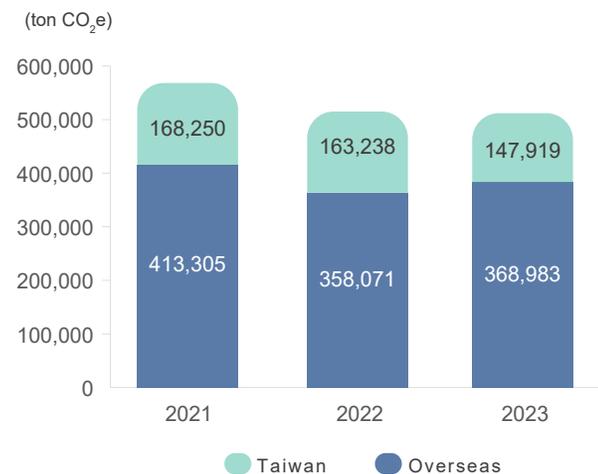
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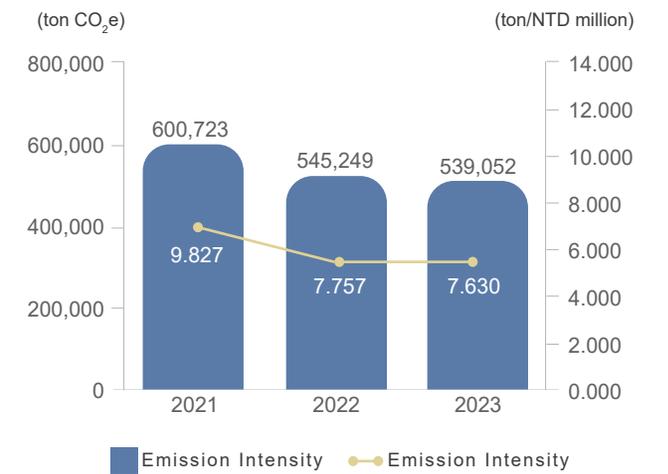
Scope 1 GHG Emissions



Scope 2 GHG Emissions



GHG emissions intensity



Note:

1. Taiwan: GlobalWafers Headquarters, Zhunan Plant, Taisil Branch
2. Overseas : GlobalWafers Japan Co., Ltd., Kunshan Sino Silicon Technology, MEMC Electronic Materials S.p.A, MEMC Korea Company, MEMC LLC, MEMC Japan Ltd., GlobiTech Incorporated., MEMC Electronic Materials Sdn. Bhd., Topsil GlobalWafers A/S.
3. CO<sub>2</sub>e emissions are calculated based on emission factors issued by the countries where each factory is located.
4. GHG emissions intensity: Scope 1 & 2 emissions (ton CO<sub>2</sub>e ) / combined revenue (NTD million).
5. Except for the offices and production sites added in November 2023, the data in the above chart covers 100% of GlobalWafers' production facilities.
6. Locations that have gotten third-party verification: GlobalWafers Headquarters and Zhunan Plant, Taisil Branch, MEMC Electronic Materials S.p.A, GlobalWafers Japan Co., Ltd., MEMC Japan Ltd., MEMC Korea Company , Kunshan Sino Silicon Technology.

### Other indirect emission sources

 ton CO<sub>2</sub>e

Emission Category	2022		2023	
	Taiwan	Overseas	Taiwan	Overseas
<b>Category 3 Indirect GHG emissions from transportation</b>	<b>5,680.57</b>	<b>19,183.33</b>	<b>7,090.76</b>	<b>19,310.09</b>
3.1 Emissions from upstream transport and distribution for goods	1,382.46	9,426.43	1,253.82	6,354.99
3.2 Emissions from downstream transport and distribution for goods	3,487.43	8,538.31	4,791.76	9,732.20
3.3 Emissions from employee commuting	800.11	1,182.93	837.98	2,828.61
3.4 Emissions from client and visitor transport	Not quantified	0.07	Not quantified	Not quantified
3.5 Emissions from business travels	10.57	35.58	207.20	394.29
<b>Category 4 Indirect GHG emissions from products used by organization</b>	<b>231,821.64</b>	<b>125,356.70</b>	<b>197,274.51</b>	<b>228,017.31</b>
4.1 Emissions from purchased goods	231,387.05	120,665.77	196,829.33	194,522.79
4.2 Emissions from capital goods	Not quantified	None	Not quantified	28,000.00
4.3 Emissions from the disposal of solid and liquid waste	434.59	4,690.93	445.18	5,494.51
4.4 Emissions from the use of assets	None	None	None	None
4.5 Emissions from the use of services that are not described in the above subcategories	Not quantified	None	Not quantified	None
<b>Category 5 Indirect GHG emissions associated with the use of products from the organization</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
5.1 Emissions or removals from the use stage of the product	None	None	None	None
5.2 Emissions from downstream leased assets	None	None	None	None
5.3 Emissions from end of life stage of the product	None	None	None	None
5.4 Emissions from investments	Not quantified	None	Not quantified	None
<b>Category 6 Indirect greenhouse gas emissions from other sources</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>None</b>
<b>Total regional emissions</b>	<b>237,502.21</b>	<b>144,540.03</b>	<b>204,365.27</b>	<b>247,327.40</b>
<b>Total</b>	<b>382,042.24</b>	<b>451,692.67</b>		


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Other indirect emission sources in 2023 (categories of upstream and downstream)

ton CO<sub>2</sub>e

Upstream			Downstream		
	Taiwan	Overseas		Taiwan	Overseas
Indirect greenhouse gas emissions from products used by the organization (upstream)	199,573.51	237,595.19	Indirect greenhouse gas emissions from products used by the organization (downstream)	4,791.76	9,732.20
Purchased goods	196,829.33	194,522.79	Downstream transportation and distribution	4,791.76	9,732.20
Treatment of solid and liquid waste	445.18	5,494.51			
Upstream transportation and distribution	1,253.82	6,354.99			
Transportation of customers and visitors	0	0			
Employee commuting	837.98	2,828.61			
Business travel	207.201	394.29			
Capital goods	Not quantified	28,000.00			
Total emission of upstream is <b>437,168.70</b>			Total emission of downstream is <b>14,523.96</b>		
Total emission by region <b>Taiwan 204,365.27 Overseas 247,327.40</b>					
Total emission is <b>451,692.67</b>					

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# Material Topics Target and Achievement

Key Performance Indicator	United Nations Sustainable Development Goals (SDGs)	2023 Goals	Achieved in 2023 Status and Achievements	Short-term Goals (2024)	Mid-term Goals (2025 - 2030)	Long-term Goals (2030 and beyond)
<b>Corporate Governance</b>						
Sound Corporate Governance Framework		Maintain the top 5% ranking among the TPEX-listed companies in the Corporate Governance Evaluation	Achieved	Maintain the top 5% ranking among the TPEX-listed companies in the Corporate Governance Evaluation	Continue to maintain a sound corporate governance structure	
Independence And Diversity of the Board of Directors	 	-	The number of independent directors accounted for 1/2 of the board seats	Increase the number of female directors	Each gender of directors accounts for at least 1/3 of the board seats	Maintain each gender of directors accounting for at least 1/3 of the board seats
Timeliness and Transparency of Information Disclosure		-	Held quarterly investor conferences Disclosure of English financial statements on a quarterly basis Regularly updated/announced operational and financial information	Hold quarterly investor conferences Disclosure of English financial statements on a quarterly basis Regularly update/announced operational and financial information	Hold quarterly investor conferences Disclosure of English financial statements on a quarterly basis Regularly update/announce operational and financial information	Hold quarterly investor conferences Disclosure of English financial statements on a quarterly basis Regularly update/announce operational and financial information
<b>Management Strategies &amp; Financial Performances</b>						
Continuous Profit		Continuous profit	Achieved	Continue to make profits and maintain good operating performance		
Maintain a Good Financial Structure		Maintain a good financial structure (maintain twAA- / twA-1+ in Taiwan Ratings)	Achieved (Affirmed by Taiwan Credit Rating: twAA-/twA-1+; the long-term rating is "Stable")	Continue to maintain a sound financial structure and credit rating		
<b>Compliance with laws and regulations</b>						
Compliance with Laws and Regulations		<ol style="list-style-type: none"> <li>Update the internal regulations of domestic companies on a weekly basis in accordance with laws and regulations</li> <li>All overseas subsidiaries are engaged in business activities in accordance with the RBA Code of Conduct</li> <li>Tracking and updating of export control laws and regulations, and internal cross-factory education and training</li> </ol>	<ul style="list-style-type: none"> <li>We confirmed the status of domestic regulatory changes on a weekly basis. If there was a need to revise internal regulations, we notified the responsible department and asked if an amendment was necessary, and followed up on subsequent actions if necessary</li> <li>Topsil GlobalWafers A/S also complied with EU requirements by adding a reporting channel on its official website (instead of using the Group headquarters reporting mechanism)</li> <li>After confirming the product mix with the R&amp;D colleagues and clarifying the control items, a one-hour EAR education and training was held in June for 10 sales executives from domestic and overseas subsidiaries/branches. The legal compliance department worked with the sales colleagues to ensure that the export targets complied with the relevant regulations</li> </ul>	<ul style="list-style-type: none"> <li>Updated the internal regulations of domestic companies on a weekly basis in accordance with laws and regulations</li> <li>All overseas subsidiaries are engaged in business activities in accordance with the RBA Code of Conduct</li> <li>Track and update of export control laws and regulations; education and training for major changes</li> </ul>	<ul style="list-style-type: none"> <li>Company operations and employees' activities comply with applicable laws and regulations</li> <li>Track the updates of foreign laws and develop business activities according to the international standard</li> </ul>	<ul style="list-style-type: none"> <li>Minimize the legal risk of participating in global market competition to ensure corporate competitiveness</li> </ul>



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Key Performance Indicator	United Nations Sustainable Development Goals (SDGs)	2023 Goals	Achieved in 2023 Status and Achievements	Short-term Goals (2024)	Mid-term Goals (2025 - 2030)	Long-term Goals (2030 and beyond)
Integrity and Ethics / Anti-Corruption		1. Implement ethical integrity training for new employees	<ul style="list-style-type: none"> <li>• One hour of education and training was conducted for all board directors, executives (department level or above), and new employees on the "Insider Education and Training." The contents included insider trading law analysis (constitutive elements, major news disclosure method and time period, judicial opinions) and insider equity transfer law analysis (The obligation to declare before/after the event, and maintaining the number of shares held by directors and supervisors). A total of 196 participants attended.</li> <li>• A two-hour "Integrity Management Training" session was conducted for directors, executives (department level and above), and new employees. The training covered major compliance issues closely related to the technology industry, including trade secret protection, competition law, anti-corruption, conflicts of interest prevention, and export controls. A total of 189 participants attended.</li> <li>• Revised internal regulations to allow anonymous reporting to comply with regulatory requirements</li> <li>• No unethical or dishonest incidents occurred</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain the education and training for new employees and insiders</li> <li>• Maintain and continuously improve the ethical integrity risk monitoring system (email keyword control/whistleblower system, etc.)</li> <li>• No unethical or dishonest incidents occur</li> </ul>	<ul style="list-style-type: none"> <li>• (Internal) No unethical or dishonest incidents occurred.</li> <li>• (External) Communicate "integrity and ethics" to the supply chain and require counterparties to conduct business activities in a manner that complies with the Company's standards.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure integrity and honesty within the supply chain to maintain fair market competition.</li> </ul>
		2. Maintain and continuously improve the ethical integrity risk monitoring system (email keyword control/whistleblower system, etc.)				
3. No unethical or dishonest incidents occurred						
<b>Information Security and Personal Data Protection</b>						
Personal Data Protection		-	-	<ul style="list-style-type: none"> <li>• Provide education and training to the units responsible for personal information</li> <li>• Conduct inventory of personal data involved in the Company's business activities</li> <li>• Ensure the responsible units to handle the collection, processing, and utilization of personal data in accordance with personal data regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Follow the updates of laws and regulations and make rolling adjustments to the operating method. If it is not necessary to adjust the operating method, a personal data inventory shall be conducted at least once every two years.</li> <li>• Assist in the formulation of supporting measures in line with the business needs of each unit.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to supervise to ensure that the collection, processing, and utilization of personal data are in compliance with laws and regulations.</li> </ul>
Information Security Incident		-	-	0 cases	0 cases	0 cases
ISO 27001 Certification		-	-	First certified	Certified every year and continuous improvement, follow-up, and revision	Certified every year and continuous improvement, follow-up, and revision



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Core value of GlobalWafers - People, Integrity, Passion, Excellence, and Innovation. We firmly believe that by adhering to the principles of people-first, maintain honesty and integrity, devote enthusiasm to life and work, and make unremitting efforts; we will naturally outperform the others. The different perspectives will also bring an endless source of creativity, which will eventually transform into innovations that will change the future. Meanwhile, we actively implement corporate social responsibility (CSR) and create the Company's unique value in order to win the trust of investors, customers, as well as employees and strive to achieve the goal of sustainable operation.

## Policies

- Actively grasp the market trends and international events. Flexible allocation with stable shipment to meet customers' needs under the impact of politics and the pandemics.
- Actively enhance the yield and debottleneck to maximize the existing capacities, prudently control capital expenditure to ensure the capital expansion plans are completed as scheduled.
- Actively develop GaN/Si/SiC products, and work with strategic partners to utilize the complementary synergies in terms of materials.
- Expand the collaboration among government, industry, and academy, deploy our advanced manufacturing process for niche applications and accelerate the development of new technologies.
- Enhance the operational performance of each business, while integrating R&D, production, and marketing across regions to maximize benefits.

## Commitment

- Following the principle of "responsible growth", we fulfill our corporate social responsibilities regarding the environment, workplace health and safety, and corporate governance, in order to pursue sustainable growth.

## Goals

### Short-term Goals

- ★ Strengthen R&D links with downstream customers, develop high-efficiency niche products with core technology capabilities, and actively reduce manufacturing costs to increase profit margins.
- ★ Accelerate the improvement of the production performance of 8" and 12" silicon wafers, compound semiconductor, and specialty wafers (FZ, SOI) to increase the global market share.
- ★ Combine the technology, resources and various possibilities within the Group to optimize the bottleneck spots of each plant and maximize product capacity, deepen the multinational technology integration platform, and comprehensively improve technical capabilities, quality and customer satisfaction to meet market demand.
- ★ Stabilize the supply of key raw materials and parts to ensure good production quality and on-time delivery so that the production line runs smoothly.
- ★ Use existing customer networks to expand the customer base of new products, increase the capacity utilization rate of production lines, and enhance the profitability of products.
- ★ Expand the collaboration among government, industry, and academy, deploy our advanced manufacturing process for niche applications and accelerate the development of new technologies.
- ★ The Company will keep close attention to market trends and the industrial fluctuation, adjust business strategies when necessary, continue to develop high-value products, and carry out patent protection measures to strengthen the Company's competitiveness.



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### ⦿ Long-term Goals

- ★ Use the Group's high-end leading technology to develop GaN/Si/SiC chips matching next-generation product utilization. Development shall move towards large size advanced manufacturing process, heavily-doped crystal growth and power semiconductor epitaxy technology.
- ★ Implement green manufacturing and corporate social responsibility, enhance the corporate governance to cement the foundation of sustainable operation.
- ★ By adopting renewable energies, enhancing the energy utilization efficiency, carbon removal and purchasing carbon offsetting goods to achieve the goal of 100% clean energy utilization by 2050.
- ★ Various energy-saving measures are actively introduced with renewable energy adopted, and by working with the production and operation bases all over the world, the Company constructs a resilient and flexible local supply chain to respond quickly to the pandemic and geopolitics tension, and reduce the impact on the environment by providing customers with green wafers with lower carbon footprint.
- ★ Increase the scale of operation through the expansion of production, and to keep abreast of industrial trends and actively strive for government subsidies, to enhance the competitiveness in the semiconductor wafer industry.
- ★ Actively sign long-term agreements with key partners to consolidate the foundation of cooperation.

### System

#### ⦿ External system

- ★ Compliance with such external regulations as the Company Act, Securities and Exchange Act, Business Mergers and Acquisitions Act, Guidelines for Online Filing of Public Information by Public Companies, Fair Trade Act, and Labor Standards Act.

#### ⦿ Internal system

- ★ Establish Internal Control System; Articles of Incorporation; Acquisition or Disposal of Assets Procedure; Procedures for Endorsement and Guarantee; Procedures for Lending Funds to Other parties; Policies and Procedures for Financial Derivatives Transactions; Corporate Governance Best-Practice Principles; Sustainable Development Best Practice Principles; Risk Management Policies and Procedures; Ethical Corporate Management Best Practice Principles; Codes of Ethical Conduct; Measures for the Report on Illegal, Immoral and Dishonest Acts; Procedures for Handling Material Inside Information; Procedure for Insider Trading Prevention; Rules Governing Public Information Reporting; Liability Commitment and Contingency Management Measures; Corporate Group Sector Specific Company and Affiliate Transaction Procedures; Governing Financial and Business Matters Between this Corporation and its Affiliated Enterprises; as well as Long-term and short-term Investment Management Measures.

### Concrete action

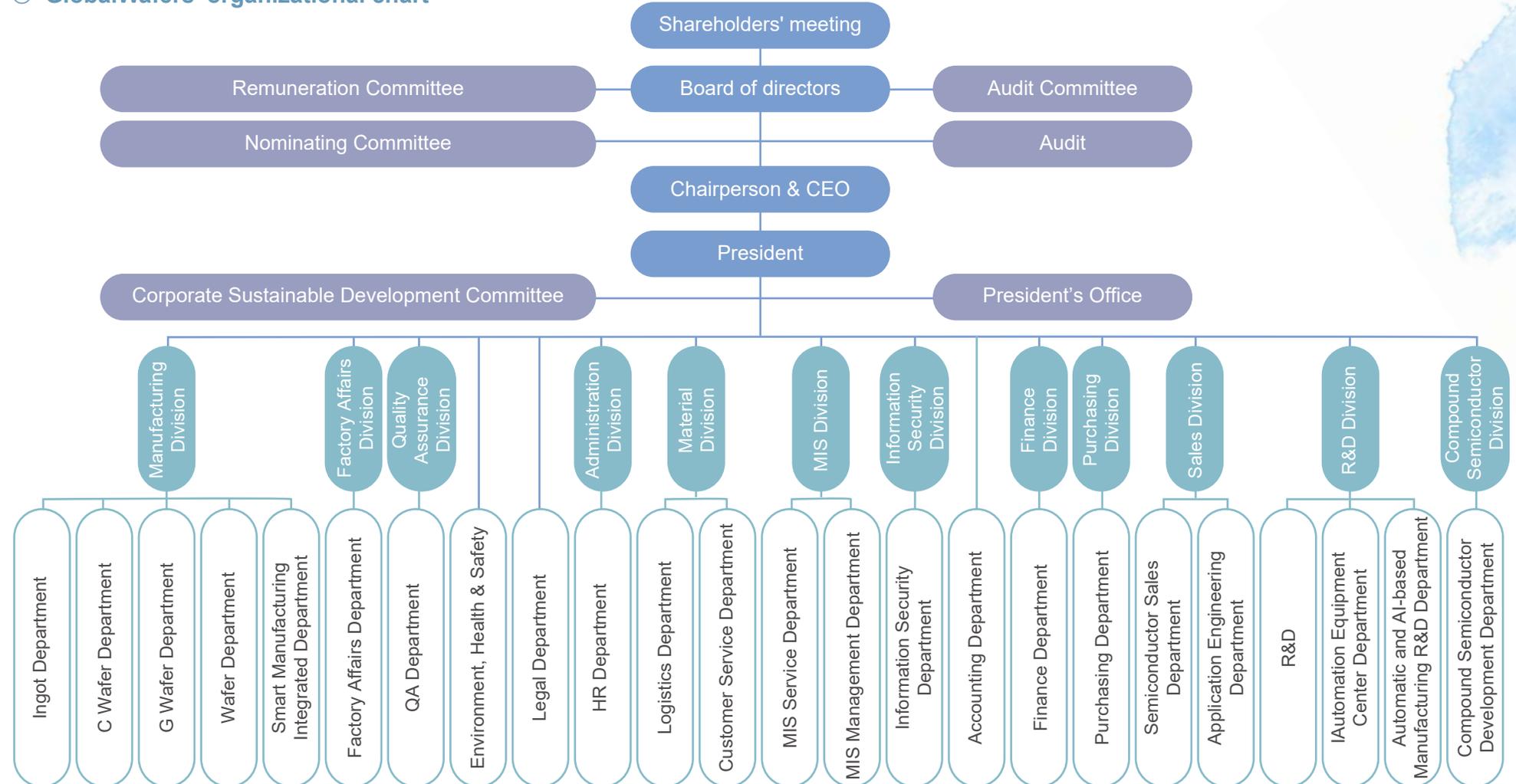
- Initiate Annual Operation Plans and formulation of KPIs for each department to strengthen internal operational management and control.
- Regularly convene business and production & marketing meetings to review goal achievement status and propose improvement & response strategies
- Establish an incentive system for improvement proposals to boost process research and product quality betterment
- Formulate appropriate measuring methods upon identifying potential risk factors by each department (including risk analysis and assessment), and proposing countermeasures.
- Implement a legal affairs mechanism and internal audits to facilitate our determination for sustainable development

# 1.1 Corporate Governance

GlobalWafers adheres to the "integrity" corporate culture, and fully implements honesty and integrity, fair and transparent, and socially responsible management concepts. The Company is able to establish a good corporate governance system through the various ethics policies and achieve the sustainable operation objective.

## 1.1.1 Governance structure

### GlobalWafers' organizational chart



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High-level operation management



GlobalWafers adheres to principles of integrity, holds the shareholders' rights and interests in high regard and believes that an efficient board of directors is the basis of excellent corporate governance. GlobalWafers has established an effective corporate governance structure; and its board of directors has authorized the establishment of an audit committee, a remuneration committee, and a nomination committee to assist the board of directors in fulfilling their supervisory duties. The charters of these committees have been approved by the Board, and the committees regularly report their activities and resolutions to the Board. GlobalWafers' audit and remuneration committees are entirely composed of independent directors, and over half of the nomination committee members are independent directors.

GlobalWafers has established a sound corporate governance structure with an Audit Office responsible for supervision to achieve continuous improvements and excelsior via its internal audit and control so as to thoroughly fulfill corporate governance. Looking to the future, GlobalWafers will still adhere to principles of integrity and continue with its corporate governance blueprint, while strengthening its company competency so as to enhance its operation performance, facilitate corporate social responsibility and proactively forge ahead towards being a benchmark enterprise.

Summary of key points for the corporate governance organization

- ★ Four out of eight directors are independent directors, accounting for half of the total number of directors on the board
- ★ Both the Audit Committee and the Remuneration Committee are composed of independent directors, and over half of the Nomination Committee members are independent directors
- ★ A dedicated Chief Corporate Governance Officer was appointed to increase support for directors and enhance the effectiveness of the board of directors
- ★ [Charter of each committee](#) is publicly disclosed on the Company's website under the Investors Section > Corporate Governance > [Committees](#)
- ★ The Board of Directors and each committee conduct an annual self-performance evaluation and disclose the [evaluation results](#) on [the Company's website under Investors Section > Corporate Governance > Board of Directors > Board and Functional Committees Performance Evaluation Results](#)

Board Operations

To implement a sound corporate governance system with robust supervision function and strengthened management capabilities, the board of directors consists of eight directors, elected for a term of three years and each armed with profound knowledge and expertise, namely, in professional technologies, business management, finance and strategy management. Consecutive terms are permitted by election. The board convenes at least once per quarter.

Furthermore, to enhance the professional knowledge and legal attainments of the Company's directors, at least 6 hours of continuing education courses are arranged for directors every year (new directors are given at least 12 hours of continuing education courses). The courses for directors cover corporate governance topics related to finance, risk management, operations, business, legal affairs, accounting, corporate social responsibility, climate change and risk management related courses. The courses for directors in 2023 included topics such as corporate governance and securities laws and regulations, prevention and response to insider trading, risk management and internal control, sustainable development action plans of listed companies, climate change and sustainable finance, etc. For the continuing courses of directors, please refer to the GlobalWafers' [2023 Annual Report](#).



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## Board of Directors Member Diversification

The Company's "[Corporate Governance Best-Practice Principles](#)" has expressly defined the formation of the Board members and ability to be held by the members. The Company has also established the diversified policy for the Board members. The composition of the board of directors has been determined by taking diversity into consideration, and appropriate policy on diversity based on the Company's business operations, operating dynamics, and development has been formulated, as the following two general standards:

- I. Basic requirements and values: Gender, age, nationality, and culture;
- II. Professional knowledge and skills: A professional background (e.g., law, accounting, industry, finance, marketing, technology), professional skills, and industry experience.

The Company's current Board of Directors consists of eight directors, including four independent directors. They include one female director, and also hold abundant educational backgrounds and experience in business administration, professional technology, business and finance, namely the knowledge, skills and literacy required by their job duties. This composition reflects the Company's policy of ensuring diversity within the Board. The Company attaches great importance to gender equality among members of the Board of Directors. The goal of the Company is to have at least one female director. Currently, the Company holds one female director position and the Company will actively plan to increase the number of female directors on the Board, ensuring that more than one-third of the seats on the Board of Directors are attended by all genders. For directors' professional qualifications and implementation of diversity, please refer to GlobalWafers' [2023 Annual Report](#).

## Avoiding Conflicts of Interest on the Board Members

GlobalWafers has established the "[Ethical Corporate Management Best Practice Principles](#)" and "[Codes of Ethical Conduct](#)" to facilitate the Board of Directors and all employees to establish a corporate culture of ethical management and sound development, as well as to establish a good business operation model.

GlobalWafers has established the [Rules of Board of Directors Meetings](#), [Audit Committee Charter](#), [Remuneration Committee Charter](#), and [Nomination Committee Charter](#), all of which contain the following provision: If a director (including the director's spouse, relatives within the second degree of kinship, or companies with which the director has a controlling or subordinate relationship) or a juristic person that the director represents is an interested party in relation to an agenda item, the director shall state the important aspects of the interested party relationship at the respective meeting. When the relationship is likely to prejudice the interest of this Corporation, that director may state his/her opinions and respond to inquiries but shall not participate in discussion or voting on that agenda item and shall recuse himself or herself from the discussion or the voting on the item. The said director may also not exercise voting rights as proxy for another director. In addition, directors shall obtain the approval of shareholders in advance before engaging in any conduct within the scope of the GlobalWafers business for themselves or others.

In the annual report, GlobalWafers discloses the circumstances where a director concurrently holds positions in other companies (including but not limited to serving as a director or independent director in other companies), the list of top 10 largest shareholders with more than 5% outstanding ownership, and related party transactions. In addition, except for the parent company, Sino-American Silicon Products Inc., which is one of the Company's major suppliers due to its actual business needs, none of the Board members has cross-shareholding with major suppliers. For details, please refer to GlobalWafers' [2023 Annual Report](#).

The Chairperson of the Company also serves as the Chief Executive Officer. This is in consideration of the Company's operating scale and to improve overall operating efficiency. The Company has separately appointed the position of President. The division of authorities between CEO and President is different. The CEO is for planning (the major function is to formulate the Company's operation guidelines, annual budget plan, important customer relationship maintenance, strategic alliance planning, reinvestment positioning planning and tracking of the actual achievement of the annual plan); the President is responsible for the execution (responsible for the execution, coordination of the company's business, and commands and supervises subordinates to achieve operational goals, while implementing the Company's policies and the operational strategies and related operational matters planned by the CEO); both of them complement each other; The Company's Chairperson currently serves as the CEO; this will effectively implement the Company's development blueprint planned by the Board of Director to the planning and execution, as well as enable the Board of Directors to better grasp the Company's operation. More than half of the Board members of the Company do not serve concurrently as employees or managerial officers, and the Board of Directors has four independent director seats, making up 50% of the board. Most members of the functional committees are independent directors, who thoroughly discuss various important issues and make suggestions to the Board of Directors, for enhancing the supervisory function of the Board of Directors and implementing corporate governance.

## Communication of Critical Concerns

GlobalWafers has established the "[Procedures for Handling Material Inside Information](#)" to create a mechanism for the Company's internal material information processing and disclosure. The relevant procedures are also applicable to the members of the Board of Directors. For the nature and total number of critical GlobalWafers incidents in 2023, please refer to the Company's material announcements on the [Market Observation Post System \(MOPS\)](#).



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In addition to reporting the Company's operations and business status to the Board of Directors on a quarterly basis, the GlobalWafers management level also communicates through discussions and resolutions of the Audit Committee and the Board of Directors on material matters such as major asset or derivative transactions, loans of funds, and endorsements and guarantees that are required to be submitted to the Board of Directors for resolution in accordance with laws, Company regulations, or regulatory requirements. If any special circumstances occur during daily operations that significantly impact the Company's management, the management will promptly contact the directors to explain the situation and seek their opinions and views. In addition, the Company also convene extraordinary board meetings at any time for discussion and communication when there are major decisions or matters that have a material impact on shareholders that require board resolution.

The Company has established the "GlobalWafers Group Operational Crisis Emergency Response Procedures." When a major incident occurs at a plant that affects normal production or product supply, the highest-ranking executive of each business unit shall immediately respond to the matter and notify the Vice President of the Manufacturing Dept. to call an emergency response plan meetings and simultaneously report to the CEO. The emergency response meeting assigns a task force according to its authority to formulate measures to prevent and mitigate related impacts, report to the recipients according to the definition of disaster notification, and report the review results of the disaster response procedures and mitigation measures to the CEO after the emergency is lifted. The CEO will report to the Board of Directors depending on the impact.

The election of GlobalWafers directors (including independent directors) shall be conducted via the candidate nomination system pursuant to Article 192-1 of the Company Act, whereby the shareholders meeting shall elect the directors from a list of candidates. In 2023, GlobalWafers' board of directors convened a total of 5 meetings, with an average attendance rate of 100%. The board organization and board members' professional and educational background and attendance record are illustrated as below:

◉ **Main experience (academic) background and attendance status of board members in 2023**

Title	Name	Gender	Age			Main Experience (Education Background)	Actual no. of presence (in attendance)	No. of presence by proxy	Actual presence (attendance) rate (%)	Remarks
			51-60 years old	61-70 years old	71-80 years old					
Chairperson	Hsiu-Lan Hsu	Female		✓		MA in Computer Science from University of Illinois / Executive Vice President of Sino-American Silicon Products Inc.	5	0	100%	
Director	Sino-American Silicon Products Inc. representative: Ming-Kuang Lu	Male			✓	Honorary Doctor of Engineering of Chiao Tung University / Honorary Doctor of Engineering of Tatung University / Chairperson of Sino-American Silicon Products Inc./ Chairperson of Actron Technology Corporation / Academician of Industrial Technology Research Institute / President of Dunnan Science and Technology Corporation / President of Xuxing Science and Technology Corporation / Vice President of Xuli Corporation	5	0	100%	
Director	Sino-American Silicon Products Inc. representative: Tang-Liang Yao	Male		✓		MA Degree from the Graduate Institute of Management at Tamkang University / President of Sino-American Silicon Products Inc. / Assistant Vice President of the Manufacturing Division of Lite-On Power Semi	5	0	100%	5th Term (elected on August 24, 2021)
Director	Kuo-Chow Chen	Male		✓		Tainan Nan Ying Senior Commercial & Industrial Vocational School / Chairperson of Nan Hai Corp. / Board Director of COTA Bank	5	0	100%	
Independent Director	Jeng-Ywan Jeng	Male		✓		Ph.D. in Mechanical Engineering from the University of Liverpool / Dean of School of Engineering, National Taiwan University of Science and Technology / Chairperson of 3D Printing Association	5	0	100%	
Independent Director	Chung-Yu Wang	Male			✓	Honorary Doctorate, Department of Chemical Engineering, Chung Yuan Christian University/Harvard University Advanced Management Class/Chairperson of Taisil Electronic Co., Ltd./Chairperson of China Steel Corporation/Chairperson of EZSet/ Chairperson of Kaohsiung Rapid Transit Corp.	5	0	100%	
Independent Director	Ming-Ren Yu	Male	✓			MBA from New York University / Vice President of JP Morgan Chase Bank, CEO Senior Vice President of Backlight Modules Business Group of Coretronic Corporation / Executive VP of Investment Banking Department, Yuanta Securities / Senior VP and Executive Director of FIH Mobile Limited / CFO of Elite Material Co. Ltd.	5	0	100%	
Independent Director	Ta-Hsien Lo	Male		✓		Ph.D. from the Institute of Technology Management, Chiao Tung University / CEO of ITRI College / Vice President of Guan Chen Electronics Co., Ltd. / Head of Quality Control Department of Texas Instruments Incorporated	3	0	100%	(elected on June 20, 2023)

For information on directors' compensation, directors concurrently holding positions at GlobalWafers and other companies, board resolutions, the policy and procedures for determining compensation for directors and managers, please refer to the [GlobalWafers 2023 Annual Report](#).



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## Remuneration Committee

GlobalWafers established a Remuneration Committee on December 12, 2014, to implement corporate governance and improve the remuneration system for directors (including independent directors) and managers. The committee consists of 3 independent directors and holds at least two meetings each year. A total of 3 meetings were held in 2023, with an average attendance rate of 100%.

The Remuneration Committee aims to assist the board of directors in executing and reviewing the company's overall remuneration and benefits policies, system, standards and structure, as well as assessing the goal fulfillment performance of the directors and managers, regularly reviewing the organizational charter of the Remuneration Committee and proposing and submitting suggestions to the board of directors for discussion.

In line with the guideline as outlined by the Remuneration Committee Charter, the Committee is entitled to hire lawyers, accountants or other consultants to assist the duty execution.

- For the Remuneration Committee Charter, please refer to the [GlobalWafers corporate website](#).
- For details on Remuneration Committee resolutions, please refer to [GlobalWafers 2023 Annual Report](#)

## Audit Committee

To strengthen the internal supervision mechanism of corporate governance, GlobalWafers formed an Audit Committee on March 19, 2015. The Audit Committee was originally composed of three independent directors. To enhance the diversification and professionalism of the directors and enhance the supervisory function of the Board of Directors, on June 20, 2023, an additional independent director was added. This increased the number of independent directors to four, making up half of the board, exceeding legal requirements, and demonstrating GlobalWafers' commitment to implementing corporate governance. The Audit Committee convenes at least one meeting every quarter. A total of 6 meetings were held in 2023 with an average attendance rate of 100%.

### ⦿ The Audit Committee aims to assist the board of directors in fulfilling its primary goal of supervision regarding the following matters

- ★ Adequate expression of the corporate financial statements
- ★ Selection (dismissal) of certification accountants and their capability, credentials, independence and performance
- ★ Effective implementation of internal company control
- ★ Company compliance with laws and regulations
- ★ Control and management of the company's potential or existing risks

In accordance with regulations as outlined in the committee's organizational charter, the Audit Committee members are entitled to conduct any suitable audits and investigation within the confinement of their responsibilities, while having direct contact channels with GlobalWafers' internal audit personnel, certification accountants and other relevant personnel. The committee is also entitled to hire lawyers, accountants or other consultants to assist the duty execution.

- For the Audit Committee Charter, please refer to [GlobalWafers' website](#)
- For details on Audit Committee resolutions, please refer to [GlobalWafers 2023 Annual Report](#)

## Nomination Committee

GlobalWafers has established a Nomination Committee on December 9, 2020, to improve the nomination system for the Company's directors and senior managers. The committee comprises 3 directors, 2 of which are independent directors. The committee convened 1 meeting in 2023 with an average attendance rate of 100%.

The Nomination Committee is designed to assist the board of directors in finding, reviewing, and nominating candidates for directors and senior managers; conduct performance evaluations of the board, committee, and director members; evaluate the independence of independent directors; as well as formulate and review training plans and succession plans for directors and senior managers.

In compliance with the guideline as outlined by the Nominating Committee Charter, the Committee is entitled to hire attorneys, accountants, or other consultants to assist the duty execution.

- For the Nominating Committee Charter, please refer to [GlobalWafers' website](#)
- For directors' attendance records and details on Nomination Committee resolutions, please refer to [GlobalWafers 2023 Annual Report](#)

## Evaluation of the Board of Directors Performance

The Company has performed annual performance evaluation work in accordance with the "[Board of Directors and Functional Committee Performance Evaluation Measures](#)" to implement corporate governance, enhance the functions of the company's board of directors and functional committees, and establish performance targets to enhance operational efficiency. An evaluation report shall be submitted to the board of directors before the end of the first quarter of the following year.

At the end of each year, the President's Office is responsible for executing and coordinating the evaluation process. Internal questionnaires are collected. The evaluation is completed through the internal self-evaluation, and the self-evaluation of board members and functional members. The evaluation scope includes the performance evaluation of the whole Board of Directors, and functional committees (including the Audit Committee, Remuneration Committee, and Nomination Committee). The scope of performance evaluation covers the level of participation in the Company's operations, enhancement of decision-making quality by the Board of Directors and functional committees, formation and structure of the Board of Directors and functional committees, election and continuous education of directors and committee members, and internal controls, et al. The 2023 performance evaluation All aspects of the evaluation results met the indicators, indicating that the overall operating state of the Board of Directors and each functional committee is sound, and meets corporate governance needs. [The 2023 performance evaluation results of the Board of Directors and functional committees](#) have been reported on



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February 27, 2024 Board of Directors Report and disclose the results on the Company's Website > Investors Section> Corporate Governance > Board of Directors > Board of Directors and Functional Committees.

## Remuneration Policies for Directors and Executives

The remuneration of the directors of the Company includes three major items: directors' compensation, directors' remuneration, and service expense; these are handled pursuant to the Company's Articles of Incorporation and relevant regulations. The president and vice president's remuneration includes of salary, bonus and employee remuneration, which are determined based on the company's Articles of Incorporation and approval authority.

The Company's Articles of Incorporation stipulates: "If there is a balance, the proportion of compensation to employees shall be between 3% and 15%, and the proportion of remuneration for directors shall not be higher than 3%." The determination of directors' remuneration is based on the degree of participation and contribution of the directors to the Company's operations, and taking into account the results of their directors' performance evaluation, pursuant to the Company's Articles of Incorporation and the "Regulations on Remuneration for Directors and Functional Committees." The remuneration received by the president and vice president is determined based on the Articles of Incorporation and the operational performance limit set forth in the annual budget approved by the Board of Directors each year, while taking into account their positions, responsibilities assumed and contributions to the Company, as well as the industry standards It is agreed. The remunerations are handled pursuant to the procedures of "Management Measures for Managers' Compensation" and "Employee Remuneration Distribution Procedures."

The Company established the Remuneration Committee on September 2, 2014. The Committee is engaged in reviewing the assessment on performance of directors and managerial officers, as well as the policies, standards, and packages by which the remuneration is paid, and reviewing the content and amount of directors and managerial officers' remunerations periodically, to report to the Board of Directors.

The performance appraisal and remuneration of the directors and managerial officers of the Company refer to their positions, participation in the Company's operations (including attendance rate, frequency of communication, and suggestions provided by directors), personal performance contributions (including financial indicators such as revenue and profit achievement rate, and non-financial indicators such as laws and internal control compliance, ESG performance indicators, or special achievement) and taking into account the usual standards of the peers, while comprehensively considering the amount of remuneration, payment methods, and future risks faced by the Company. It is are highly related to the Company's operating responsibilities and overall performance.

In terms of non-financial indicators, in order to fulfill the Company's commitment to sustainable development, non-financial performance aspects such as ESG (environmental, social, governance) have also been included in the performance evaluation of the Company's senior managers (high-ranking managers include the President, Vice President, Heads of operation sites, etc.). The ESG indicators and weights are determined individually based on their duties, including relevant performance in domestic and international ESG ratings and evaluations, mitigation and adaptation measures related to climate change (such as greenhouse gas emission reduction, energy conservation and carbon reduction target achievement rate, or renewable energy utilization ratio, etc.), occupational safety and health promotion, etc.. In the performance appraisal, the achievement of those ESG performance indicators will be included in the calculation to evaluate their remuneration.

● For the remuneration of directors and executives , please refer to [GlobalWafers 2023 Annual Report](#).

## 1.1.2 Integrity & Ethics

### Core Values

GlobalWafers' most important core value is "Honesty and Integrity." To establish an integrity-based business environment, GlobalWafers has established relevant regulations and communication mechanisms for all directors, managers, and employees to follow. Through rigorous management mechanisms and effective control, the risk of dishonesty is minimized, ensuring the creation of value for customers and profitability for shareholders and other stakeholders.

### Internal Regulation System

To implement integrity management, GlobalWafers has established important internal regulations such as "[Ethical Corporate Management Best Practice Principles](#)," "[Codes of Ethical Conduct](#)," and "[Procedures for Ethical Management and Guidelines for Conduct](#)." Their contents cover topics such as integrity management, ethical behavior, prohibition of unreasonable hospitality or improper interests, prohibition of intellectual property rights infringement, prohibition of anti-competitive behavior, as well as conflict of interests. These documents are published on the Company website and internal website for colleagues to review at any time in order to improve legal compliance and professional ethics awareness for all colleagues.

For marketing and procurement colleagues, the Company has reiterated the importance of "honesty and integrity" via "Sales Management Measures" and "Procurement Management Measures" and established a comprehensive business law compliance mechanism covering topics such as fair competition, due diligence, trade control (trading counterparty, subject matter, purpose of use, cash flow, and relevant trade control and restrictions of major trading countries), anti-corruption, anti-bribery, and conflict of interests prevention and exemption mechanism. The Company also uses supply chain control to ensure compliance with conflict-free minerals provisions.

In addition to signing "Intellectual Property Rights and Confidentiality Agreements" with employees, the marketing and purchasing units are also required to sign non-disclosure agreements (NDAs) before cooperating with suppliers and customers in order to prevent unethical information-related acts such as disclosing company secrets to others. Employees are also prohibited from inquiring or collecting non-job-related company operation secrets in order to fully protect the sensitive or confidential information of business partners. GlobalWafers has established the "Personal Data Protection Management Measures," regularly implements personal data inventory, and practices personal privacy confidentiality obligations with the highest ethical standards.

GlobalWafers did not encounter any legal incidents or penalties associated with anti-competitive behavior regulations in 2023.



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## Anti-bribery and Anti-corruption

GlobalWafers insists on "3 Nos": No bribe offering, no bribe receiving, and no bribe demanding. The "Ethical Corporate Management Best Practice Principles" clearly stipulates that colleagues shall not directly or indirectly provide, promise, request or receive any improper benefits during the process of engaging in business activities. The "[Procedures for Ethical Management and Guidelines for Conduct](#)" further provides clear codes of conduct for colleagues, and the key points include: (1) If payment is provided or promised due to threat or intimidation, record the process, report to the supervisor, and notify the compliance unit. (2) If others provide or promise illicit benefits, return or refuse the offer, and report to the supervisor and notify the compliance unit. If it cannot be returned, hand it over to the legal compliance unit for processing within 3 days from the date of receipt.

In 2023, GlobalWafers arranged "Integrity Management" education and training courses for all new employees upon their onboarding to convey the correct concepts, enhance legal compliance awareness, and ensure all corruption risks are properly controlled.

### ◉ GlobalWafers spares no effort in conveying the following code of conduct to colleagues :

- ★ Be vigilant and cautious about all interests that may affect business decision-making.
- ★ Regardless of value, "no bribe offering, no bribe receiving, and no bribe demanding."
- ★ "No prior gifts and no subsequent gratuities."

GlobalWafers' marketing and procurement units are the first-line external contact units due to their business attributes, so they are faced with more internal/external incentives and opportunities for dishonest behaviors (i.e., cash, gifts, services, entertainment, facilitating fees). They are identified as having a higher risk of corruption by the Company using the dishonest behavior risk assessment mechanism. As such, GlobalWafers has stipulated the "anti-bribery and anti-corruption" clauses in the "Sales Management Measures" and "Procurement Management Process" measures to prohibit any bribery and corruption such as direct or indirect requests, appointments, deliveries, requests, or acceptance of bribes, any unreasonable gifts, entertainment, or other improper benefits from any third party. In case of violation, the violator must face criminal and civil liabilities in addition to punishment according to the Company's employee Reward and Punishment Provisions. If GlobalWafers has suffered damages due to such actions, the violator must also compensate the Company for the losses thus incurred.

In addition to the aforesaid internal risk control measures, GlobalWafers has urged all suppliers and customers to adopt the highest corruption prevention standards and sign a written "[Supplier Code of Conduct](#)" or "Customer Code of Conduct" to declare the "anti-bribery and anti-corruption" concepts to all of the Company's transaction partners. GlobalWafers requires suppliers and customers not to pay or accept bribes to GlobalWafers or its representatives in order to prevent improperly influencing transaction decisions under any circumstances.

## Conflict of Interest

GlobalWafers has established the "[Procedures for Ethical Management and Guidelines for Conduct](#)," which clearly stipulates that when directors, managers, and other interested parties participating or attending a board of directors meeting has a conflict of interest with the proposals listed by the board of directors; the conflict of interest shall be explained to the board of directors. If such conflict of interest is harmful to the Company, said person shall be prevented and recused from discussion and voting and shall not act on behalf of other directors to exercise their voting rights. Board directors shall also be self-disciplined and not offer inappropriate support to each other.

When a GlobalWafers colleague discovers that there is a conflict of interest with himself/herself or the legal person he/she represents during Company business performance, or the situation may enable himself/herself or his/her spouse, parents, children, or their interested parties to obtain improper benefits; report the relevant situation to the direct supervisor and the GlobalWafers Legal Compliance Unit, and the direct supervisor shall provide appropriate guidance.

To enhance corporate governance and prevent insider trading, the Company has established the "[Procedure for Insider Trading Prevention](#)" specifying that insiders, quasi-insiders, and information receivers, upon actually knowing of any information that will have a material impact on the price of the securities of the issuing company, after the information is precise, and prior to the public disclosure of such information or within 18 hours after its public disclosure, shall not purchase or sell, in the person's own name or in the name of another, shares of the Company that are listed on an exchange or an over-the-counter market, or any other equity-type security of the company, or the non-equity-type corporate bonds of such company that are listed on an exchange or an over-the-counter market, so that anyone knowing material information will not violate the regulations of insider trading due no ignorance to laws. In addition, the "Management Procedures to Prevent Insider Trading" stipulates that directors, managers, and individuals designated to perform duties under Article 27, Paragraph 1 of the Company Act are prohibited from trading the Company's stocks during the lock period from 30 days prior to the announcement of annual financial statements, and 15 days prior to the announcement of quarterly financial statements. The Company requested the President's Office to inform the persons subject to the provisions the lock period forbidding trading after arranging dates of board meetings; the President's Office also review the compliance of the concerned persons whenreporting the equity every month.

## Education and Training

GlobalWafers firmly believes that "integrity management is achieved by full compliance with laws and regulations." So, the Company has actively organized education and training as well as integrity management policy advocacy, and promoted the integrity policy and its importance to directors and employees. The goal is to ensure that all colleagues fully understand and comply with the policies, execute operations according to the highest standards, and practice the core value of "Honesty and Integrity" in daily work. Specific course contents offered in 2023 related to ethics, integrity, and legal compliance are as follows:

- ★ Conducted a one-hour "Insider Education Training" for directors, management a department level or higher, President's office, and new employees. The contents include insider trading law analysis (constitutive elements, major news disclosure method and time period, judicial opinions) and insider equity transfer law analysis (The obligation to declare before/after the event, and maintaining the number of shares held by directors and supervisors).



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- ★ Conducted a two-hour "Ethical Corporate Management Training" for directors, managers at a department level or above, and recruits; the content includes trade secret protection, issues of competition law, anti-bribery and corruption, conflict of interest prevention, customer due diligence (KYC), export control, and among other major compliance issues closely related to the technology industries.
- ★ Conducted one-hour education and training on the "New U.S. Export Administration Regulations (EAR) Education and Training" for the semiconductor business system managers of GlobalWafers and overseas subsidiaries. The training content included a summary of the current status of U.S. EAR regulations affecting GlobalWafers' business and an analysis of the countermeasures to be taken.

## Reporting Channel and Informant Protection

GlobalWafers has established the "Measures for the Report on Illegal, Immoral and Dishonest Acts" in order to ensure integrity management compliance and clearly stipulate the disciplinary and appeal system for integrity management violations. The Company has also established and provided employee suggestion boxes, e-mails, and appeal hotlines on the Company's internal website; and pledged to protect whistleblowers from any mistreatment due to whistleblowing. The goal is to encourage GlobalWafers internal and external personnel to report unethical behaviors or misconducts. In 2023, to align with the guidelines of TPEX's "Ethical Corporate Management Best Practice Principles for TWSE/TPEX Listed Companies" and "Guidelines for Establishing Codes of Ethical Conduct for TWSE/TPEX Listed Companies," the Company revised its "[Measures for the Report on Illegal, Immoral and Dishonest Acts](#)." Anonymous reporting is allowed.

GlobalWafers shall ensure that the identities of the informants and the contents of the report are kept confidential, and the relevant personnel involved in the report verification and investigation are required to provide the whistleblower with written confirmation that their identity and the report will be kept confidential. If an integrity management regulation violation is proven, punishment shall be issued according to the severity of the case. The specific reporting process and the responsible unit are summarized as follows:

### 1. Acceptance Unit and Accepted Party

Acceptance Unit	Accepted Party
Spokesperson	1. Shareholders, 2. Investors, 3. Other interested parties
Human Resources Executives	1. Company insiders, 2. Customers, 3. Suppliers, 4. Contractors
Legal Affairs	Same as spokesperson and personnel supervisor accepted parties

### 2. Processing Unit and Procedure

Steps	Responsible Unit	Content
General Employees	Money Case	Report to the Chairperson Human Resources (legal department may assist)
	Non-money Case	Report to the Chairperson, Notify the Department Director Human Resources & Department Director (legal affairs must assist)
Chairperson, Director, Senior Executive	Report to independent directors or Audit Committee	Human Resources & Legal Department

### 3. Handling Method

Steps	Responsible Unit	Content
1. Investigate the Facts	Human Resources, Legal Department	<ul style="list-style-type: none"> <li>• Investigate the relevant facts immediately; if it is believed that there is indeed a risk of unethical behavior, submit the case to the Chairperson of the board of directors for case delegation.</li> <li>• The relevant personnel handling the case shall issue a written disclosure to keep the identity of the informant and the content of the report confidential.</li> <li>• Written records of report acceptance and investigation shall be kept for 5 years.</li> </ul>
2. If verified to be true	Human Resources, Legal Department	<ul style="list-style-type: none"> <li>• The perpetrator is required to stop the relevant behaviors, and shall be properly disciplined via the Company's internal procedures or legal procedures.</li> <li>• Information such as the job title, date of violation, facts of violation, provisions violated, and handling status shall be disclosed on the Market Observation Post System. (This also applies to cases where the violation has been exempted by the Board of Directors.)</li> <li>• If necessary, report to the competent authority or transfer the case to the judicial authority for investigation.</li> <li>• The relevant unit of the perpetrator shall review the internal control system and operating procedures, and propose improvement measures.</li> <li>• The investigation results shall be recorded in writing and be kept for 5 years.</li> </ul>
3. Relief	Human Resources	<ul style="list-style-type: none"> <li>• Give the perpetrator the opportunity to appeal, and convene a Personnel Appraisal Committee hearing if necessary.</li> </ul>
4. Report to the board of directors	Legal Department	<ul style="list-style-type: none"> <li>• Submit the case reported, the handling method, and the subsequent review and improvement measures to the board of directors.</li> </ul>



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## Integrity Inspection

The Legal Affairs Office shall be responsible for formulating, supervising, and implementing the integrity management policy and prevention plan. We currently use the mail system management, access control, reporting system, legal compliance inventory, interview human resources & intellectual property team (non-competition violation, unlawful infringement of business secret, bribe, and intellectual property infringement risks), and conduct investigations into specific cases. These efforts ensure that the company's operations comply with integrity management principles, and existing measures are reviewed during audits. The Legal Affairs Office regularly reports the cases above to the Board of Directors every year, and no corruption incidents have occurred after the investigation in 2023. GlobalWafers will continue to review and optimize each work item details, and strive to eliminate any unethical and dishonest behaviors.

### 1.1.3 Implementing internal audits

#### Primarily goal for the set-up

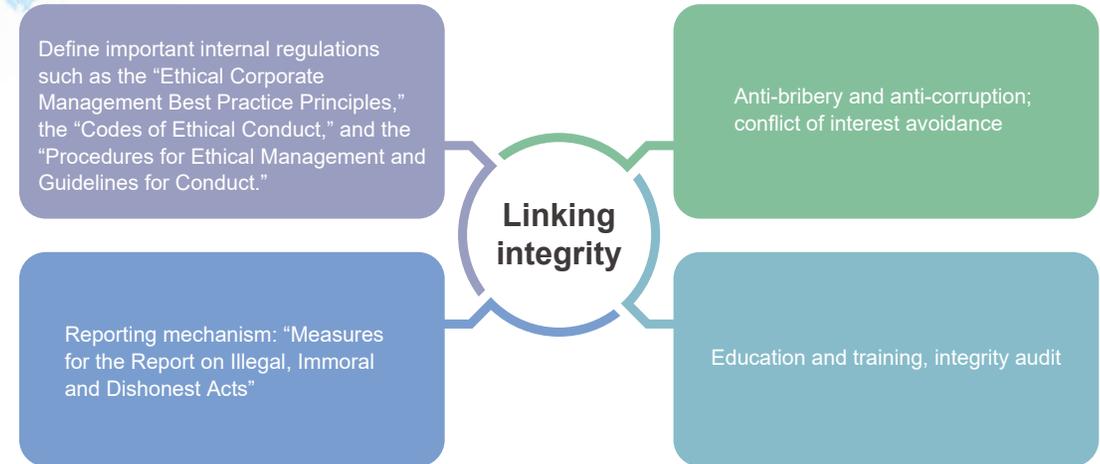
Assist the Board of Directors and management in checking and reviewing the internal control system for deficiencies, measuring the effectiveness and efficiency of operations, reliability of financial reports, and compliance with relevant laws and regulations, and providing improvement suggestions in a timely manner to ensure the continuous and effective implementation of the internal control system.

#### Key Areas for Execution

1. Make an annual audit plan based on the results of risk evaluation, including items to be audited each month. It does carry out audit operations in accordance with the annual audit plan. The Company's annual audit plan is approved by the board of directors; the same applies to amendments.
2. Any deficiencies or anomalies in the internal control system discovered during the audit are accurately disclosed in the audit report. These issues are tracked at least quarterly, and a tracking report is made until improvement, in order to confirm that the relevant units have taken appropriate improvement measures in time. After the audit report and follow-up report are submitted, they shall be submitted to the Audit Committee for review by the end of the next month after the audit project is completed.
3. Internal auditors uphold the spirit of detachment and independence, perform their duties with an objective and fair standpoint, and provide due care as professionals. In addition to regularly reporting the audit results to the Audit Committee, the Audit Committee also attends the board of directors' meeting to present the reports.

4. The Company and subsidiaries conduct a self-inspection of the internal control system at least once a year, and the Audit Office reviews the self-inspection reports of each unit and subsidiary, together with the improvement of internal control deficiencies and abnormal matters discovered by the audit unit. This serves as the main basis for the Board of Directors and the President to assess the effectiveness of the overall internal control system and issue the internal control system statement. Self-inspection work papers and related self-inspection reports and materials shall be retained for at least five years.

For details, please refer to the internal audit organization and operation under the [Corporate Governance section](#) on GlobalWafers' website.





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## 1.1.4 Legal Compliance

In addition to formulating the relevant policies and provisions according to domestic and foreign laws and regulations, GlobalWafers has also complied with the various relevant national laws and regulations. GlobalWafers also conducts continuous education, training, and promotion, and instructs all departments to complete the "Departmental Legal Compliance Self-Evaluation System" every year. The completeness and accuracy of the information are verified by the compliance unit to ensure that all employees comply with and understand the relevant laws and regulations; if deficiencies are found, appropriate improvement plans will be formulated and the improvement results will be tracked. In addition, the Compliance Unit also takes the initiative as needed to assist all departments in responding to regulatory changes specific to each department by amending or establishing relevant internal procedures. When necessary, it will conduct proper education and training to ensure effective implementation of the compliance system.

### ⦿ The penalty cases for GlobalWafers and its subsidiaries in 2023 are as follows:

Year	No. of penalty	Penalty of fines	Penalty plant	Matter of violation	Corrective measures
2023	1	NT\$30,000	GlobalWafers Zhunan Plant	Violation of Paragraph 2, Article 26 of the Toxic and Concerned Chemical Substances Control Act by failing to declare operation records for concerned chemical substances	Corrective measures: After the local environmental protection bureau notified the access, the declaration was completed. Preventive measures: 1. The capture interval of detailed purchase data is revised to the 1st day of the month to the 1st of the following month to avoid omissions. 2. Check the inventory quantity on site at the end of each month and check the material management and receipt records. 3. Notify the suppliers on a monthly basis to provide the shipping details. 4. Check the purchase details, inventory the stock at each unit, the goods receiving records, the details of the supplier's shipment at the end of each month, and check the supplier's declaration records at the time of declaration.

### ⦿ 2023 Law Compliance Focus:

<b>Securities and Exchange Regulations</b>	Strict management mechanism GlobalWafers' stocks are listed on the Taipei Exchange, and shall abide by the Securities and Exchange Act and other relevant laws and regulations. <ul style="list-style-type: none"> <li>• The president's office has established a good communication channel with the relevant competent authorities.</li> <li>• The legal compliance division shall observe the legal trends, review the latest regulations and proclamations, track the law and regulation developments, and notify the relevant departments after verification to formulate the necessary response measures. If a relevant department raises questions, the legal compliance division shall study the relevant regulations and provide the correct response direction after communicating and confirming with the competent authority.</li> </ul>
<b>Products, services, and import &amp; export regulations</b>	<ul style="list-style-type: none"> <li>• Verify the law and regulation requirements of the customers' or suppliers' business locations or designated trading places to ensure that the products, processes, and services meet the laws and regulations of the jurisdiction.</li> <li>• Ensure the raw material sources comply with the corresponding local laws and regulations, such as the EU RoHS directive, REACH regulations (restrictions), and the Toxic Substances Control Act (TSCA) of the United States.</li> </ul>
<b>Labor &amp; human rights regulations</b>	Strict compliance with labor & human rights regulations <ul style="list-style-type: none"> <li>• Regularly revise various work systems and management regulations to meet or exceed local labor regulations. Use formal and informal channels as well as 2-way communication with supervisors and employees to ensure that all employees have the basic concepts of labor laws and regulations, and can help to create a sound working environment together.</li> <li>• Value employee salaries and benefits; proactively cultivate talents; implement labor laws; ensure employees' rights. Regarding major policy changes, remuneration &amp; benefits, leave system changes that impact the rights of our employees, employees will be notified, prior to implementation, via labor-management meetings, electronic newsletters or announcements on the HR notice board to ensure employees' rights. In addition, the employers and employees have jointly operated GlobalWafers's Employee Welfare Committee to improve welfare and shape a corporate culture of inclusiveness.</li> <li>• Implement 0.5 or 1-hour relevant human rights education and training for new employees. Conduct regular workplace violence and sexual harassment prevention education and training for unit managers and interested colleagues. Moreover, we have established the relevant methods and appeal windows to provide employees with unobstructed appeal channels and communication platforms, and prevent any illegal incidents. The goal is to let employees achieve self-realization and create personal value in a safe working environment.</li> </ul>



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<b>Data management</b>	<ul style="list-style-type: none"> <li>• Formulating employment contracts and Business Confidentialities and IPR agreements, Codes of Ethical Conduct, Handling Procedures for Intellectual Property Disputes, and Confidentiality Agreements.</li> <li>• Management mechanism: Education on the importance of intellectual property and business secrets through posters and slogans, employee training and education, and signing of confidentiality agreements with employees in charge of relevant operations.</li> </ul>
<b>Corporate Governance</b>	<ul style="list-style-type: none"> <li>• Formulate the "Ethical Corporate Management Best Practice Principles," the "Codes of Ethical Conduct," and the "Procedures for Ethical Management and Guidelines for Conduct."</li> <li>• Management mechanism: Relevant contents are incorporated into education for current employees and orientation training for newly inducted employees to ensure compliance by all employees with said code of conduct in the performance of duties.</li> </ul>
<b>Environmental/ OSH laws and regulations</b>	<ul style="list-style-type: none"> <li>• Identification and management procedures for environmental protection, energy management, and occupational safety and health related laws and regulations.</li> <li>• Management mechanism: Monthly review of conformity to the latest amendments of relevant environmental, energy management, and OSH related laws and other relevant requirements; regular assessment of conformity to applicable legal requirements.</li> </ul>

## Legal Compliance Courses and Education

With the regular launch of strengthened legal training courses, the company intends for the staff members to understand the important laws and regulations and to further enhance their formidable commitment to abide by the occupational ethics and confinements. Not only are promotional posters posted within the plant, but the policy guidance on legal compliance is also provided on the internal website or facilitated through the regulation advocacy activities of the following themed courses, so as to substantiate our staff members' understanding of all legal compliance.

### 2023 Course Offers





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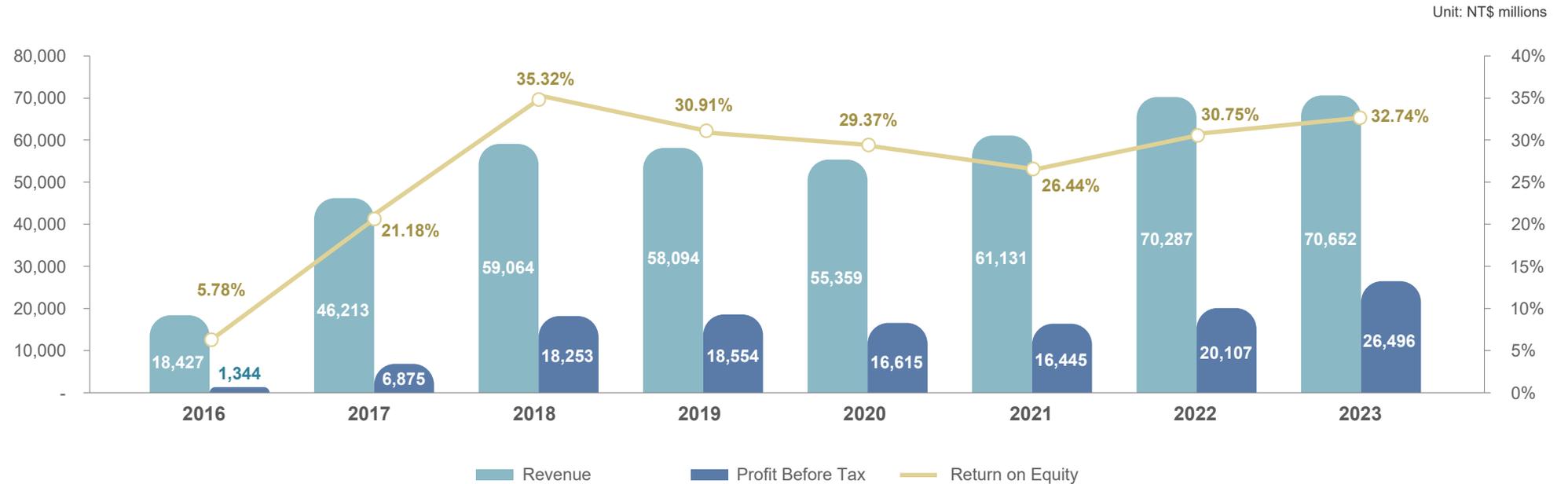
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## 1.2 Operation Performance

In 2023, the semiconductor industry had weakened momentum due to factors such as customer inventory adjustment and uncertain end demand. With its long-term agreements with customers, abilities to support customers in switching to a wide spectrum of products for required application, coupled with the large-size and special wafers (FZ, SOI) and compound semiconductors led by automotive electronics and industrial applications, GlobalWafers has showed operational resilience in the headwind. FY2023 consolidated revenue of GlobalWafers reached NT\$70.65 billion, with 0.52% YoY; gross profit was NT\$26.44 billion, and the operating profit was NT\$20.06 billion; the profit before tax was NT\$26.5 billion, and the net profit was NT\$19.77 billion; EPS of NT\$45.41, with an increase of more than NT\$10 compared with the previous year. FY2023 consolidated revenue was NT\$70.65 billion which grew in 3 consecutive years and rose to the highest again! FY2023 EPS, profit before tax margin and net profit margin all hit record high and achieved fruitful results.

For details on the Company's operating performance and financial information, please refer to GlobalWafers' [2023 Consolidated Financial Statements](#).

### Financial Performance (Consolidated)



### Cash Dividends





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### 2023 Economic Value Analysis

Unit: NT\$ Millions

Generated direct economic value	Annual report: income	70,652
Distributed economic value	Operational costs	44,211
	Employee salaries & benefits	13,748
	Payment to investors	6,964
	Payment to the government	6,065
	Community resources	9

### Product Sales

The semiconductor market entered the adjustment stage at the end of 2022 and 2023. Although the semiconductor industry was affected by the overall economy and the slowdown in consumer electronics demand in 2023, the inventory pressure increased. GlobalWafers benefited from high coverage by long-term contracts. The utilization rates for FZ wafers and compound semiconductor wafers remained high, allowing GlobalWafers to continue growing its revenue in 2023 despite the headwinds. The Company's consolidated revenue reached NT\$ 70.651 billion in 2023, with 0.52% growth from 2022. The Company continued to record multiple outstanding performances, fully demonstrating GlobalWafers' excellent management and operation capabilities.

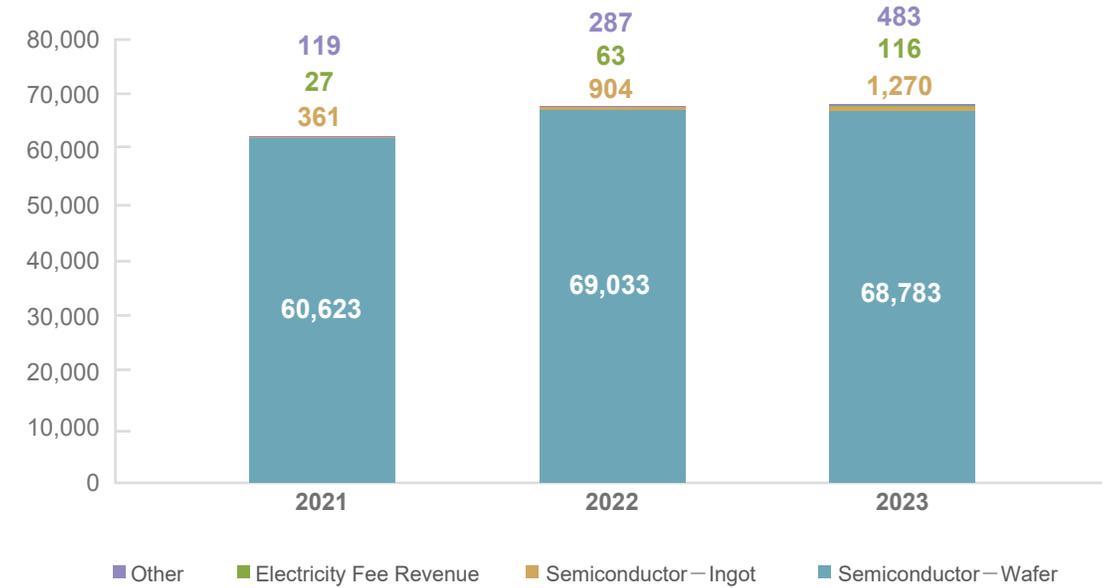
For the total global wafer production volume in 2023: 44,747 (thousand wafers) semiconductor wafers & 296 (metric tons) semiconductor ingot products & 142 (thousand wafers) other products Note, 100% of the Company's production comes from our own factories. Please refer to GlobalWafers' [2023 Annual Report](#) for details.

Note:

1. The semiconductor ingot products only include external sales in the statistics; self-produced or intercompany usage is not included
2. "Other products" refers to production capacity and volume of Crystalwise Technology Inc, Shanghai Sawyer ShenKai Technology Material Co., Ltd. and their subsidiaries, which we acquired in 2023.

### Revenue

Unit: NT\$ Millions

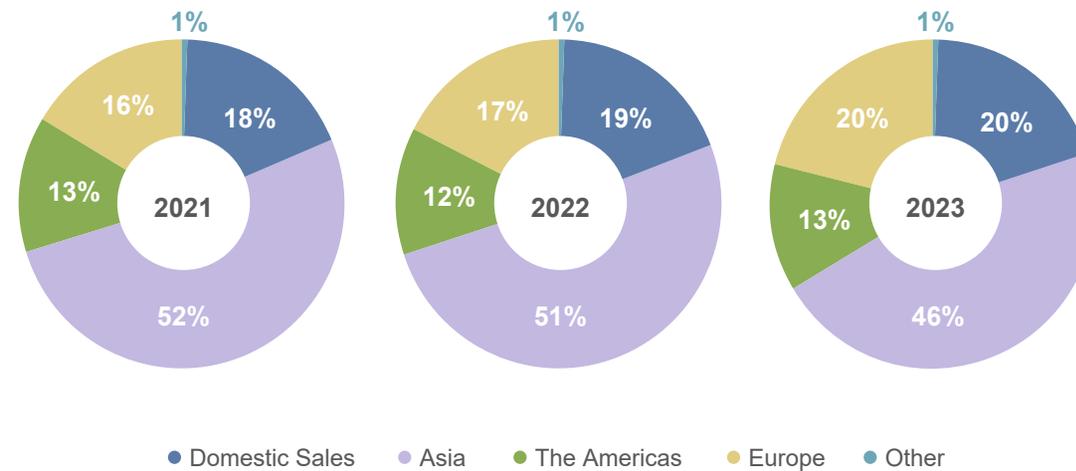




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## Sales Area Ratios

GlobalWafers' revenue distribution across sales regions is balanced and stable, with Asia being the largest market, including domestic sales accounting for nearly 70%, followed by Europe.



## Overall Economic Environment and Industry Trends

Although the semiconductor industry was affected by the overall economy and the slowdown in consumer electronics demand in 2023, the inventory pressure increased. GlobalWafers benefited from high coverage by long-term agreements. The utilization rates for FZ wafers and compound semiconductor wafers remained high, allowing GlobalWafers to continue growing its revenue in 2023 despite the headwinds. Looking forward to 2024, as the end market inventory gradually decreases, AI functions are gradually introduced into personal computers, tablet computers and smartphones, which are expected to promote a wave of machine replacements. Meanwhile, the AI ecosystem relies on the support of peripheral devices and semiconductor components to drive the demand for edge computing and high-performance computing (HPC), promoting the development of low-energy-consuming components (SiC, ULLD, IGBT...), and more innovative applications debuted, such as 5G, electrification, smart cabin, autonomous driving. Additionally, various countries' energy transition and net-zero carbon policies lay a long-term foundation for the development of compound semiconductors. The market is expected to gradually recover in 2024, with signals likely being led by the memory sector. However, the speed and extent of the economic recovery will depend on different end applications and overall economic uncertainties, such as war, rising transportation costs, interest rate cuts, and exchange rate fluctuations. GlobalWafers, positioned upstream in the semiconductor supply chain, typically experiences market recovery one to two quarters later than downstream segments. Since customers will prioritize the consumption of their inventory, it is expected that the performance of the second half of the year will be healthier than the first half of the year.

GlobalWafers offers a comprehensive product spectrum ranging from 3" to 12" wafers, capable of meeting a wide array of customer needs and mitigating the impact of market fluctuations for individual products. Recent expansion plans further prepare the market for an accelerated shift towards advanced processes. GlobalWafers leverages its unique strengths in sustainability and high regionalization to become a long-term partner for its customers. With production and operation locations all over the world, the Company can supply its customers locally, reducing the impact of product carbon footprints and carbon tariffs, and diversifying geopolitical risks. By utilizing flexible asset allocation and maintaining a robust financial structure, GlobalWafers can navigate market volatility, generate profits and ensure stable operations.

## 1.3 Risk Management

### Risk Management Policies and Procedures

In response to the rapidly changing management environments and to ensure the company's stable management and sustainable development, GlobalWafers has formulated the "Risk Management Policies" and "Risk Management Guidelines" in 2015. In 2021, the Company had integrated the relevant information and redefined the "[Risk Management Policies and Procedures](#)" to establish an effective risk management mechanism, assess and supervise risk tolerance, monitor risk exposure status, determine risk response strategies, and comply with risk management procedures.

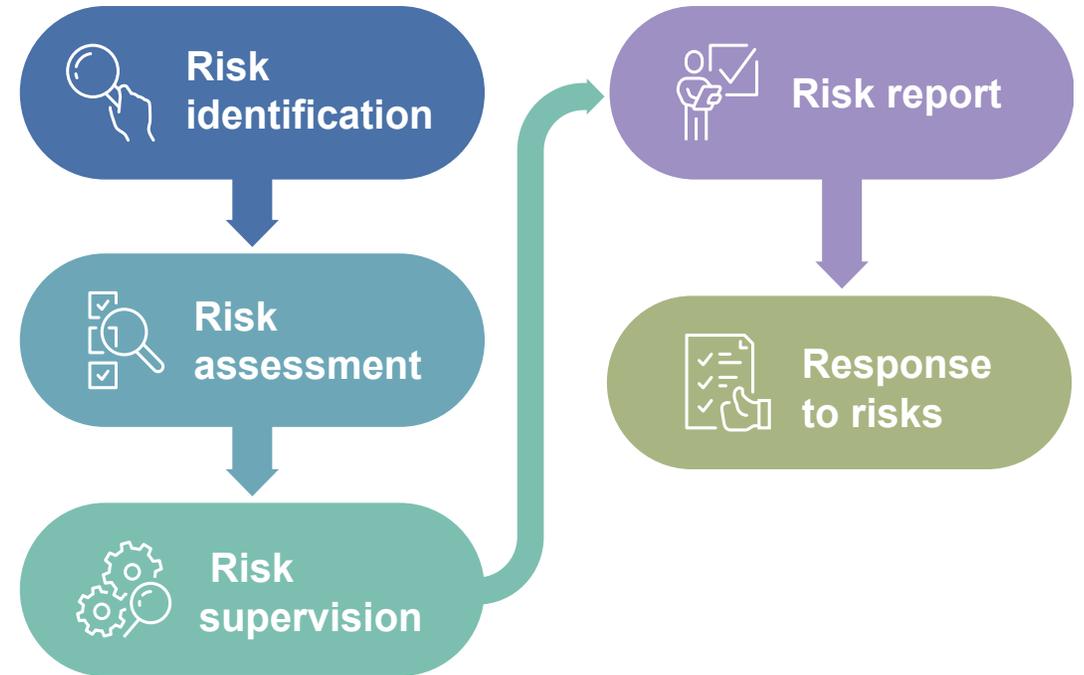
### Risk Management Organization Framework

GlobalWafers' risk management organizational structure is as follows:

- I. Board of directors: As the Company's highest risk management unit, the board of directors aims to ensure legal compliance according to the overall business strategy and environment, promote and implement the Company's overall risk management, and clearly understand the risks faced by securities firms' operations, ensure risk management effectiveness, and take the ultimate responsibility for risk management. The above risk management-related matters are supported and supervised by the Audit Committee.
- II. Senior management: Responsible for planning and executing the board of directors' risk management decisions and coordinating cross-departmental risk management interactions and communications to reduce strategic risks.
- III. Various functional units: Responsible for analyzing, managing, and monitoring related risks within the subordinate units and ensuring that risk control mechanisms and procedures are effectively implemented.
- IV. Internal audit: This independent unit is subordinate to the board of directors. It assists the board of directors in supervising and executing the risk management mechanisms, inspects the risk implementation response and control of by functional unit, and provides suggestions for improvement in risk monitoring.

### Risk Management Process and Operation

GlobalWafers' risk management procedure includes risk identification, assessment, supervision, reporting, and response operations. With this risk management procedure, we aim to implement and facilitate the company's risk management strategies effectively.



GlobalWafers has stipulated an assessment method as the basis for risks management. Regarding quantifiable risks, we have adopted a rather stringent statistics analysis and technique for analysis management and manage such quantifiable risks using a progressive method. With risks that cannot be easily quantified, we assess them using the qualitative method, i.e., linguistic description to express the possibility and impact of a risk occurrence. Relevant operation and risks management information is also disclosed in the Company's [annual report](#) and the [company website](#).



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GlobalWafers operates risk management in accordance with the three-level risk management division of labor structure

**Tier-1 liability**

1

Each functional unit or business undertaker shall be the responsible risk-control person for the business it undertakes. This entity must execute the operations according to the relevant business's internal control system and provisions and serve as the initial risk discovery, assessment, and control unit.

**Tier-2 liability**

2

The powers and responsibilities of each functional unit or the assigned risk management personnel of the functional unit shall be responsible for the risk management of the relevant businesses. This entity shall review the operation rules or operation manuals according to the actual business operations, pay attention to the competent authority's latest regulations (revisions or) amendments and business-related decrees or orders, and (revise or) amend the relevant internal provisions when necessary.

**Tier-3 liability**

3

Senior management must review the integrity of the company's risk management-related mechanisms, supervise the risk management implementation and effectiveness, and report to the Audit Committee and board of directors every year

To implement the risk management mechanism, the Company's Corporate Sustainable Development Committee reports to the Audit Committee (composed of four independent directors) and the Board of Directors every year on material environmental, social, and corporate governance issues and risk-related strategies, management operations, and execution related to the Company's operations. The Audit Committee and the Board of Directors are to provide feedback and guidance, with the most recent report submitted on May 7, 2024. In consideration of the importance and particularity of the climate change issue, the Corporate Sustainable Development Committee additionally reports to the Board of Directors each quarter on environmental performance indicators and targets, as well as climate change strategies and management.



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GlobalWafers has established an effective risks management mechanism to assess and supervise its ability of withstanding risks and status of risks sustained, and to determine risks-responsive strategies and the compliance status of risks management procedure. The ESG risks and the strategies of turning risks into opportunities that the Company has identified are illustrated below.

## Strategies of turning risks into opportunities

Corporate Governance Aspect	
<p><b>All risks involving management and investment</b></p> <ul style="list-style-type: none"> <li>Proactively establish a comprehensive up-, middle- and down-stream integrated supply chain to expand the operation scale and to disperse operation risks via multi-angled management strategies.</li> <li>Establish an automatic feedback production analysis system to improve process stability, optimize quality, and reduce costs</li> <li>Continue to cultivate in the advanced technology R&amp;D, commit to enhanced performance of key materials for power components so as to widen the gap from the competitors.</li> <li>Invest in the development of key technologies for GaN RF components as a response to the market demand for IoT and G5 mobile telecommunication.</li> <li>Establish an information security risk management structure and policy, strengthen the information security management awareness, and prevent possible information security risks and losses by implementing specific management plans as well as related education and training</li> </ul>	<p><b>Challenges for relationship maintenance and communication with internal &amp; external stakeholders</b></p> <ul style="list-style-type: none"> <li>Strengthen the stakeholder area on the Company's website, hold legal seminars regularly, and maintain open communication channels with stakeholders to respond to major issues of concern.</li> </ul>
<p><b>Strengthen the Board of Directors' Competency</b></p> <ul style="list-style-type: none"> <li>Improve the board of directors' structure and its member composition, implement corporate governance policies and specific incentive measures, formulate relevant governance provisions, and clearly define the punishment and appeal system to enhance the sustainable value of the enterprise</li> </ul>	<p><b>Regulation Compliance Risks</b></p> <ul style="list-style-type: none"> <li>Continue to monitor the revisions of relevant laws and regulations, ensure compliance with laws and regulations by adding and revising the corresponding internal procedure specifications, and provide education and training</li> </ul>
Environmental Aspect	
<p><b>Climate change risks</b></p> <p>Set short-, medium- and long-term carbon emission reduction goals with 2019 as the base year. To achieve these goals, we have planned four major reduction strategies.</p> <ul style="list-style-type: none"> <li>Renewable energy adoption: Continuing to increase the proportion of renewable energy via self-built solar power generation systems and purchased renewable energy (e.g., PPA, RECs).</li> <li>Improve energy efficiency: Reduce equipment energy consumption by improving equipment.</li> </ul>	<p><b>Risks for environmental protection</b></p> <ul style="list-style-type: none"> <li>Install the pollutant emission supervision system; devote to pollutant reduction</li> <li>Strengthen the risk control for turning waste into resources and reuse; use regenerated raw materials as much as possible</li> </ul>
People Aspect	
<p><b>Risks for occupational health and safety</b></p> <ul style="list-style-type: none"> <li>Conduct hazard identification and risks assessment plus risk reduction measures, stipulate relevant management procedures and handling guidelines, and implement emergency response drills on a regular basis</li> <li>The Company has conducted regular health and safety education and training to prevent occupational hazards and protect labor safety and hygiene.</li> </ul>	<p><b>Risks for labor health</b></p> <ul style="list-style-type: none"> <li>Regarding particular operations prone to health hazards, special physical check-ups are offered to employees who are newly recruited or undergoing job changes. Annual special health check-ups are conducted, and labor operation environment supervision is implemented.</li> <li>To strengthen employees' health awareness, we have held sporadic employee health management and health promotional events in order to share information on major illnesses or health and enable our employees access to comprehensive health information.</li> <li>The factory has established a Covid Contingent Action (CCA) epidemic prevention team in response to COVID-19 to provide rolling adjustment of the plant's epidemic prevention measures and plan epidemic prevention-related employee benefits according to the COVID-19 development. The actions include providing vaccination incentives and purchasing additional employee group insurance to cover new statutory infectious diseases. The goal is to establish a friendly workplace environment, ensure employee health, and enable them to work without worries.</li> </ul>
	<p><b>Risks for labor-management relationships</b></p> <ul style="list-style-type: none"> <li>Labor-management communication: The Company attaches great importance to the rights and interests of employees. So, before any important decisions are made, the Company will notify the affected employees via labor-management meetings, electronic newsletters or personnel announcements in order to protect their rights and interests.</li> <li>Work hours and output management: Stipulate clear job descriptions and establish work goals. We have adopted work hours and output management to ensure the value and rationality of work, ensure that colleagues can create value under the premise of harmony between work and life, and reduce the risk of labor disputes</li> <li>Employee complaints channel: Install designated personnel for handling employee opinions, handle problems raised by employees in a timely manner, reduce labor-management conflicts</li> </ul>



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🕒 [Long-Term Emerging Risks]

Given the drastic changes in the international situation causing macroeconomic shocks, the ongoing risks posed by extreme climate events leading to energy shortages, and emerging information security threats, the Company has formulated the following response strategies for identified long-term emerging risks

Emerging Risks	Risk Description	Potential Impact	Response measures
<b>Geopolitical Risks</b>	Recently, the international situation has changed drastically. Regional trade conflicts, the Russia-Ukraine War, the Israel-Hamas War and the potential conflict in the South China Sea will impact the overall economic environment.	<ol style="list-style-type: none"> <li>1. Geopolitical factors significantly impact the overall economy, causing fluctuations in the semiconductor industry and affecting changes in the investment environments of various countries.</li> <li>2. Geopolitical risks also affect exchange rate fluctuations. The Company has established production sites in Europe, America, and Asia, where the labor, utilities and other overheads were paid by these sites separately in respective local currencies. Some of the export sales were settled by the customers in respective local currencies of the host countries while the remainder will be settled in USD. As such, wide fluctuation of the exchange rate between the USD and the currencies of the aforementioned host countries will affect the cost of operation of the Company.</li> </ol>	<ol style="list-style-type: none"> <li>1. Highly regionalized global operations GlobalWafers' 18 operating production bases are located in nine countries around the world. After the completion of the new plant in the United States, GlobalWafers will have thorough production processes from wafer growth to epitaxy in the Americas, Asia and Europe. For customers, it is a local supplier to meet their needs nearby, and mitigate the impact of geopolitical and overall economic changes. GlobalWafers has production facilities around the world and thus is able to allocate flexibly to respond to the impacts of related regulations, lower duties and operational costs. Clients all over the world also effectively diversify the impacts from the pandemic to the revenue and lower the economic risks from a single area. GlobalWafers also keeps close relationships with customers, and establishes a resilient local supply chain and business continuity plan (BCP) to cope with various challenges flexibly.</li> <li>2. Strategies for responding to exchange rate fluctuations The international economic situation and exchange rate are so unpredictable. In response, the Company adopts the policy of natural hedge between the positions of assets and liabilities with an attempt to minimize the exposure of the position to exchange risk. The treasury function of the Company pays close attention to the trend of the exchange rate, and will match with appropriate foreign exchange instruments for hedging where necessary to mitigate the influence of exchange rate fluctuation on the cost of operation.</li> </ol>
<b>Energy Transition Risks</b>	Extreme climates have prompted countries to continue to set net-zero carbon emission targets. The energy transition will bring about energy shortage worries, which may affect production. The governmental regulations, investment institutions, customers and the national policies of trade partners have increasingly scrutinized specifications for energy saving and carbon reduction. There is an expanded requirement for the use of renewable energy, and the power costs and the carbon tariff at the export destinations are a severe test for the survival ability of enterprises.	<ol style="list-style-type: none"> <li>1. Extreme climate conditions, such as unusually high temperatures, require maintaining optimal production conditions within the plant, which leads to an increase in operating electricity consumption and greenhouse gas emissions. This results in higher operating costs.</li> <li>2. In order to comply with the government's regulations on the use of renewable energy and customers' requirements for a green supply chain, such as collecting carbon fees from large electricity users and providing low-carbon products, production costs may increase.</li> </ol>	<ol style="list-style-type: none"> <li>1. Committed to optimizing its existing equipment and introducing various energy-saving measures, to produce in an environmentally friendly manner. GlobalWafers' new plants have also introduced various energy-saving equipment and solutions during the construction phase, to reduce energy consumption, while comprehensively applying various green solutions, expanding the proportion of green power utilization, and monitoring the impacts of extreme weather at the same time, to minimize operational risks. For example, through the construction of a solar power plant, GlobalWafers' Denmark subsidiary Topsil is expected to become the first semiconductor crystal growth factory to use 100% self-generated green electricity in the second half of 2024.</li> <li>2. By building our own solar power plants, signing power purchase agreements (PPAs) and purchasing Renewable Energy Certificates (RECs), as well as the Company's RE100 blueprint, we achieved our goals in stages.</li> <li>3. As the parent company, SAS is a Green Energy Total Solution Provider, their rich experience and vertically integrated supply chain advantages may be adopted to assist the Group in building solar power plants to increase green energy power generation, and the subsidiary, Sustainable Energy Solution, will help in matching the demand for green power.</li> </ol>



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Emerging Risks	Risk Description	Potential Impact	Response measures
<p><b>Cyber Security Risk</b></p>	<p>In the era of digital technology, various emerging technologies are developing rapidly, and enterprises will face more complex and changing information security threats, including data leakage, cyberattacks, ransomware, and identity theft. These related cybersecurity risks may pose threats to the Company, its customers, and suppliers.</p>	<p>Cyber security risk incidents may cause damage to the Company's finances or affect overall business operations. On the other hand, leakage of confidential information, hacker attacks, etc., may damage the Company's reputation and various stakeholders' trust in the Company.</p>	<ol style="list-style-type: none"> <li>1. The Company has established the Information and Communication Security Committee, and each subsidiary has an Information and Communication Security Promotion Team to coordinate the formulation, implementation, risk management, and compliance of information security and protection policies. In addition, the Company has established the "Information Security Management Policy" and "Information Security Management Procedures" and conducted regular annual information security drills to strengthen the Company's emergency response capabilities.</li> <li>2. Established information security monitoring and vulnerability scanning systems to prevent external hacker intrusions and internal secret theft, and implemented strict software and hardware control (including Internet and personal information equipment) to ensure personal data and internal confidential data protection and security.</li> <li>3. The Company joined the Taiwan Computer Emergency Response Team/Coordination Center (TWCERT/CC) and SP-ISAC of the Industrial Park. Through the annual exchange with famous information security service providers and programs, the Company pays close attention to issues related to information security and planned for proper response. The Company also conducts exercise drills against DDoS and APT under different information security environments to strengthen the capacity of the management staff in response to the situation with a view to detecting and deterring attack once discovered.</li> <li>4. To implement the Company's information security risk management, the introduction of ISO 27001 began in January 2024, and ISO 27001 certification is expected to be obtained by the end of 2024</li> </ol>



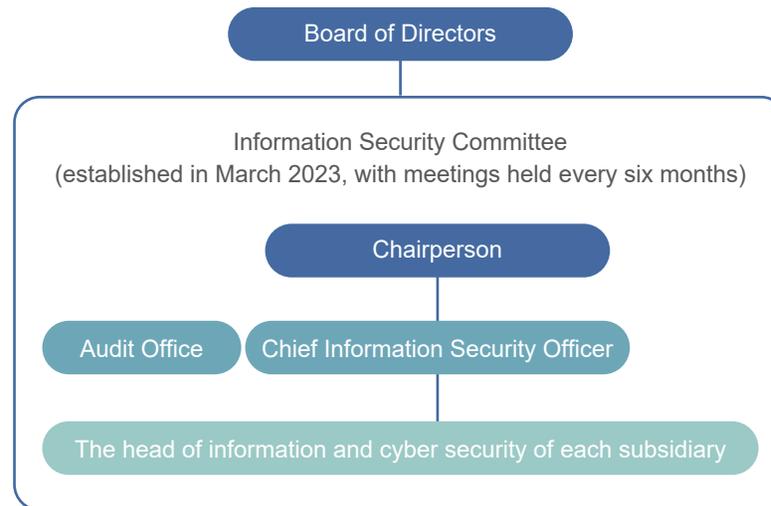


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### 1.3.1 Information security

GlobalWafers established the Information Security Division on March 1, 2023. To strengthen GlobalWafers' information security management, we also formulated the [Information Security Management Policy](#), which was approved by the Board of Directors. GlobalWafers established the Information Security Committee on March 1, 2023. The members of the Committee are the heads of information or cyber security of the Company or subsidiaries under the Group. In each subsidiary, the cyber security promotion team is established to coordinate the formulation, execution, risk management and compliance of cyber security and protection policies.

#### Information Security Committee



GlobalWafers has established a Chief Information Security Officer (CISO) and an information security organization to lead the execution of the company's information security operations and the effectiveness of information security risk management mechanisms. At least once a year, the CISO reports the effectiveness of information security management and the strategic direction of information security to the Board of Directors. The overall information security management organization and the execution effectiveness of related information security operations and systems are supervised by Chairperson Hsiu-Lan Hsu, who has a background in computer science. These are regularly reviewed and revised. The most recent report to the Board of Directors was on May 7, 2024.

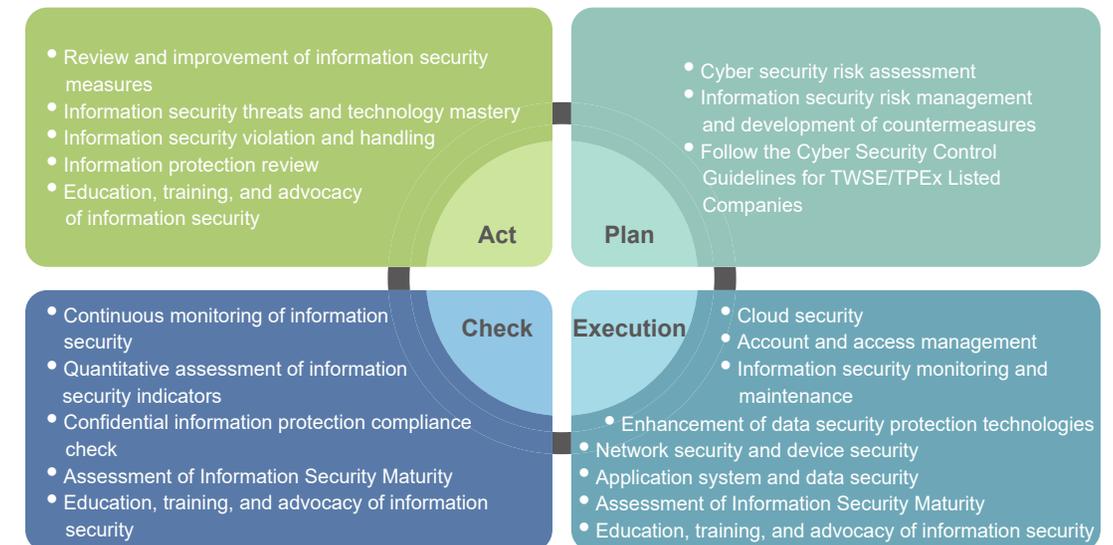
GlobalWafers outsourced with the group parent (Sino-American Silicon Products Inc.) to manage its information system. The internal audit function of the Company orchestrates the audit on the information system and information security annually and reports to the Board on the audit status.

The Company initiated the implementation of the ISO 27001 Information Security Management System standard in January 2024, with the goal of obtaining ISO 27001 certification by the end of 2024.

GlobalWafers takes "Information Security Governance" as the theme of the information security strategy – pursuit in compliance with the Information Security Policy, with timely introduction of new technologies for the improvement of the capacity in security information governance. "Compliance" – the Company reviews newly enacted legal rules and regulations and introduces new technology products for enhancing information security management. "Application of Technology" – cooperation with famous professional information security service provider to make improvement of information security governance capacity in these 3 aspects. Through close cooperation and mutual support, and endless improvement, the Company optimizes its capacity in overall information security defense.

The Company has adopted the PDCA cycle operation model to achieve the objectives and provide continuous improvement, established information security monitoring and vulnerability scanning systems to prevent external hacker intrusions and internal secret theft, and implemented strict software and hardware control (including Internet and personal information equipment) to ensure personal data and internal confidential data protection and security.

#### Information security risk management and continuous improvement framework:





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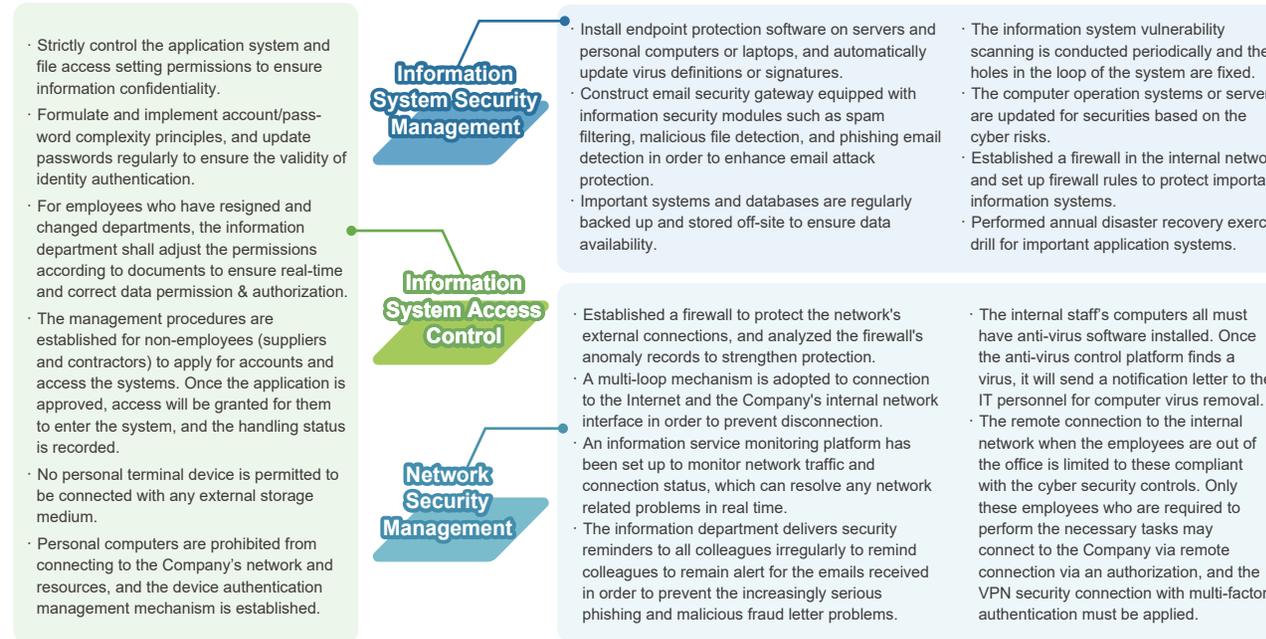
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○ The specific information security management programs are implemented in three major aspects to ensure effective information security protection and reduce risks:



In light of the new trend of information security such as DDoS attack, blackmail software, community engineering software, website side recording, and loopholes, the Company joined the Taiwan Computer Emergency Response Team/Coordination Center (TWCERT/CC) and SP-ISAC of the Industrial Park. Through the annual exchange with famous information security service providers and programs, the Company pays close attention to issues related to information security and planned for proper response. The Company also conducts exercise drills against DDoS and APT under different information security environments to strengthen the capacity of the management staff in response to the situation with a view to detecting and deterring attack once discovered.

○ Implementation results of the promotion of cyber security measures in 2023 :

- ★ The Company implements "Cyber Security Related Education and Training" to all employees every year. In 2023, each employee has completed at least one IT security related training course.
- ★ Each dedicated information security personnel (currently three designated information security personnel) has completed 40 hours of professional information security-related training in 2023.
- ★ In 2023, social engineering drill was conducted for three times, and all users passed the test.
- ★ The external service system vulnerability scanning monitoring scored 98 points.

1.3.2 Personal Data Protection

To implement personal data protection, GlobalWafers has formulated the "Personal Data Protection Management Measures" for any internal or external data that can directly or indirectly identify a natural person. These measures regulate employees' behavior in collecting, processing, and using personal data handled in business operations. The Company has adopted three personal data protection policies: (1) the Right to Know, (2) the Principle of Proportionality, and (3) the Safety Guarantee.

- ★ Right to know: When collecting personal data, the data authority shall clearly inform the subject in writing or orally of the scope and purpose of the collection, the period, method, and targets of use, and the legal rights that the subject may exercise.
- ★ Principle of Proportionality: Respect the rights and interests of the parties concerned, proceed in an honest and trustworthy manner, and follow the principles of appropriateness, necessity, and minimization. This includes having a reasonable connection to the purpose of collection and not exceeding the purpose of collection in use.
- ★ Safety Guarantee: The data responsible unit shall handle the security and maintenance of personal data files. If there is any information security hazard, such as illegal data leakage or theft, the Company will instruct the relevant units to implement an emergency response; after investigation and confirmation, the party concerned will be notified of the facts of the damage and the response measures the Company has taken.

The Company's compliance unit performs regular (biannual) audits and organizes "personal data protection education and training" to instruct the data authority to inventory the personal data involved in its operations and ensure that the unit responsible for the collection, all handling, and utilization shall comply with personal data laws and regulations.



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# Material Topics Target and Achievement

Key Performance Indicator	United Nations Sustainable Development Goals (SDGs)	2023 Goals	2023 Status and Achievements	Short-term Goals (2024)	Mid-term Goals (2025 - 2030)	Long-term Goals (2030 and beyond)
<b>Product Quality and Safety</b>						
Customer Satisfaction		8" & 12" Product Quality & Product Development > 82	Achieved	Product Quality & Product Development > 83 Meet the needs of customers for different generations and different application products	Product Quality & Product Development > 85 Become the first-tier supplier of advanced processes and mature products for customers.	Product Quality & Product Development > 88 Become the first choice of customers for products of different generations and different applications
Product Specifications		100% Compliance with hazardous substance-related regulations and customer specifications	Achieved	100% Compliance with hazardous substance-related regulations and customer specifications		
<b>Sustainable Supply Chain Management</b>						
Supplier A obtained ISO 14001 Certification		-	62% (120/194 suppliers)	65%	80%	100%
Supplier A Obtained Third-Party Carbon Inventory Confirmation		-	11	20%	50%	80%
Supplier A Obtained Third-Party Product Carbon Footprint Verification		-	3	+ 2	+ 2	> +10
Due Diligence in Procurement of Compliant Conflict-Free Minerals A		-	100%	100%	100%	100%
Supplier Annual Audit		-	Supplier Document & Physical Audit 83%	Increase supplier sustainability audits by 30%	Increase supplier sustainability audits by 50%	Increase supplier sustainability audits by 60%

A = Qualified primary and secondary raw material suppliers. The 2023 target achievement for sustainable supply chain management is calculated only for the Taiwan region. From 2024 onwards, calculations will be based on the entire Group.



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## 2.1 Innovation Management

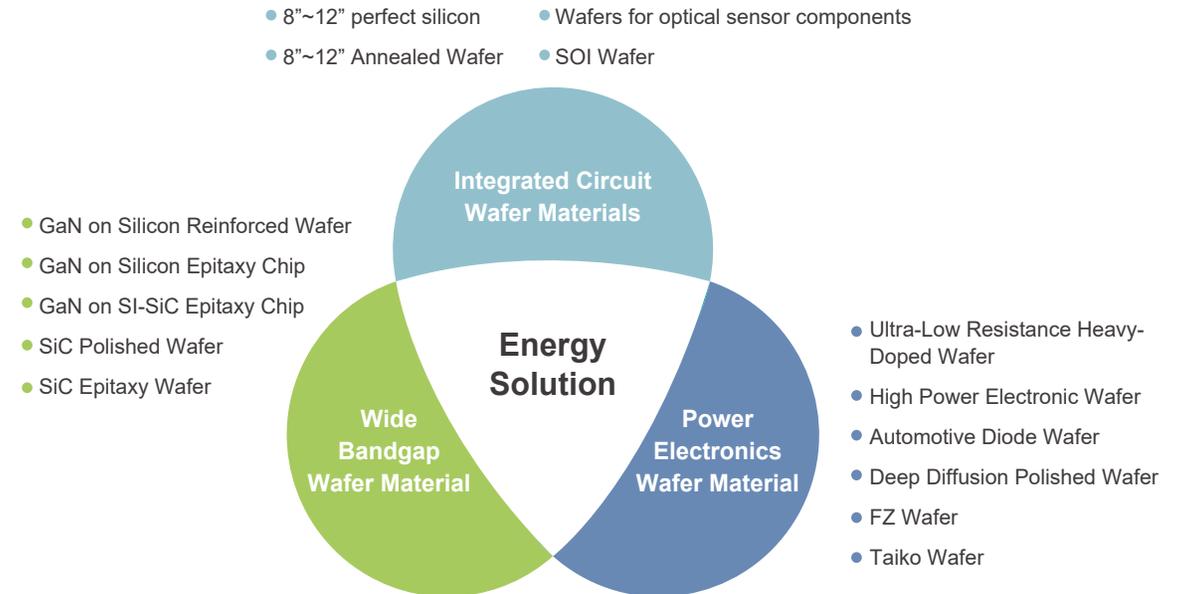
To meet the demand for increased semiconductor unit content brought about by technological innovation and respond to the accelerated digital transformation post-pandemic, GlobalWafers has implemented a large-scale capacity expansion plan, including production locations in Asia, Europe, and the USA. The production capacity expansion covers 12" wafers and epitaxy, 12" SOI, 8" FZ, SiC wafers (SiC Epi included), GaN on Si, among other large-sized next-generation products. Currently, the Phase 2 plant of the Hsinchu Science Park is undergoing equipment replacement, investing in 12-inch silicon wafers for advanced processes and expanding its R&D center to develop advanced compound semiconductors materials such as silicon carbide (SiC) and gallium nitride (GaN) epitaxy. These two wide bandgap materials are widely used in the fields of power devices and microwave/RF communications, including 5G, high-power components, fast-charging applications, high-frequency and high-voltage, automotive electronics, photonic data communications, AIoT, green energy, and other application fields. Market demand has continued to climb significantly. At present, these products have entered mass production one after another, becoming the new impetus for GlobalWafers' sustained high growth.

### • In Terms of Products and R&D, the Following Strategies are Formulated:

- Significantly increase the production capacity and technology of high-end semiconductor wafers dedicated to advanced processes;
- Accelerate the development of SiC wafers and semi-insulating SiC required for new technologies such as 5G, power electronics, and electric vehicles;
- Expand the establishment and R&D capacity of the Taiwan Wafer R&D Center;
- Invest in the development of green energy in Taiwan and increase the proportion of green energy used in the semiconductor wafer manufacturing process.

Products can be classified into three major products based on product types. The following is an explanation of development directions for these three major products:

### • GlobalWafers Product Development Direction



#### • 1. Integrated Circuit Wafer Materials

Our main products include 8"~12" perfect silicon, 8"~12" annealed wafers, optical sensor device wafers and SOI wafers, predominantly used in the manufacture of integrated circuit devices across five key categories: Bipolar Digital, Memory, Micro, Logic, and Analog. As manufacturing processes continue to miniaturize and demands for silicon wafer purity, surface cleanliness, and flatness become more stringent, advancements in crystal pulling technology (such as oxygen density control and micro-defect reduction) and breakthroughs in wafer processing technology have become increasingly critical. With the shrinking wire widths in integrated circuit manufacturing, the quality standards for silicon wafers also become more exacting. GlobalWafers is dedicated to developing wafers that meet the exacting requirements of advanced integrated circuit manufacturing processes, all while offering customers the finest services and options available.



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## 2. Power Electronic Wafer Material

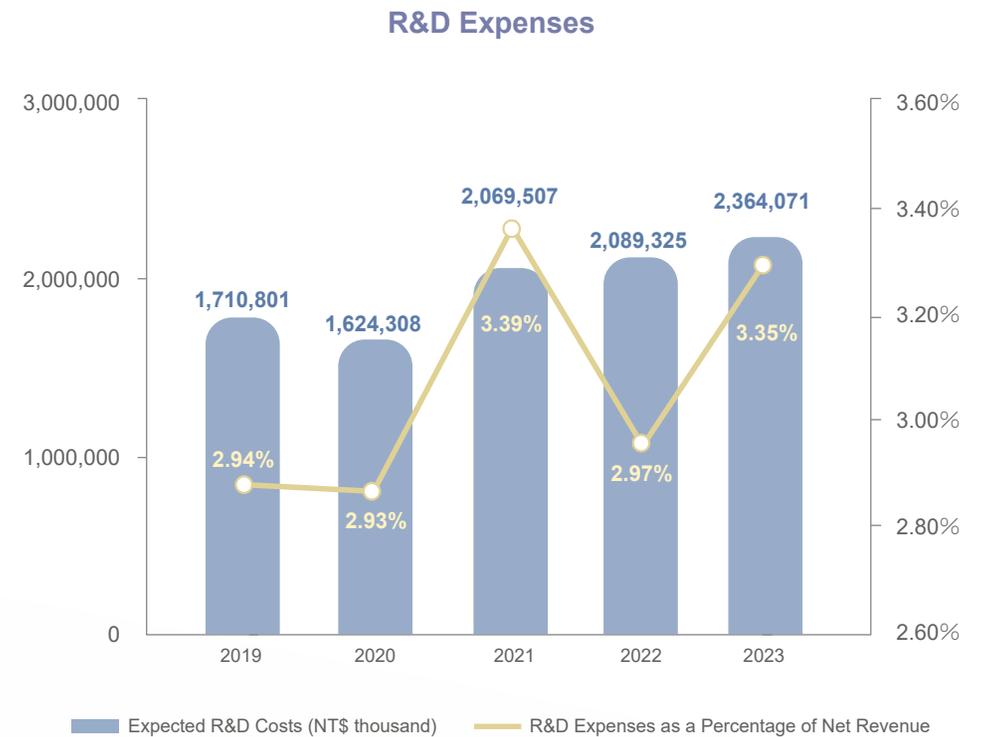
The global shift towards green energy amid heightened environmental awareness has spurred a rising demand for renewable energy sources and accelerated growth in the electric vehicle sector, making power electronics development a focal point worldwide. This trend, coupled with industrial automation advancements, increasing consumer power consumption, and rising demand for electronics, has propelled the expansion of power electronics solutions. Industry leaders are prioritizing energy efficiency through advanced power electronics solutions, driving extensive industrial applications and expanding vertical markets in this field. The wafers required for power electronic components of silicon-based power semiconductors include ultra-low resistance heavily doped wafers, high-power power electronics wafers, automotive diode wafers, FZ wafers, Taiko wafers, etc. For mass applications, the demand for wafer quality and quantity is also increasing year by year. With the continuous market growth, the power electronics market size was valued at USD\$43.3 billion in 2022 and is expected to grow to US\$94.21 billion by 2032, at a compound annual growth rate (CAGR) of 8.3% during the forecast period (2021-2030). Higher power density and the increasing demand from the automotive industry are the main market drivers for the market growth. At the same time, the revolution in material switching is ongoing. GaN and SiC technologies are replacing part of silicon-based transistors, more diode products to enhance product performance.. The global demand for power semiconductors continues to grow. GlobalWafers plays a leading role in this field while continuously strengthening the development of related products and technologies.

## 3. Wide Bandgap Wafer Material

Wide bandgap power device comes with many advantages which include features of high electric breakdown field, high saturated electron drift velocity and superior heat dissipation. These features make wide bandgap device more suitable for applications in high power, high frequency and high temperature environments. Utilization of wide bandgap power device can lower energy consumption during conducting and switching, and the power consumption for the system's overall operation can be reduced by half. Additionally, given the features of lowered energy consumption and excellent heat dissipation, volume and weight for the system using wide bandgap power devices can be reduced dramatically. Currently, new materials such as SiC, GaN and Ga2O3 are being regarded as materials for next-generation power semiconductor. According to TrendForce research estimates, the market value of SiC power devices will significantly grow 3.3 times by 2026 compared to 2022. The output value will grow from US\$1.69 billion in 2022 to US\$5.33 billion in 2026. According to Transparency Market Research Inc. According to the (TMR) research on the GaN semiconductor market, the output value of GaN semiconductors was US\$1.85 billion in 2021. The compound annual growth rate (CAGR) is expected to be 27.4% from 2022 to 2031, and the output value will reach US\$19.5 billion by the end of 2031. The global demand for GaN substrates will reach US\$647 million in 2030 from US\$227 million in 2022. GlobalWafers has invested in the research of developing GaN and SiC wafers. Currently, the Company is already providing customers with silicon wafer substrates, which are exclusive for GaN on silicon and GaN on silicon/GaN on SI-SiC epitaxy wafers for their device design and development. Developments for polished SiC wafers and Epitaxy wafers shall continue. For these two new materials with explosive growth, we shall continue to invest in development resources. At the same time, GlobalWafers will be able to provide various types of wafers for energy applications and total solutions for customers.

GlobalWafers has a strong R&D team composed of 137 R&D engineers in Taiwan and 124 overseas.

## Actual R&D Expenses Over the Years





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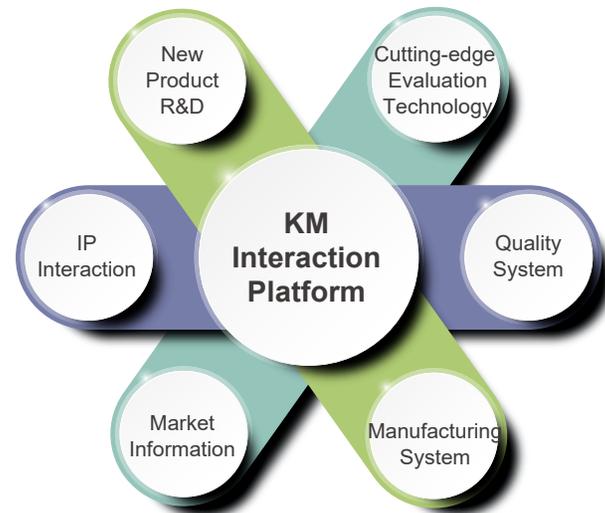
## 2.1.1 R&D Resources

Developing products requires considerable time, manpower, and resources. It also necessitates support and resources from numerous stakeholders for successful completion. Given limited resources, effectively utilizing what is available is crucial for maximizing benefits.

### Internal Resources

GlobalWafers has a total of 18 operating production bases distributed throughout 9 countries worldwide, as well as customers in Europe, Asia, and the Americas. Faced with globalized competition, grasping information and sharing resources will be conducive to more efficient and accurate strategies. Therefore, it is necessary for GlobalWafers to establish a cross-plant KM (Knowledge Management) Exchange Platform, allowing the factories to exchange information and technology with each other. On this interaction platform, resources and support can all be obtained for technology issues, market information and product development, manufacturing management, quality management and IP patent related activities faced by respective factories. In the meantime, enhancement for respective factories' capabilities is facilitated accordingly through the internal competition mechanism established by this interaction platform.

### Internal Resources - KM Exchange Platform



### External Resources

Taiwan has excellent academic resources and has accumulated a large amount of profound knowledge regarding fundamental research and scientific applications. Industry-academia collaboration can quickly integrate abundant R&D capabilities, accelerating product development and shortening the time to market. Taiwan also has a comprehensive ICT (Information and Communication Technology) industry chain. Through the integration of upstream and downstream operations, products can be mass-produced in the development stage. Furthermore, to facilitate industry upgrades and the practical application of academic research, governmental bodies provide substantial research funds each year to subsidize academia-industry collaboration on new products and new technology development. Since 2015, the Taiwanese government has initiated a guidance program promoting industry upgrades & innovation platforms and assists industries in undergoing structural changes via four major development strategies: enhancing product value, supplementing critical supply chain, developing systems and incubating emerging industries. GlobalWafers headquarters utilizes external resources through academia-industry collaborations with academic institutes, commissioned research with research agencies, as well as implementing national projects via subsidy application to national institutes and conducting strategic alliances with industry players. External research consultant groups composed of these external resources work together to solve technological issues arising during the product development process and conduct verification of research products.

### External Resources





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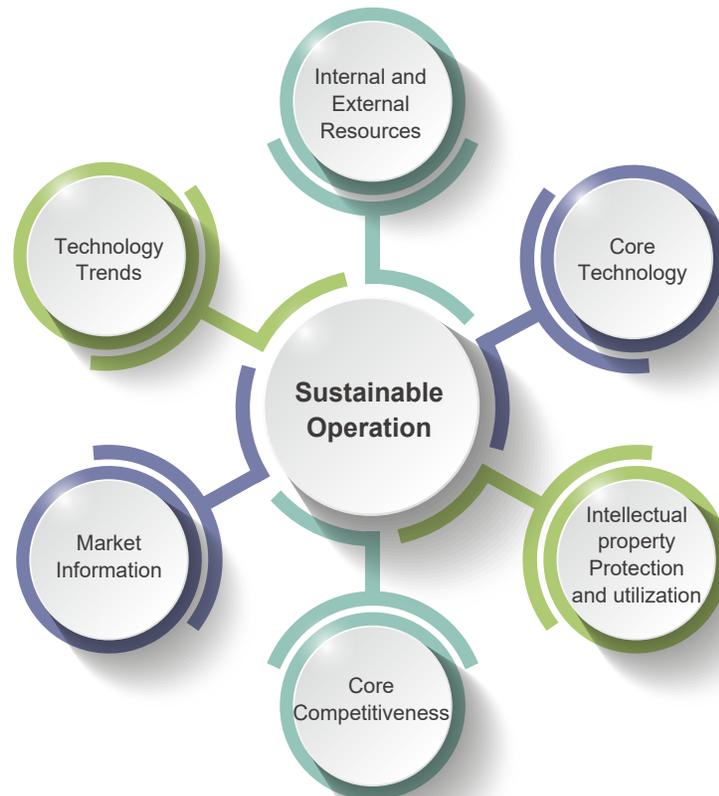
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- Corporate sustainable operation and continued profits are every enterprise's expectation. However, century-old enterprises may vanish too when faced with global competition and technology evolution if they loses their driving force for progressive operation. A company will grow and make profits if its operation strategies align with the development trends.
- Regarding research strategies, it is necessary to continue with in-depth cultivation of core technologies and core competitiveness, supplemented by technology trends and market information as the development direction. The company can thus achieve the goals of sustainable operation through integrated internal and external resources and maximum benefits from minimum investment, along with sound management of intellectual property protection and utilization.

### R&D Strategy and Company Operations

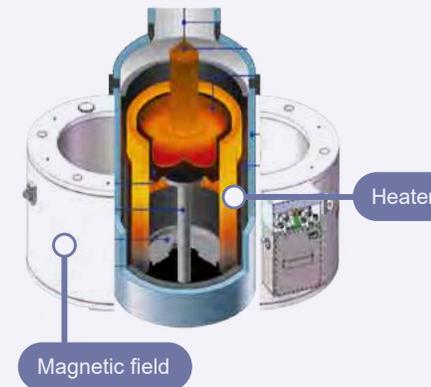


### Case in Focus

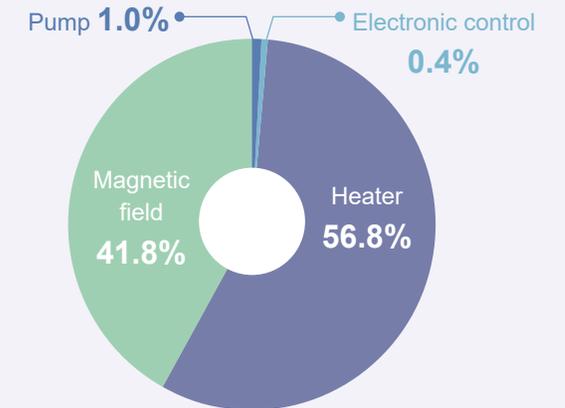
## Crystal Puller Energy Saving Project

#### ★ Project Introduction

For sustainable operation, the Company continues to invest in green energy technology to reduce the energy consumption of production and manufacturing. For this project, the magnetic field during the crystal growth process and the electricity consumed by the heater accounted for more than 90% of the total. The conversion efficiency of the transformer of the electric box is poor, and the old transformer generated a lot of heat loss, making it impossible to perform software magnetic field control. This project evaluates the new IGBT power box on the hardware side through the development and improvement of hardware and software. The power box has the advantages of high conversion efficiency and low loss; on the software side, the magnetic field control software developed in-house is used to modulate the magnetic field switch and size.



#### Distribution of electricity consumption for crystal pullers



#### ★ Concrete achievements

- Cumulative power consumption savings of 5,576,000 kWh (hardware improvement + software improvement) = 5.57 million kWh (320,000 kWh/month)
- Reduced carbon emissions by 5,576,000 kWh X 0.495kgCO<sub>2</sub>/kWh = 2,760 ton CO<sub>2</sub> (162 ton CO<sub>2</sub>e/month)
- The total savings accumulated since implementation amount to 5,576,000 kWh X 3 (NTD/kWh) = 16.72 million (NTD) (NT\$960,000/month)

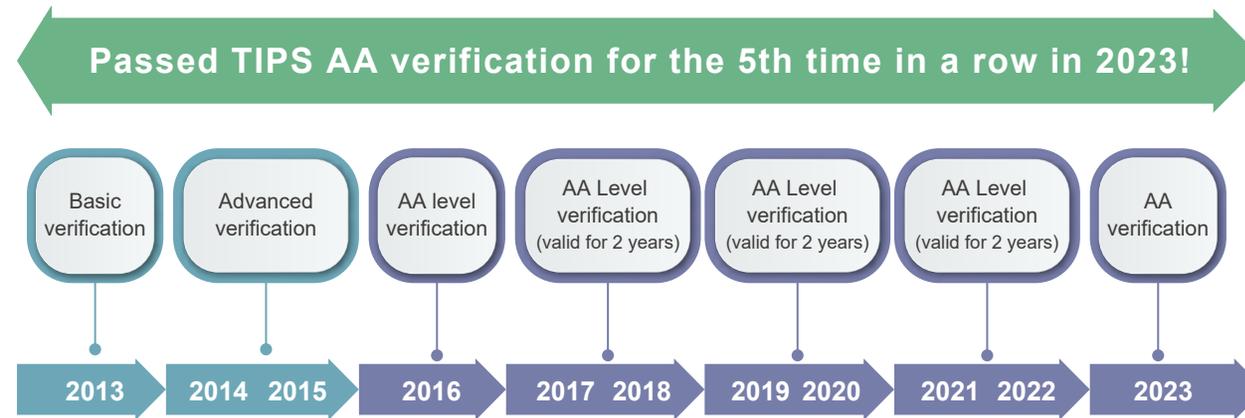


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## 2.1.2 Intellectual Property Management System

GlobalWafers implemented the Taiwan Intellectual Property Management System (TIPS) in 2013, establishing management processes and passing the basic certification. It continued to achieve advanced certifications in 2014 and 2015, as well as AA-level certification in 2016, 2017, 2019, 2021, 2023. Strengthen and enhance the Company's intellectual property management capabilities through the establishment of systematic management and have them certified and affirmed by third parties.

### ◎ TIPS Validation History



### ◎ Intellectual Property Management Strategy

- ★ Improve intellectual property management capabilities and cultivate long-term competitiveness.
- ★ Encourage all employees to make innovative proposals and strengthening the layout of product patents
- ★ Establish a confidentiality management mechanism to protect the rights and interests of corporate customers.

Through the implementation of TIPS, the intellectual property management policy focuses on confidential control and patent layout, aligning with operational and R&D strategies. Aiming to become the world's largest and most comprehensive wafer supplier, the Group employs core technological capabilities to establish competitive next-generation products. The intellectual property management system aims to enhance IP management capabilities, strengthen product patent layouts, build a comprehensive confidentiality management mechanism, and ultimately boost the Company's competitiveness while protecting the rights of the Company and its customers.

### ◎ Intellectual Property Management Outcome: Diversified Patent Deployment to Secure Competitive Advantages

In terms of system implementation, the head of the R&D unit acts as the management representative and forms a promotion team together with the intellectual property unit and the executive representatives of each unit. Annual internal audits and management reviews are conducted regularly, and participation in external verifications ensures the effective implementation of the management system. In terms of patent management, we establish patent management procedures to ensure the quality of patent output and cooperate with the innovation and development team to strengthen the patent portfolio for new products or new technologies.

GlobalWafers currently has 493 valid patent applications, with applications covering a wide range, including: (1) silicon substrate crystal growth and processing technology; (2) silicon carbide wafer crystal growth, processing, and defect inspection technology; (3) gallium nitride epitaxy technology; (4) smart manufacturing and AI analysis technology. We have layouts from the generation of semiconductor materials to the third generation of emerging technology. Including other overseas subsidiaries, the total number of effective patent applications for the entire Group has accumulated to 2,310, with 1,403 patents granted and 907 patents pending (as of the end of December 2023).

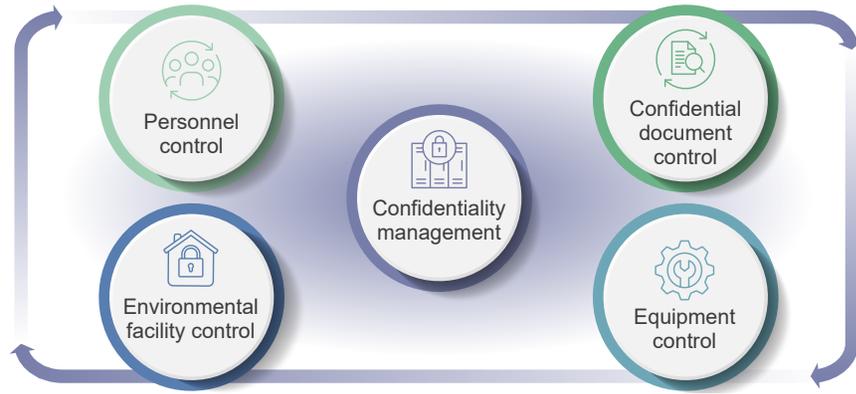


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### ⦿ Risks and Countermeasures: Reinforce Secret Control to Reduce Secret Leakage Risk

Whereas secret leakage frequently makes headlines in the media, the Company will continue to strengthen its secret control program to prevent theft of the technologies generated by its hard work and protect clients' interests. In terms of confidentiality control, a management mechanism is established for personnel, confidential documents, equipment, and environmental facilities. For the personnel department, intellectual property education and training are provided to raise employees' awareness of secrets control and risk awareness; for the document department, each department inventories and manages the documents, classifies them into confidentiality levels, and performs level labeling, authority control, and circulation and destruction control in sequence; for the equipment department, the use of personal computers or electronic storage devices is controlled; for environmental facilities, control areas are set up for important data centers or production operations to implement access control and filming control. The Company conducts internal audits and self-examinations every year to confirm the implementation level of confidentiality control in each department.

#### Four Major Areas of Confidentiality Management



For the Group, intellectual property rights can demonstrate the strength of technological development, create opportunities for strategic alliances, enhance the overall competitiveness of the Company, and win the trust and recognition of customers. In particular, when developing new technologies or products, it is important to position the patents in this field to avoid possible intellectual property risks. Intellectual property rights are not only a competitive tool for developing next-generation products, but also an important tool for defending against the influence of all competitors and enabling the Company to operate continuously.

## 2.2 Product Quality

GlobalWafers adheres to the spirit of never-ending improvement and excellence, provides the best quality, technology, and comprehensive services to enhance product quality and competitiveness. The Company aims to grow alongside its customers, foster excellence among employees, create value for shareholders, and maintain sustainable operations.

To ensure the effective implementation of strategic operations, GlobalWafers has promulgated the "Quality Policy" to serve as the creed for all employees. We are committed to continuous improvement in all aspects in order to achieve the ultimate quality, technology, and manufacturing excellence. Our goal is to provide customers with zero-defect products and services.

### ⦿ Enhancement of Company Improvement Culture

Each GlobalWafers plant has actively invested in quality management activities, pursued comprehensive improvements, and refined process technologies to enhance product quality. The plants have established a Quality Improvement Team (QIT) composed of members from various functional departments to ensure process research and product quality improvement. The improvement results include innovative creativity; cost-effectiveness; lean production; product competitiveness; customer satisfaction; customer complaint cause analysis, review, and improvement; and quality index process capability. Its goal is to achieve perfection in order to enhance the image and competitiveness of the company's products through continuous improvement and progress. We aim at zero-defect as our permanent goal, and continue to improve and grow with our customers in order to become their No. 1 choice.

GlobalWafers participated in the 2023 "Taiwan Continuous Improvement Awards" and won two Silver Tower Awards in the categories of Self-improvement (Quality & Efficiency) and Project Improvement. We will continue to improve and refine our engineering technologies.





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## 2.3 Customer Service

Customers are GlobalWafers' valuable assets. They are also the Company's important partners along the way to growth. In addition to maintaining operational performance, enhancing the company's core value, and pursuing advanced technology and stable quality, we also provide comprehensive customer service and maintain good collaboration relationships with customers, hoping that all parties can grow and prosper together, enjoy sustainable operation, and achieve social and economic values.

### Customer Satisfaction

Customer recognition and support are the main reasons why GlobalWafers has become the third largest wafer manufacturer globally. Therefore, customer service has always been a key focus of GlobalWafers' work. In order to enhance customer relationship, improve service quality and facilitate technology innovation, we conduct customer satisfaction survey each year focusing on top 20 profitable customers and potential key customers through questionnaire distribution or telephone interviews for the purpose of accessing and grasping customers' needs.

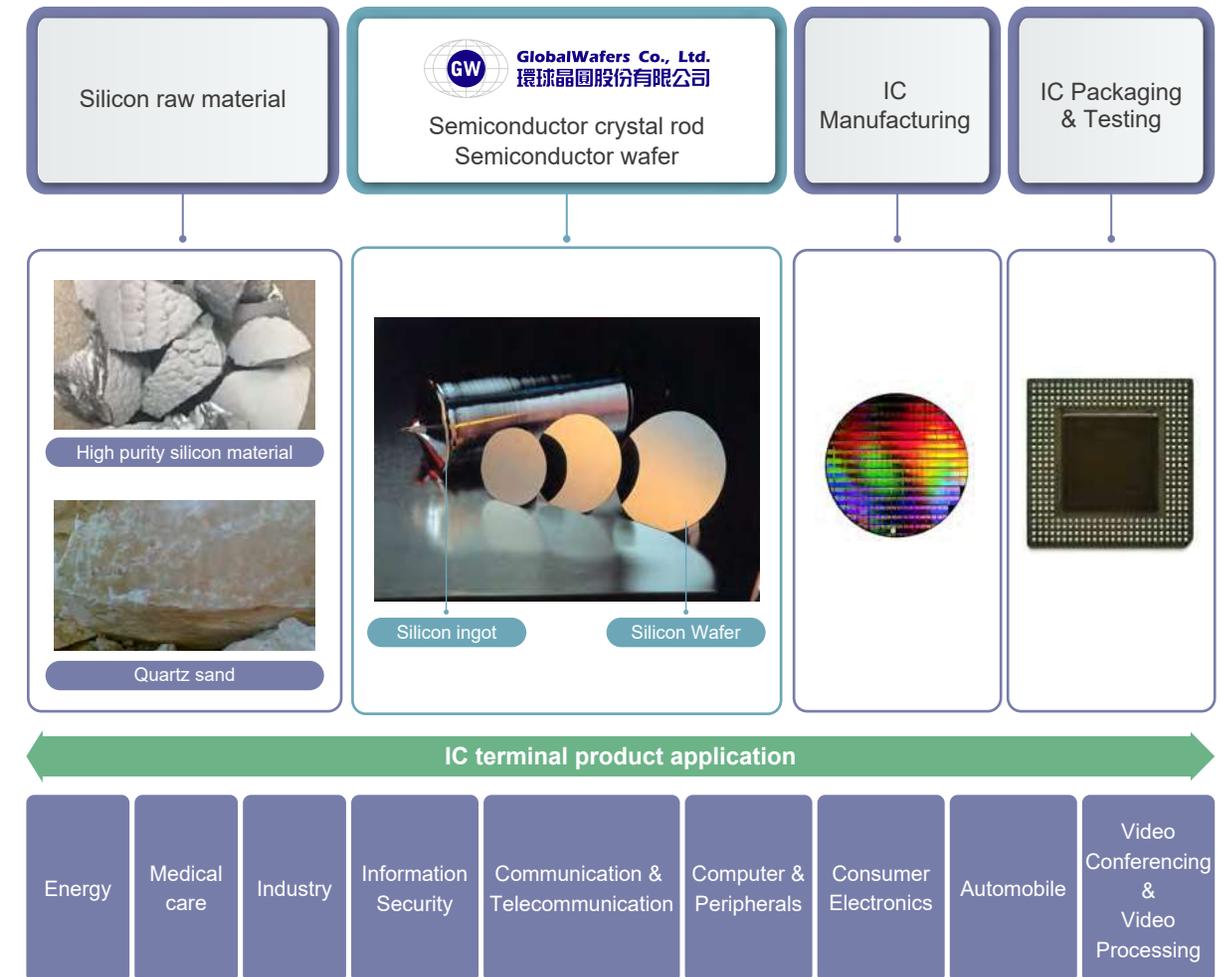
Contents for our customer satisfaction survey mainly encompass overall impression, business service, and new product development. Based on customer's feedback, GlobalWafers business team together with other colleagues will establish an improvement plan focusing on issues revealed, and further conduct in-depth discussion with customers in order to complete the customer satisfaction survey process.

In 2023, through the efforts of various GlobalWafers teams, the customer satisfaction survey achieved a 100% response rate. The evaluations for product quality and new product development both met the company's set targets, indicating that we have consistently gained the approval of the vast majority of our customers in terms of stable quality and the pursuit of advanced technology. GlobalWafers will continue to make improvements to enhance customer satisfaction, striving to become the most trusted partner for our customers in their journey of technological innovation.

## 2.4 Sustainable Supply Chain & Management

GlobalWafers is committed to responsible sourcing and actively cooperates with supplier partners. At the same time, we pay attention to social and environmental impacts and ensure that the supply chain is equipped with a safe working environment, maintains dignified labor relations, and operates in compliance with ethical standards. We fulfill our corporate social responsibilities to achieve the goal of developing a sustainable supply chain.

### Upstream and Downstream Supply Chain



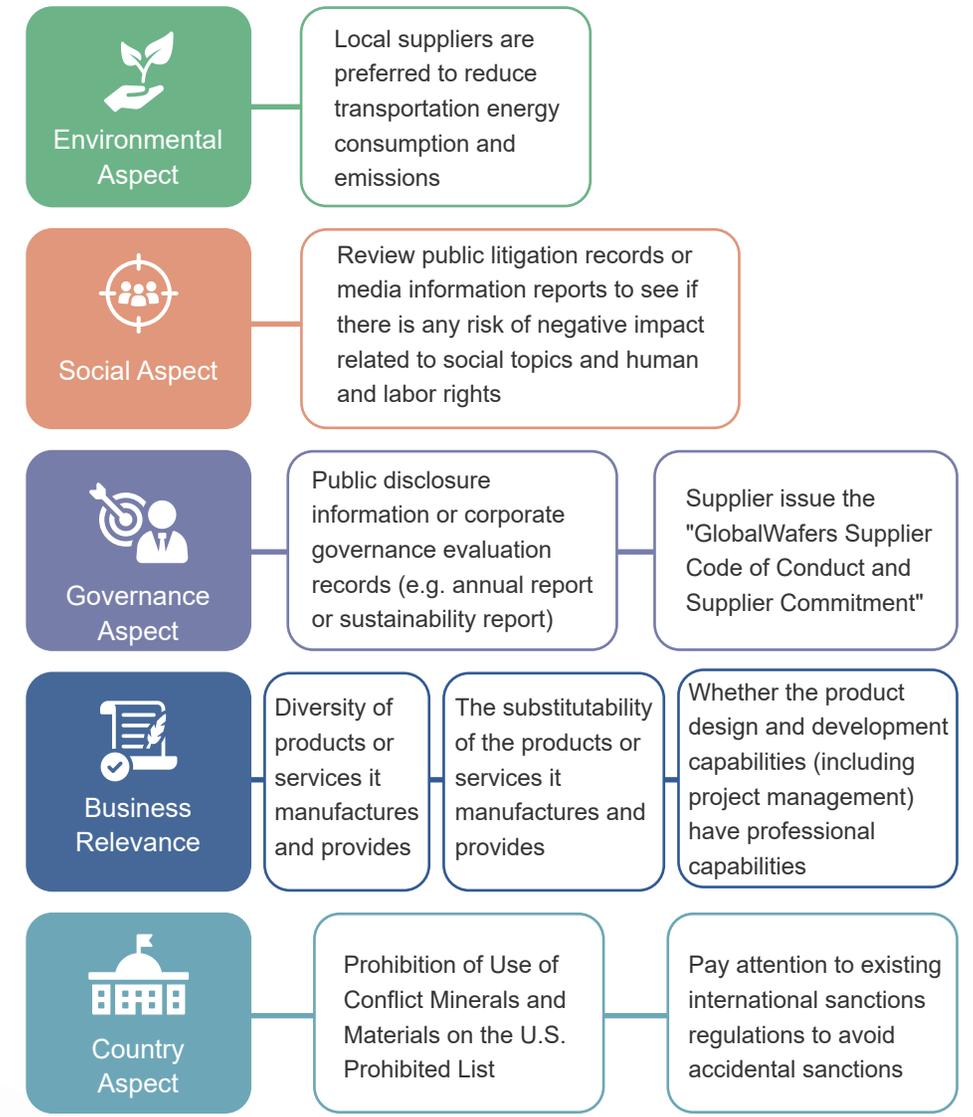
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### Supplier Management Strategy



GlobalWafers adheres to the supplier policy of "viewing suppliers as partners and guiding them for long-term cooperation" in order to establish a supply chain management mechanism for sustainable growth.

### Supplier Sustainability Assessment

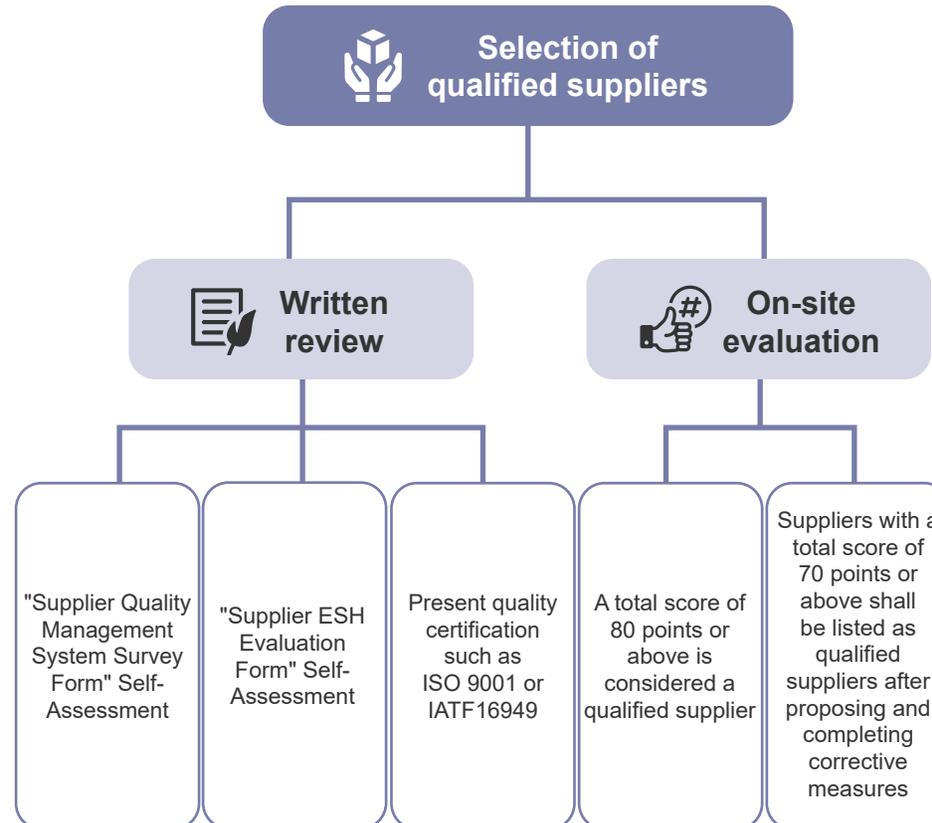


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### Supplier Assessment Management

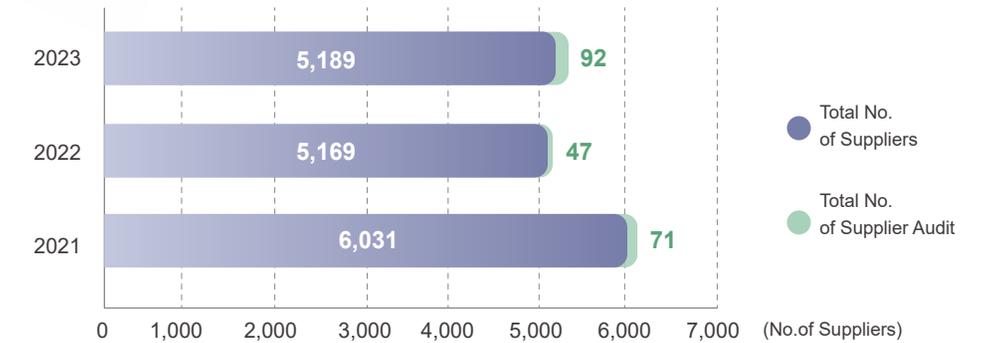
Through appropriate supplier assessment operation, qualified suppliers are carefully defined and selected by GlobalWafers. Close work relationship and feedback system are also established accordingly to ensure raw material, finished product, half-finished product, fixture and tools, technology service and other labor services all comply with quality, environment, safety and hygiene requirements. Our qualified suppliers all require to comply with Code of Integrity Management, with no dishonest behavior records. Each year, we form a supplier appraisal team composed of quality assurance, procurement, environmental safety, R&D, and other relevant department members to perform supplier factory audits and document reviews. We also conduct interviews with other supervisors and employees to improve the issues discovered and retain the relevant records for inspection.

#### Selection of supplier qualifications



Regarding on-site supplier audits, approximately 1.8% of the total number of suppliers received on-site audits in 2023. The proportion of on-site supplier audits this year slightly increased compared to the previous two years.

#### Number of On-Site Audit Suppliers for Global Factories



### Regulation Requirements

GlobalWafers regularly collects regulation requirements from countries as place of receipt, countries as place of delivery, and destinations designated by customers to ensure that purchased products, procedures, and services comply with laws and regulations requirements of countries involved. In addition, when customers impose special controls on specific products due to legal requirements, we ensure these controls are implemented and maintained, including monitoring suppliers.

In certain countries or regions, the sourcing or production of raw materials must comply with local laws and regulations, such as the EU RoHS directive, REACH regulations (restrictions), and the Toxic Substances Control Act (TSCA) in the United States.

To maintain compliance with customer requirements and regulations, our company conducts regular reviews of our quality management system. We compile a list of stakeholders and address their concerns. Additionally, we adhere to the Conflict-Free Minerals Plan, requiring suppliers to conduct thorough due diligence on their supply chains to ensure materials are conflict-free, aligning with customer and regulatory mandates.

The British government passed the 2015 Modern Slavery Act in October, which applies to enterprises with annual revenues exceeding £36 million and operating in the UK. Our operations in all countries adhere strictly to local laws, including legislation aimed at preventing human trafficking and modern slavery. GlobalWafers unequivocally condemns any form of modern slavery and ensures that all commercial transactions, business relationships, and supply chain activities adhere to ethical standards, with integrity as our highest principle.



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### ◉ Risk Control of Key Materials

GlobalWafers has adopted three major management measures to mitigate the operational risks of key materials:

1. Establish safety reserves: We manage the safety reserves of key materials on a rolling basis, considering factors such as production needs, transportation, and company and domestic and foreign policies.
2. Implement supplier management: In addition to regular written reviews and on-site audits, we also implement supplier management, including but not limited to quality, delivery, environment, and emergency response plans. Suppliers are also required to comply with non-conflict minerals and ESG-related sustainability issues.
3. Supplier diversification: We maintain relationships with at least two qualified suppliers to mitigate the risk of supply disruptions.

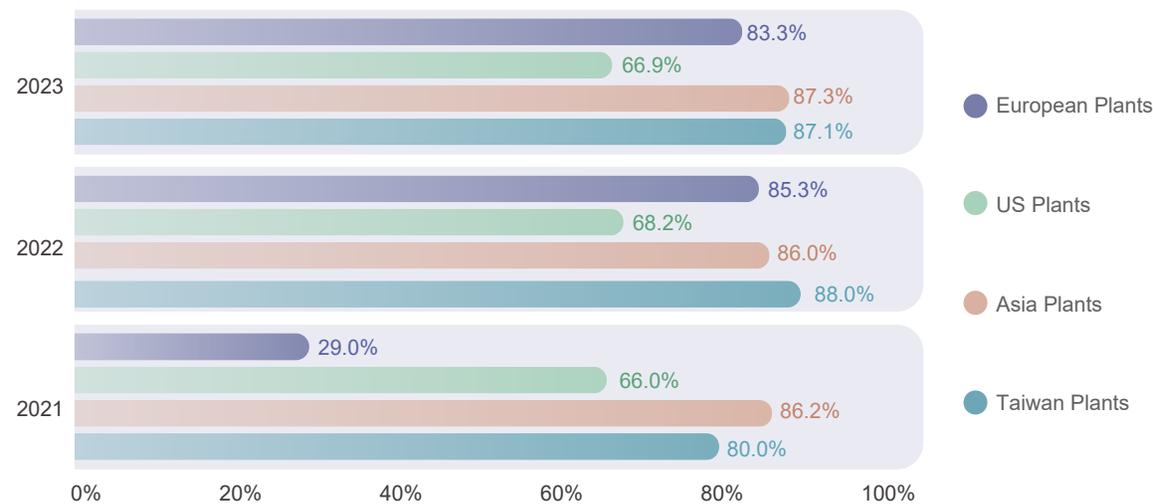
### ◉ Local Procurement

GlobalWafers' procurements are roughly categorized into equipment, parts & components, raw material, factory matter and automation equipment. Each factories manages their own procurement. Our goal is to establish a localized supply chain to enhance flexibility, reduce unnecessary costs and carbon emissions, promote green industry development, and create local employment opportunities.

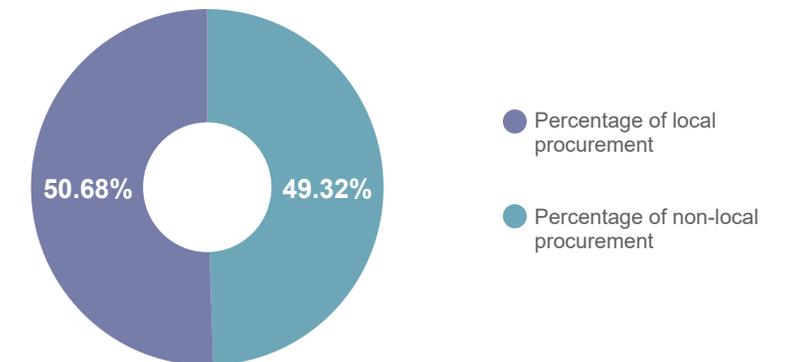
GlobalWafers' production bases span across various regions globally. We consider promoting local industry development a crucial part of our corporate social responsibility and strive to embody this concept. In 2023, GlobalWafers' supply chain saw minimal changes. In terms of total procurement amounts, Asian plants (excluding Taiwan) accounted for 49.48%, Taiwan plants 22.54%, US plants 11.19%, and European plants 16.79%.

In terms of local procurement, based on the number of locally sourced suppliers, Asian plants (excluding Taiwan) saw 87.3%, Taiwan plants 87.1%, European plants 83.3%, and US plants 66.9%.

Percentage of Local Procurement Suppliers by Plants Worldwide



Proportion of Local Procurement in 2023



Note 1: Local Procurement: The factory and its supplier are located in the same country.  
 Note 2: Local procurement percentage is calculated by dividing the number of local procurements by the supplier number.  
 Note 3: The percentage of local procurement amount is calculated based on the local procurement amount/total annual purchase amount.



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# 3 Sustainable Environment

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## Material Topics Target and Achievement

Key Performance Indicator	United Nations Sustainable Development Goals (SDGs)	2023 Goals	2023 Status and Achievements	Short-term Goals (2024)	Mid-term Goals (2025 - 2030)	Long-term Goals (2030 and beyond)
<b>Climate Strategy and Actions</b>						
GHG unit emission reduction (Scope 2) (compared to the base year of 2019)		≧ 3%	Achieved (16.72%)	≧ 4%	≧ 10% (by 2030)	Achieve RE100
<b>Energy Management</b>						
Reduction in Unit Electricity Consumption (compared to the base year of 2019)	  	≧ 3%	Achieved (8.17%)	≧ 4%	≧ 10% (by 2030)	Continue to introduce energy-saving measures and increase the utilization rate of renewable energy to reduce unit electricity consumption
<b>Waste Management</b>						
Waste recycling rate (recycling and reuse treatment ratio for the total waste volume) (compared to the base year of 2019)	 	≧ 83%	Not achieved <sup>note</sup> (81.53%)	≧ 84%	≧ 90% (by 2030)	Continue to increase the recycling rate of waste generated by operational production sites
0 abnormal incident was reported to the competent authority		0 case	Achieved	0 case	0 case	0 case
<b>Water Resource Management</b>						
Reduction in Unit Water Withdrawal (compared to the base year of 2019)	 	≧ 4%	Achieved (26.08%)	≧ 5%	≧ 11% (by 2030)	Continue to implement water-saving and water recycling and reuse related measures to reduce the unit water withdrawal.
0 abnormal incident was reported to the competent authority		0 case	Achieved	0 case	0 case	0 case

Note: Due to changes in waste treatment measures of subsidiaries



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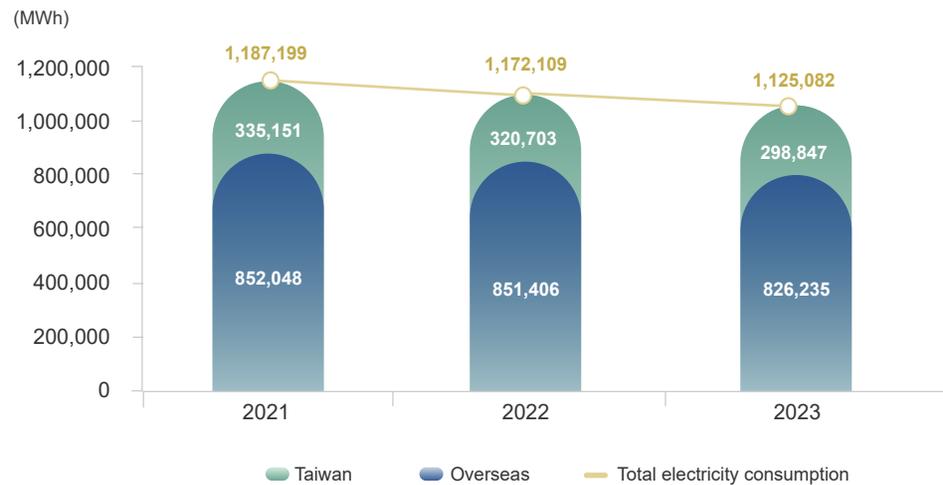
## 3.1 Energy Management

By implementing the ISO 50001 Energy Management System, GlobalWafers monitors major energy-using equipment, formulates improvement plans, and regularly tracks the performance of improvement measures to achieve the goal of continuous improvement, energy conservation, and carbon reduction. 62.5% of all 16 production sites have implemented energy management systems, and the 5 production sites in overseas factories will complete the implementation of energy management systems (ISO 50001) and obtain third-party certification by the end of 2024. GlobalWafers also expects to facilitate corporate innovation power, lower environmental ecology footprints for various products and services, and enhance corporate image and competitiveness through our concerns over environmental protection and sustainable issues.

According to the statistics, the total power consumption of all GlobalWafers' plants in 2023 was 1,125,082 MWh, about 47,027 MWh less than the previous year. According to the statistics, purchased electricity accounted for about 90.75% of the energy consumption; the renewable energy usage ratio was about 2.70%<sup>Note</sup>. In 2023, Taiwan reported a total energy saving of 5,479,658 kWh. In addition to continuing the previous energy-saving measures, in 2023, the Company invested in 25 energy-saving measures in Taiwan sites, including air conditioning energy saving, unit performance improvement, machine improvement, and lighting energy saving, at a cost of NT\$42,872,100, with energy-saving benefits reaching 2,660,106 kWh, reducing carbon emissions by 1,316.6 metric tons. For overseas sites, the Company invested in 37 energy-saving solutions in 2023, with setup costs totaled US\$9,908,665 (approximately NT\$304,242,550), resulting in a power-saving benefit of 9,709,788 kWh, which translates to a reduction of 4,469.2 metric tons of carbon emissions. In total, 7,181.5 metric tons of CO2 emissions were reduced by implementing the energy saving programs throughout the year.

Note: Renewable energy usage ratio = renewable energy (MJ)/total energy usage (MJ)

### Total Electricity Consumption by Plants worldwide



- Note:
- Taiwan: GlobalWafers Headquarters, Zhunan Plant, Taisil Branch
  - Overseas: GlobalWafers Japan Co., Ltd., Kunshan Sino Silicon Technology, MEMC Electronic Materials S.p.A, MEMC Korea Company, MEMC LLC, MEMC Japan Ltd., GlobiTech Incorporated., MEMC Electronic Materials Sdn. Bhd., Topsil GlobalWafers A/S.
  - Except for the offices and production sites added in November 2023, the data in the above chart covers 100% of GlobalWafers' production facilities.

### Energy usage in Taiwan

Unit: MJ

Item	Item	2022			2023	
		Taiwan	Taiwan	Overseas	Taiwan	Overseas
Item	Externally purchased electricity	1,206,543,762	1,154,530,714	3,065,061,703	1,075,847,996	2,974,446,691
	Renewable energy	42,496	76,420	105,287,309	76,779	120,316,442
	Natural gas	20,754,905	24,925,829	265,855,091	24,643,471	244,596,617
	Diesel	213,797	235,093	24,718,626	423,828	22,605,872
	Gasoline	0	0	38,960	0	32,269
<b>Total</b>		<b>1,227,554,960</b>	<b>1,179,768,055</b>	<b>3,460,961,689</b>	<b>1,100,992,074</b>	<b>3,361,997,892</b>

- Note:
- Taiwan: GlobalWafers Headquarters, Zhunan Plant, and Taisil Branch.
  - Overseas: GlobalWafers Japan Co., Ltd., Kunshan Sino Silicon Technology, MEMC Electronic Materials S.p.A, MEMC Korea Company, MEMC LLC, MEMC Japan Ltd., GlobiTech Incorporated., MEMC Electronic Materials Sdn. Bhd., Topsil GlobalWafers A/S.
  - For the year 2021, only data for Taiwan was disclosed. Starting from the years 2022-2023, data for overseas regions was also disclosed.
  - Conversion unit: 1 degree of electricity = 3.6 MJ; 1 cubic meter of natural gas = 33.494 MJ; 1 liter of diesel = 35.169 MJ; 1 liter of gasoline = 32.657 MJ.
  - For the years 2022-2023, except for the offices and production sites added in November 2023, the data in the above chart covers 100% of GlobalWafers' production facilities.



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[Case in Focus]

## GlobalWafers' Denmark subsidiary Topsil is poised to become the first semiconductor crystal manufacturing factory to utilize its own installed 100% green electricity in the second half of 2024.

As part of GlobalWafers' push for green manufacturing, Topsil, a subsidiary in Denmark, signed a cooperation agreement with SolarFuture, a solar power system service provider, in November 2023 to build a brand-new solar power plant next to Topsil's plant. GlobalWafers' Danish site, Topsil, is poised to become the first semiconductor crystal manufacturing site to utilize its own installed 100% green electricity during 2H of 2024. By constructing a new solar park with an estimated capacity of 10.2MW, the power plant is expected to generate 9,500,000 kWh per year. Accordingly, Topsil is set to produce more electricity than it consumes, marking a significant milestone in GlobalWafers' green manufacturing process.



Denmark Plant solar power plant simulation diagram

### Energy conservation measures

Classification	Energy Saving Projects	Calculated Energy Saving Period	Annual Energy Savings (kWh)	Annual Energy Savings (GJ)	Carbon emission reduction equivalent(ton CO <sub>2</sub> e)	Electricity Bill Saved (NT\$)	Investment (NT\$)
<b>GlobalWafers Headquarters &amp; Zhunan Plant</b>							
<b>Air Condition Energy Saving</b>	B1 medium warehouse inverter box-type air conditioner project (continued)	1/1~4/30	24,528	88,301	12.1	77,214	-
	Quality inspection air conditioning box motor energy saving improvement project (30HZ)	5/1~12/31	10,368	37,325	5.1	32,638	1,000
	Cooling tower energy-saving fans in the factory	2/1~12/31	52,828	190,181	26.1	164,189	163,000
	Add inverter control to air conditioners and ice machines	2/1~12/31	696,666	2,507,998	344.8	2,165,238	6,000,000
	Permanent Magnet Motor Power Saving Project	2/1~12/31	33,000	118,800	16.3	102,564	220,000
	Frequency reduction for MAU441	3/1~12/31	7,790	28,044	3.9	24,211	0
<b>Machine Efficiency Enhancement</b>	Switching to IE3 for subscription 4R and 4R water pumps (continued)	1/1~10/31	7,694	27,699	3.8	24,221	-
	Benefit improvement project of obsolete replacement of air compressor heads (continued)	1/1~3/31	13,946	50,206	6.9	43,903	-
	A005 Consolidated benefits of rinsing tower aging (continued)	1/1~11/30	118,470	426,492	58.6	372,944	-
	Replacement of 7.5HP*2 sets of energy-saving fans for GWC1 cooling tower	4/1~12/31	7,808	28,107	3.9	24,578	140,000

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Classification	Energy Saving Projects	Calculated Energy Saving Period	Annual Energy Savings (kWh)	Annual Energy Savings (GJ)	Carbon emission reduction equivalent(ton CO <sub>2</sub> e)	Electricity Bill Saved (NT\$)	Investment (NT\$)
Machine Efficiency Enhancement	13T 10T ultrapure water booster pump adjustment case	4/1~12/31	16,632	59,875	8.2	52,358	1,000
	Operation control of cutting fluid mixer (continued)	1/1~2/28	401	1,444	0.2	1,246	-
	Implementation of total energy-saving thermal field (15 furnaces) (continued)	1/1~5/31	811,250	2,920,500	401.6	2,521,365	-
	Office computer virtualization*15 (continued)	1/1~1/31	109	392	0.1	339	-
	Development of high-efficiency heat treatment process in polysilicon furnace (continued)	1/1~3/31	7,680	27,648	3.8	23,869	-
	Update of wastewater discharge pump B (continued)	1/1~11/30	4,004	14,414	2.0	12,444	-
	Adjustment of the ice outlet water temperature by the plant manager (continued)	1/1~9/30	439,200	1,581,120	217.4	1,365,034	-
	Energy saving of acid rinsing tower cycle PUMP	2/1~12/31	4,004	14,414	2.0	12,444	80,000
	Energy saving project of transfer pump in reclaimed water relay pond	5/1~12/31	866	3,118	0.4	2,692	100,000
	MCZ Energy Saving Project	1/1~12/31	322,346	1,160,446	159.6	1,001,851	6,500,000
	Ice crystal growth machine/monitoring system update	10/1~12/31	503,284	1,811,822	249.1	1,564,207	10,000,000
Machine Improvement	TENCOR6220 Solid-State Laser Evaluation Report (continued)	1/1~3/31	3,338	12,017	1.7	10,508	-
	FF grinding machine vacuum machine energy saving	8/1~12/31	1,073	3,863	0.5	3,335	2,000
Energy Saving on Lighting	GWC1 lobby lighting energy saving improvement project (continued)	1/1~4/30	324	1,168	0.2	1,021	-
	Lighting energy saving case for washing machine flats (continued)	1/1~6/30	362	1,303	0.2	1,140	-
	Large conference room and new conference room lighting improvement project	3/1~12/31	1,229	4,425	0.6	3,869	357,000
	Quality assurance lighting fixtures were replaced with LED panel lights case	11/1~12/31	238	857	0.1	750	23,800
	Improvement in the replacement of lighting fixtures in the wafer area with LED flat panel lights	11/1~12/31	212	763	0.1	667	66,300
	Improvement of lighting in the chemical warehouse on 1F (continued)	1/1~1/31	93	335	0.0	289	-
	Visual inspection room lighting turned off during breaks (continued)	1/1~10/31	1,200	4,320	0.6	3,730	-
	Energy-saving improvement of office lighting on 3F (continued)	1/1~2/28	1,303	4,691	0.6	4,050	-
	Change of lighting in the aisle area on 2F	10/1~12/31	1,392	5,011	0.7	4,326	130,000



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Classification	Energy Saving Projects	Calculated Energy Saving Period	Annual Energy Savings (kWh)	Annual Energy Savings (GJ)	Carbon emission reduction equivalent(ton CO <sub>2</sub> e)	Electricity Bill Saved (NT\$)	Investment (NT\$)
<b>Taisil Electronic Plant</b>							
<b>Air Condition Energy Saving</b>	Replacement of water-cooled box-type air conditioners for IT equipment rooms with high-efficiency environmentally friendly models (continued)	1/1~6/30	185,632	668,276	91.9	565,064	-
	Energy Saving Project for ingot cooling room in crystal growth area	8/1~12/31	150,446	541,605	74.5	457,957	1,684,000
	Added UB#7 ice machine (load switching)	7/1~12/31	701,002	2,523,608	347	2,133,850	15,000,000
<b>Machine Efficiency Enhancement</b>	Adoption of a new type of heater to enhance the heating efficiency of grinding and cleaning machines (continued)	1/1~9/30	7,548	27,174	3.7	22,977	-
	Improvement of 200mm wire saw pulp pipeline (continued)	1/1~5/31	4,113	14,805	2	12,519	-
<b>Machine Improvement</b>	Improve the 300mm thermal field design to enhance the thermal insulation effect Option A (continued)	1/1~11/30	403,584	1,452,904	199.8	1,228,511	-
	Improve the 300mm thermal field design to enhance the thermal insulation effect Option A (continued)	1/1~10/31	263,190	947,485	130.3	801,151	-
	Improve the crystal growth process and shorten the processing time Option A (continued)	1/1~11/30	514,145	1,850,924	254.5	1,565,059	-
	Improve the 300mm thermal field design to enhance the thermal insulation effect Solution C	12/1~12/31	7,859	28,292	3.9	23,922	1,089,000
	Improve the crystal growth process and shorten the processing time Option A	2/1~12/31	125,806	452,903	62.3	382,954	136,000
	Adoption of a new type of heater to enhance the heating efficiency of sandblasting and cleaning machines (continued)	10/1~12/31	3,418	12,305	1.7	10,404	108,000
	300mm epitaxy machine using low-power pump	11/1~12/31	2,467	8,880	1.2	7,508	360,000
<b>Energy Saving on Lighting</b>	Replacement of halogen lamps with LED lamps for the visual inspection machine	10/1~12/31	4,896	17,627	2.4	14,905	315,000
	Replacement of strong lights with LED lamps for the visual inspection machine	12/1~12/31	1,397	5,030	0.7	4,253	240,000
	Replacement of inspection machine with LED lamps	4/1~12/31	3,079	11,085	1.5	9,373	156,000
	Installation of an automatic cut-off device for the LED lamp of the polishing machine (continued)	1/1~9/30	6,635	23,884	3.3	20,196	-
	Replacement of halogen lamps with LED lamps for visual inspection machines (continued)	1/1~3/31	801	2,885	0.4	2,439	-
<b>Taiwan Total</b>	Electricity		5,479,658	19,726,769	2,712.3	16,886,276	42,872,100



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Energy Saving Projects	Calculated Energy Saving Period	Annual savings (kWh)	Annual savings (GJ)	Carbon emission reduction equivalent (ton CO <sub>2</sub> e)	Electricity bill savings (USD)	Investment (USD)
<b>MEMC Electronic Materials S.P.A (Merano Plant)</b>						
Sludge drain pumps power reduction	2023	131,400	473,040	30.9	13,266	8,791
Replace the liquid nitrogen system's water evaporators with a natural convection model		50,174	180,626	11.8	5,066	0
Low power puller HZ expansion 2023 - 5 puller		547,000	1,969,200	128.5	55,226	0
Second inverter on pumps station of CZA demi cooling water loop		105,120	378,432	24.7	10,613	10,989
Recycle water from puller cooling loop to Administrative building heating		11,340	40,824	2.7	1,145	16,484
Energy usage efficiency improvements activities as for ISO 50001 plan		157,680	567,648	37.1	15,919	0
<b>MEMC Electronic Materials S.P.A (Novara Plant)</b>						
New Guardhouse Heat Pump	2023	60,000	216,000	14.4	6,058	18,545
New sludge dryer		50,000	180,000	12.0	5,048	2,408,791
Electrical power station factor correction (CE 03)		700,000	2,520,000	168.0	70,673	19,181
Chiller replacement "Glicolated water" (only summer season)		70,000	252,000	16.8	7,067	0
Upgrade of the air compressors cooling system		75,261	270,940	18.1	7,598	0
<b>MEMC Korea Company</b>						
Reduce agitator operation time	2023	166,411	599,080	76.0	16,801	0
Install ceiling fan instead of the aircon		70,068	252,245	32.0	7,074	0
G-scrubber#5 circulation pump motor down sizing (45→37.5kW)		65,689	236,480	30.0	6,632	0
power off when vaccum pump for puller is not needed at Fab#1 and Fab#2		227,721	819,796	104.0	22,991	0
Grinder hydraic pump idle tiem controls at Fab#1 and Fab#2		10,948	39,413	5.0	1,105	0
Fab#2 Class 1 Clean Room Humidity (26%→28%)		602,146	2,167,726	275.0	60,793	0
CPCW Temperature Change (27→28.5)		1,057,587	3,807,313	483.0	106,775	0
<b>Kunshan Sino Silicon Technology Co., Ltd.</b>						
Replacement of magnetic levitation inverter ice machine & water system integration for 1#350RT ice water chiller	2023	710,000	2,556,000	552.8	71,682	0
Replacement of high-efficiency T8 LED lights		40,800	146,880	31.8	4,119	0
<b>MEMC Electronic Materials Sdn. Bhd.</b>						
Install Variable Speed Drive (VSD) to control chiller cooling tower fan speeds (total 6 fans 11kW) based on condensor water supply temperature	2023	190,716	686,578	111.6	19,255	18,271
Install VSD to control Chiller condenser water pumps speed (total 3 pumps 45kW) based on return condensor water temperature from individual chillers.		397,920	1,432,512	232.8	40,174	36,166
Install VSD for 3DI RO pump (18.5kW - 4 units) to control flow of water by slow down the pump instead of controlling using valve		135,492	487,771	79.3	13,679	10,911



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Classification	Energy Saving Projects	Calculated Energy Saving Period	Annual savings (kWh)	Annual savings (GJ)	Carbon emission reduction equivalent (ton CO <sub>2</sub> e)	Electricity bill savings (USD)	Investment (USD)
<b>Topsil Globalwafers A/S</b>							
	Re-use heat from kompressor	2023	40,000	144,000	5.6	4,038	10,000
<b>MEMC LLC</b>							
	Optimize Cooling Tower G condensor water setpoint to reduce chiller energy use	2023	400,000	1,440,000	262.0	40,384	0
	Reclaim SOI wastewater for use in cooling towers		524,000	1,886,400	343.2	52,903	865,836
<b>MEMC Japan Ltd.</b>							
	Switch Heat Source of WSAW	2023	180,000	648,000	78.8	18,173	34,590
	Reducing transformer no-load losses.		12,487	44,953	5.5	1,261	4,842,165
	COP is improved by lowering the brine chiller cooling water temperature.		2,880	10,368	1.3	291	0
	Change lighting to LED.		5,952	21,427	2.6	601	4,856
	Updated package air conditioner.		35,784	128,822	15.7	3,613	51,885
	Building 4 solar power generation		245,050	882,180	107.3	24,740	414,389
	Inverter refrigerator installed in Building 4		2,160,000	7,776,000	946.1	218,075	775,233
<b>GlobalWafers Japan Co.,Ltd.</b>							
	LED Lighting	2023	9,354	33,674	4.4	944	9,475
	Renewal of Transformer		4,608	16,589	2.2	465	43,629
	Replacement of cooling water pump for cooling tower		14,136	50,890	6.7	1,427	58,468
	Aggregation of chiller		442,064	1,591,430	209.5	44,631	250,000
<b>Overseas Total</b>	Electricity		9,709,788	34,955,237	4,469.2	980,305	9,908,655

Note:

- The carbon emission coefficient of electricity in Taiwan is calculated based on 0.495 (kg CO<sub>2</sub> e/degrees 2), the MEMC Electronic Materials SPA (Merano Plant) is calculated at 0.235 (kg CO<sub>2</sub> e/degree), and the MEMC Electronic Materials SPA (Novara Plant) is calculated at 0.235 (kg CO<sub>2</sub> e/degree), MEMC Korea Company is calculated at 0.4567 (kg CO<sub>2</sub> e/degree), Kunshan Zhongchen Silicon Crystal Co., Ltd. is calculated at 0.77865 (kg CO<sub>2</sub> e/degree), MEMC Electronic Materials Sdn. Bhd. is calculated at 0.585(kg CO<sub>2</sub> e/degree), Topsil Globalwafers A/S calculated at 0.14 (kg CO<sub>2</sub> e/degree), MEMC LLC is calculated at 0.655 (kg CO<sub>2</sub> e/degree), MEMC Japan Ltd. is calculated at 0.438 (kg CO<sub>2</sub> e/degree), GlobalWafers Japan Co., Ltd. is calculated at 0.474 (kg CO<sub>2</sub> e/degree).
- After weighted calculation, the electricity fee of each factory is calculated at 3.148 NTD/kWh for GlobalWafers Headquarters, 3.148 NTD/kWh for the Zhunan plant, and 3.044 NTD/kWh for the Taisil Branch. For overseas locations, due to the difficulty in obtaining precise statistics, the average amount of Taiwan's plants is converted to USD for calculation.



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**Case in Focus**

## GlobalWafers' Zhunan Plant has outstanding performance in energy conservation due to its deep cultivation of green manufacturing

GlobalWafers continues to promote green technology and energy-saving concepts. By introducing a number of energy-saving projects, we achieved remarkable results in electricity consumption, water usage, and waste management. As a representative of manufacturers with outstanding energy saving performance, GlobalWafers' Zhunan Plant was invited to host an energy saving observation activity in 2023 to provide a platform for science park manufacturers to exchange and learn from each other and inspire more enterprises to participate in environmental protection actions.

Through various improvement activities, the unit product electricity intensity and greenhouse gas emission intensity decreased by 23.7% in 2022 compared to the previous year. In 2023, energy-saving improvements were made by installing variable frequency drives on the air conditioning chiller units and chilled water circulation pumps, replacing the crystal growing process chiller units with high-temperature variable frequency chillers, and upgrading the monitoring systems. These upgrades allow the equipment to automatically adjust its operating frequency based on actual demand. Thereby reducing energy consumption while further improving energy efficiency. This resulted in an impressive annual electricity savings of nearly 3.09 million kWh and a reduction of 1,530 tons of carbon emissions per year.

Regarding renewable energy, in order to meet the Group's sustainable growth goal of using 100% green energy by 2050, GlobalWafers' Zhunan Plant has installed solar panels on the roof. The utilization rate of the roof reached 100%. It is estimated that this setup can generate 250,000 kWh of electricity annually, thereby enhancing energy resilience and mitigating the impact of climate change.



## 3.2 Water Resource Management

Due to the extreme global climate, the risk of climate change has become a key issue that enterprises must face in their operations, making water resource management critical.

### 3.2.1 Water Withdrawal, Discharge, and Consumption

#### Management of water withdrawal-related impacts

The water sources for GlobalWafers' factories worldwide are divided into the third-party water supply, surface water, and groundwater sources. The water source of each base is fresh water ( $\leq 1,000$  mg/L total dissolved solids). The water in the Taiwan area is taken from the tap water supplied by the Taiwan Water Company. None of the raw water sources are classified as national or international nature reserves or sensitive water bodies.

GlobalWafers' total water withdrawal in 2023 showed a downward trend compared to previous years. The water withdrawal in 2023 was 18,874 megaliters, which decreased by 889.6 megaliters compared to 2022. In terms of water withdrawal impact, in Taiwan, for example, the water withdrawal in 2023 was approximately 2,149.6 megaliters.

According to the World Resources Institute's "Water Risk Assessment Tool" (WRI Aqueduct), our global facilities' water risk assessment results indicate that the plant in Mainland China is rated as "High - Medium risk (3)" for water sources. The other bases are rated as "Low - Medium risk (1-2)" without any water source pressure issues. The proportion of our total water withdrawal/total water consumption and high water stress areas are 1.64% and 1.97%, respectively. Nonetheless, each factory has adopted internal water management and external cooperation strategies to reduce the impacts that operational activities have on water resources.

#### Management of water discharge-related impacts

To ensure compliance with water discharge standards, GlobalWafers adheres to local regulations and implements pollution prevention measures at all facilities. In addition to reducing the amount of pollutants in the process and using high-efficiency equipment for water recycling and pollutant treatment, we also conduct self-testing and regular outsourced wastewater testing and long-term follow-up monitoring of effluent quality to ensure that the quality of effluent from each factory area meets local effluent standards. In addition to the previously listed substances of concern for the substances of concern to the Taiwan factory, new pre-treatment devices for fluoride ions were set up. We use equipment to reduce the emission concentration to reduce the harm to discharged water bodies. GlobalWafers' total water discharge volume was 16,390.4 megaliters in 2023, a slight decrease from 16,825.2 megaliters in 2022. In 2023, there were no major leakage or overflow incidents from the GlobalWafers plant areas.



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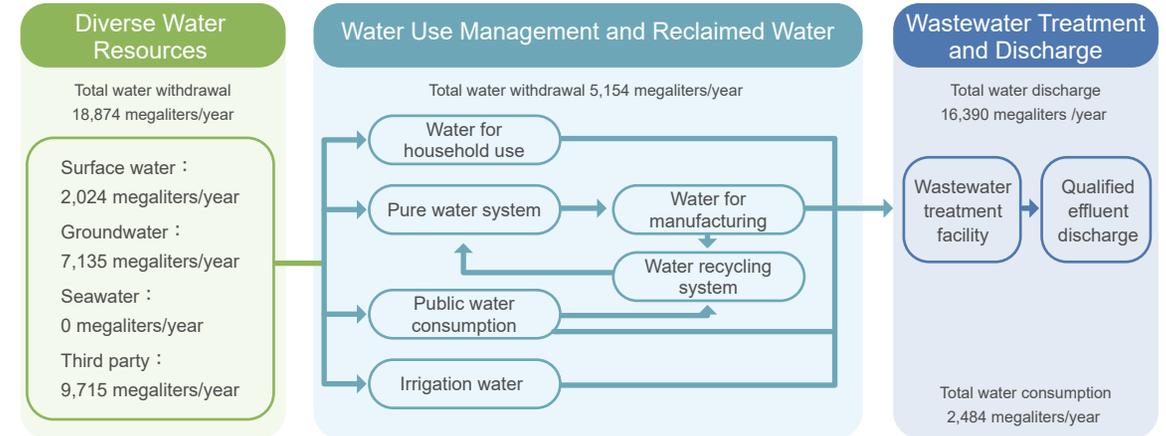
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### Water Resource Management and Conservation

Global rainfall has become extremely unstable in recent years, and water supply stability has become a challenge due to extreme climate problems. GlobalWafers is dedicated to reusing recovered water in response to the water shortage risks caused by global climate change. In terms of water recycling and reuse, the total volume of water recovered by our plants worldwide in 2023 is 5,154.2 megaliters. In 2023, the plants in Taiwan recovered and reused 1,773.3 megaliters of water, which accounted for 34.41% of the total water volume recovered. With respect to the water resource recycling rate, the average water resource recycling rate for global factories in 2023 is 21.45%, a 0.44% increase from 21.01% in 2022. For Taiwan area, the water resource recycling rate for 2022 and 2023 were 45.47% and 45.2% respectively, making it the region with the better water resource recycling area amongst all of our global factories.

### Water Resource Flowchart



### 2021~2023 Water withdrawal, discharge, and consumption

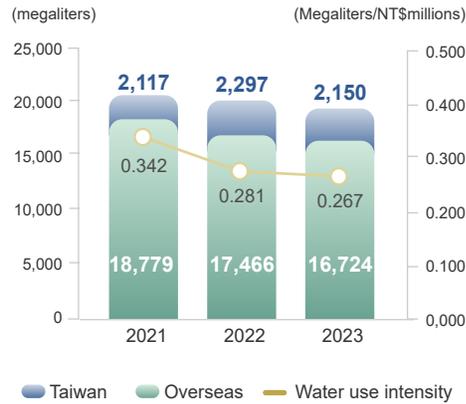
Unit: megaliters

Item	2021			2022			2023			
	Taiwan	Overseas	Water resource stressed areas	Taiwan	Overseas	Water resource stressed areas	Taiwan	Overseas	Water resource stressed areas	
Water withdrawal quantity	Surface water	0	1,269.4	0	0	1,261.2	0	0	2,024.4	0
	Underground water	0	9,492.5	0	0	8,274.2	0	0	7,135.1	0
	Seawater	0	0	0	0	0	0	0	0	0
	Third-party water	2,117	8,016.9	341.8	2,297	7,930.8	334.1	2,149.6	7,565.0	309.5
	<b>Total</b>	<b>20,895.9</b>		<b>341.8</b>	<b>19,763.6</b>		<b>334.1</b>	<b>18,874.0</b>		<b>309.5</b>
Water discharge quantity	Surface water	0	5,656.7	0	0	4,634.6	0	0	3,912.8	0
	Underground water	0	0	0	0	0.0	0	0	0.0	0
	Seawater	0	4,738	0	0	4,435.1	0	0	3,619.5	0
	Third-party water	1,731.3	5,221.6	300.6	1,869.9	5,885.6	273.0	1,788.6	7,069.5	260.3
	<b>Total</b>	<b>17,347.6</b>		<b>300.6</b>	<b>16,825.2</b>		<b>273.0</b>	<b>16,390.4</b>		<b>260.3</b>
Water Consumption Volume		385.7	3,162.6	41.2	427.5	2,510.9	61.2	361.0	2,122.7	49.2
<b>Total</b>		<b>3,548.3</b>		<b>41.2</b>	<b>2,938.4</b>		<b>61.2</b>	<b>2,483.7</b>		<b>49.2</b>

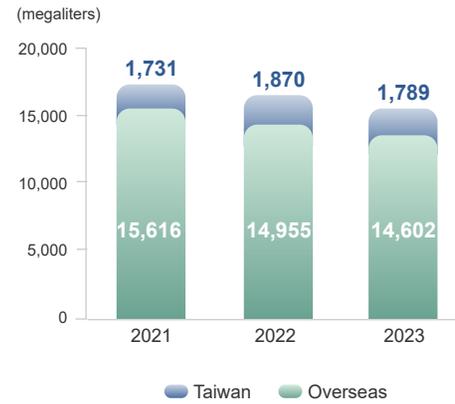


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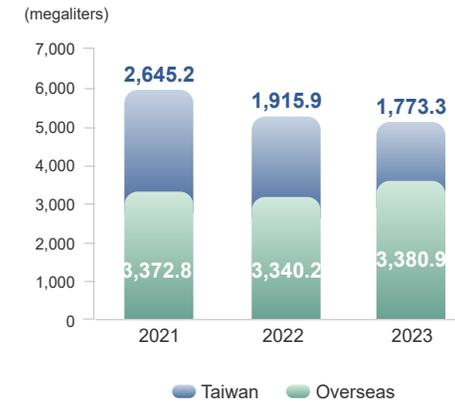
### Total Water Withdrawal Quantity



### Total Water Discharge Quantity



### Recycled Water Reuse Rate



### Water Resource Recycling Rate



Note:

1. Taiwan: GlobalWafers Headquarters, Zhunan Plant, Taisil Branch
2. Overseas: GlobiTech Incorporated, GlobalWafers Japan Co., Ltd., MEMC Electronic Materials Sdn. Bhd., MEMC Electronic Materials S.p.A, MEMC Japan Ltd., MEMC Korea Company, MEMC LLC, Kunshan Sino Silicon Technology, Topsil GlobalWafers A/S
3. Water consumption density: water consumption (megaliters)/consolidated revenue (NT\$millions)
4. Except for the offices and production sites added in November 2023, the data in the above chart covers 100% of GlobalWafers' production facilities.
5. Water resource recovery rate: Reclaimed water volume/(total water withdrawal + reclaimed water volume); the reclaimed water volume in Taiwan is based on the data reported on the water balance chart formulated by the governing unit.

### Water conservation programs

Site	Project name	Description for the project	Benefit (Reduce the water consumption, reduce water-related expenses, etc.)
GlobalWafers Co., Ltd.- Zhunan Plant	GWC2 ultrapure water equipment resin cleaning water recycling and reuse project	Plan the pipeline engineering, change the pipeline, install new water meters and record the water, and recycle the wastewater after washing.	It is estimated that water consumption from tap water can be reduced by 40 m <sup>3</sup> per year.
GlobalWafers, Taisil Branch	POU water recycle system in the EPI expansion area	Add a water recycling system to reduce the amount of tap water taken	It is estimated that water consumption from tap water can be reduced by 90,000 m <sup>3</sup> per year.
MEMC Electronic Materials S.p.A. (Merano plant)	Removal of liquid nitrogen evaporators	Replace the liquid nitrogen system's water evaporators with a natural convection model	Reduction of a continuous consumption of first level water equal to 30 m <sup>3</sup> /h (saving equal to 260,000 m <sup>3</sup> water per year)
	Heat pump Administrative Building	Recycle water from puller cooling loop to Administrative building heating	Reduction of the water consumption equal to 30 m <sup>3</sup> /h for the building heating system operation period. (saving equal to 130,000 m <sup>3</sup> water per year)
	Reduction of water cooling loop pressure	Lower the cooling water circuit pressure from 4.2 to 4.0 bar to reduce the energy consumption of submersible pumps by 16%	Reduction of a continuous consumption of first level water equal to 30 m <sup>3</sup> /h (saving equal to 260,000 m <sup>3</sup> water per year)
MEMC Electronic Materials S.p.A. (Novara plant)	Upgrade of the air compressors cooling system	Replacement of the air compressors cooling loop using well water with a closed loop of chilled water	Saving of a continuous consumption of first level water equal to 300,000 m <sup>3</sup> per year



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### 3.3 Waste Management

GlobalWafers' waste management emphasizes source reduction, manufacturing process improvement and source reduction in order to reduce waste generated. Meanwhile, recycling, re-use and re-utilization are implemented within factories to reduce amount for newly purchased raw materials while lowering amount of wastes generated. Finally, the company implements commissioned clearance (including incineration, landfill and physical treatment). Currently, all wastes in our respective factories are treated through commissioned clean-up. There are no cases of multi-national (overseas) waste treatment. In the past 3 years, no major waste treatment vendor violations have been discovered, and an audit mechanism has been established to ensure legal compliance by the waste treatment vendors and determine whether to cooperate with such vendors. There has been also no major leakage or overseas hazardous industrial waste disposal incidents from any plants

In Taiwan, our waste generated goes through clearance and handling in accordance with waste clearance related regulations to comply with the most basic requirements from laws and regulations. Prior to commissioning the waste treatment, collection by categories and storage management are implemented within the plants. After appropriate and legal waste clearance and handling contractors are selected based on the features of waste, the waste is thus handed over to the contractors for handling, clearance and reporting where the waste is shipped all in accordance with environmental protection regulations. To effectively manage waste flow and ensure proper waste disposal, GlobalWafers conducts audits based on the nature of the vendors (removal/treatment/recycling). As for clearance institutes, we emphasize on factory access control. For handling/reutilization institutes, audit is conducted on materials of their storage facility, treatment facility, treatment capability, operation of pollution prevention equipment, on-site safety, hygiene and firefighting management as well as company operation condition. Audit results then are categorized into grades to determine whether later collaboration will be continued or the audit frequency should be enhanced.

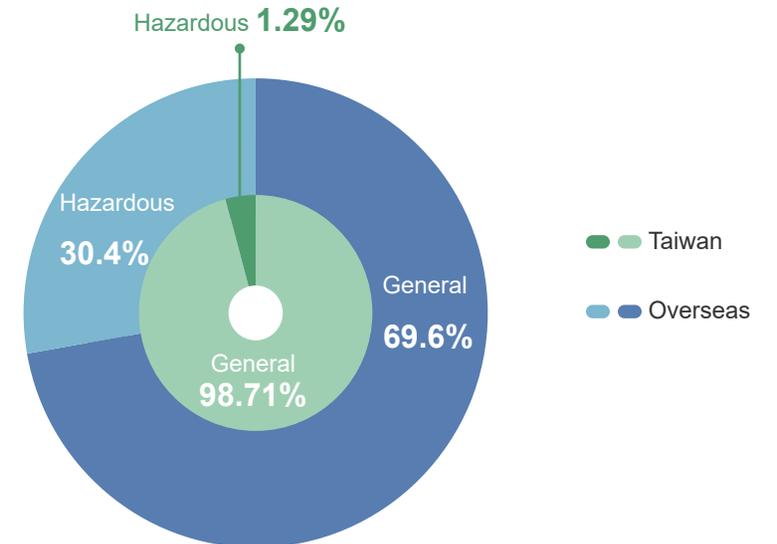
⦿ **In addition, our waste-related impact management includes :**

- ★ a. Preventing any significant impact caused by managed wastes
  - (1) To prevent the significant impact of waste management, GlobalWafers has installed air pollution control equipment, waste (sewage) pre-treatment facilities, and proper waste storage facilities, and the operation and management of all factories around the world comply with the requirements of local environmental protection laws and regulations, and proper operation and management reduce the impact on the environment.
  - (2) GlobalWafers strictly adheres to the principle of recycling and reuse and has taken proper recycling measures and control operations to reduce the impact on environmental quality.
- ★ b. Treatment flow for wastes derived from our own operations
  - Derivative waste generated from its own operations is managed through incineration, landfill, and recycling by third-party organizations. Proper waste disposal is ensured through contractual agreements.
- ★ c. Collection of waste-related data

The quantity of derivative waste generated from its own operations is recorded monthly. Waste removal is conducted in accordance with local environmental regulations at each global plant, either handled internally or outsourced to third-party organizations for processing.

In 2023, Taiwan's waste disposal volume was 7,733 metric tons, of which general industrial waste accounted for 98.71% and hazardous industrial waste accounted for 1.29%. The amount of waste processed in overseas areas was 26,832.6 metric tons, of which general industrial waste accounted for 69.6% and hazardous industrial waste accounted for 30.4%.

**Percentage of industrial Waste in 2023**

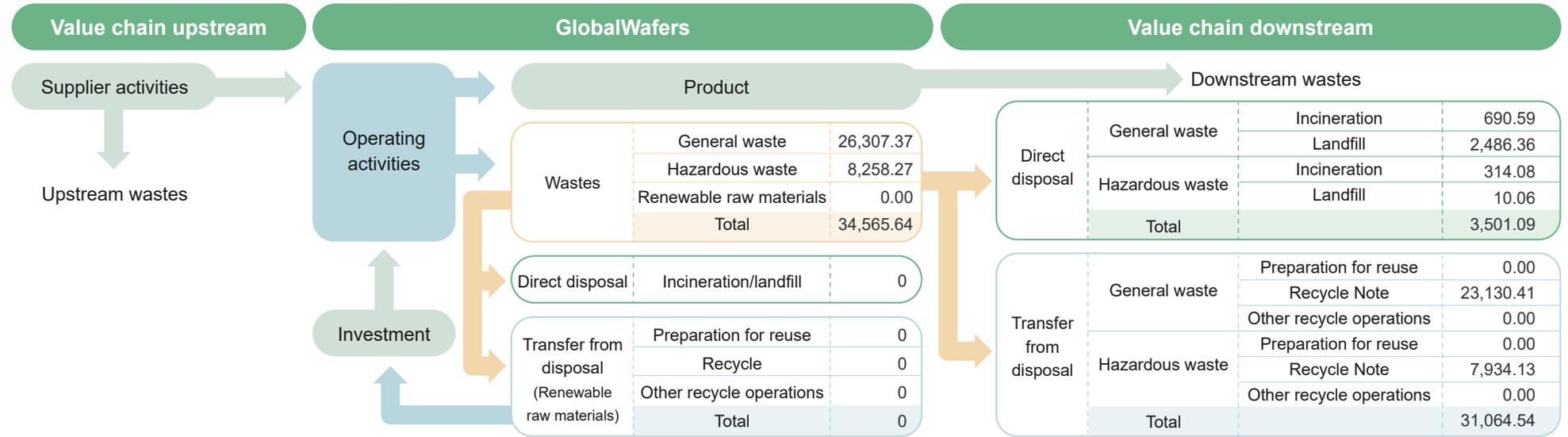


Note:

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3. Except for the offices and production sites added in November 2023, the data in the above chart covers 100% of GlobalWafers' production facilities.

Taking the wastes generated by GlobalWafers' operations in 2023 as an example, general wastes (including recycled raw materials) accounted for 76.11% (26,307.37 metric tons) of the total wastes, and hazardous wastes accounted for 23.89% (8,258.27 metric tons) of the total waste. Regarding waste treatment, we have prioritized the waste recycling operations implemented during waste disposal (such as recycling and reuse), which account for approximately 89.9% of the total waste disposal volume.

Unit: Metric Ton



Note:

1. Preparation for reuse: Take a product or composition intended for waste and adopt the inspection, cleaning, or repair methods to reuse it for its original purpose.
2. Recycle: Reprocess (chemical, physical, heat treatment, solidification, or other methods) waste products or components to produce new materials.

Unit: Metric Ton

Type of waste	Total output	Transfer during disposal				Direct disposal			
		Transfer method	On-site	Off-site	Total	Disposal method	On-site	Off-site	Total
General waste (include renewable raw materials)	26,307.37	Preparation for reuse	0.00	0.00	0.00	Incineration	0.00	690.59	690.59
		Recycle	0.00	23,130.41	23,130.41	Landfill	0.00	2,486.36	2,486.36
		<b>Total</b>	<b>0.00</b>	<b>23,130.41</b>	<b>23,130.41</b>	<b>Total</b>	<b>0.00</b>	<b>3,176.95</b>	<b>3,176.95</b>
Hazardous waste	8,258.27	Preparation for reuse	0.00	0.00	0.00	Incineration	0.00	314.08	314.08
		Recycle	0.00	7,934.13	7,934.13	Landfill	0.00	10.06	10.06
		<b>Total</b>	<b>0.00</b>	<b>7,934.13</b>	<b>7,934.13</b>	<b>Total</b>	<b>0.00</b>	<b>324.14</b>	<b>324.14</b>
<b>Total</b>	<b>34,565.64</b>	<b>Total</b>	<b>0.00</b>	<b>31,064.54</b>	<b>31,064.54</b>	<b>Total</b>	<b>0.00</b>	<b>3,501.09</b>	<b>3,501.09</b>



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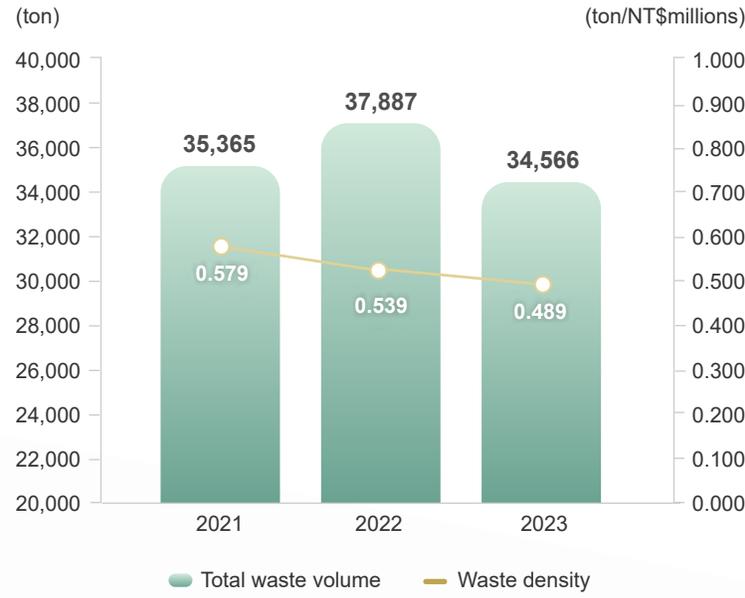
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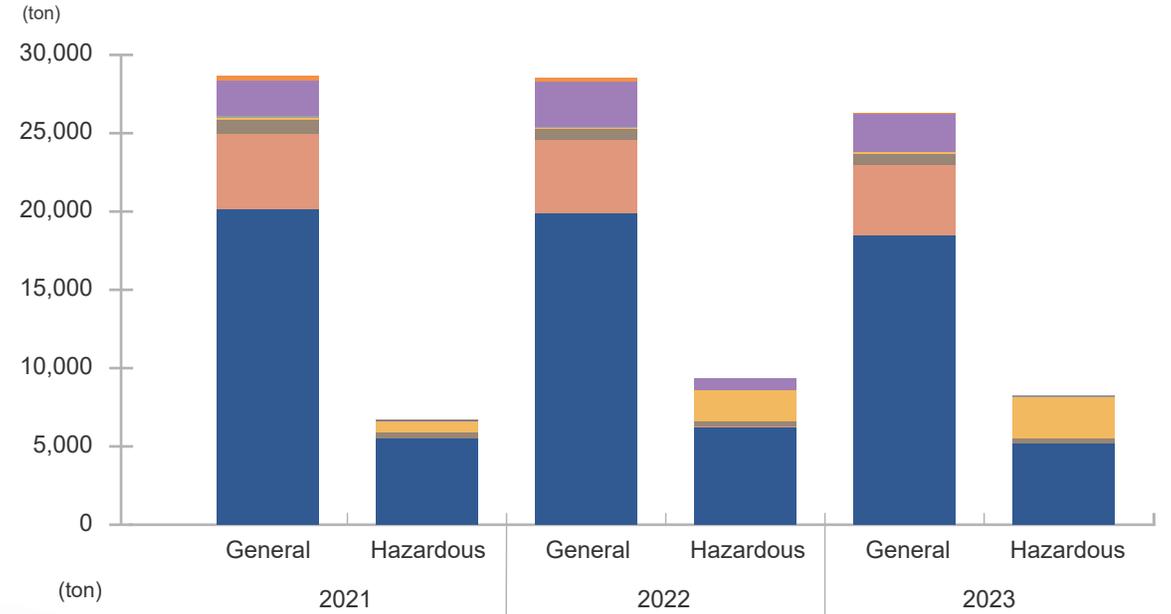


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### 2021-2023 Total waste output from GlobalWafers



### 2021-2023 GlobalWafers' Industrial Waste Disposal Method



(ton)	2021		2022		2023	
Other	289	112	249	764	43	136
Curing Treatment	21	1	13	2	10	3
Landfill	2,257	1	2,888	14,1538	2,486	10,056
Thermal treatment	0	0	2	0	0	0
Chemical Treatment	120	9	39	7	1	7
Chemicals	124	572	103	1,971	113	2,588
Incineration	905	326	728	340	691	314
Recycle	4,788	39	4,662	29	4,494	29
Recycle & reuse	20,150	5,473	19,864	6,213	18,469	5,171

Note:

1. Taiwan: GlobalWafers Headquarters, Zhunan Plant, Taisil Branch
2. Overseas: GlobiTech Incorporated, Kunshan Sino Silicon Technology, MEMC Electronic Materials S.p.A, MEMC Korea Company, MEMC LLC, MEMC Japan Ltd., GlobiTech Incorporated., MEMC Electronic Materials Sdn. Bhd., Topsil GlobalWafers A/S.
3. Waste output and general waste, excluding recycled raw materials
4. Waste density: waste volume (ton)/consolidated revenue (NT\$millions)
5. Except for the offices and production sites added in November 2023, the data in the above chart covers 100% of GlobalWafers' production facilities.



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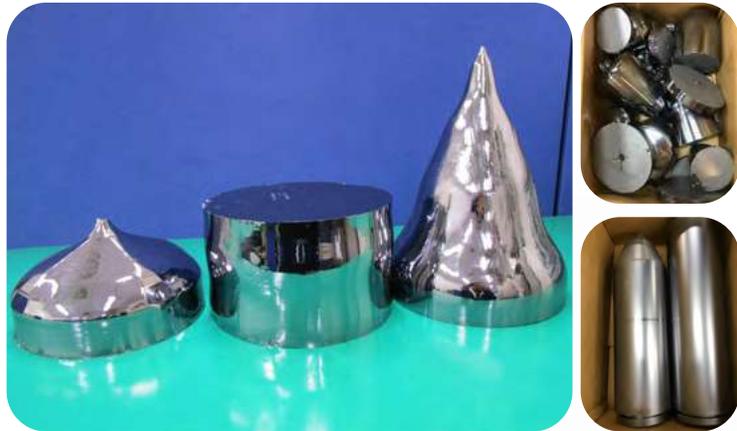
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### 3.3.1 Raw Material Re-Utilization

GlobalWafers has promoted the ISO 14001 environmental management system and introduced the product life cycle concept in order to reduce raw material consumption and waste output, and achieve the goal of sustainable operation and environmental protection.

Based on different manufacturing processes, our respective factories utilize as much recycled raw materials as possible. Recycled raw materials utilized by GlobalWafers' respective global factories include silicon raw materials, cutting fluid (supporting agent), product package carton and wafer cassette.

GlobalWafers relies mainly on silicon as its main raw materials for production. During the crystal growth stage, we use the tailings recycled within the plants as much as possible to save the procurement costs and to reduce the waste outputs.



#### 2023 Recycled Raw Materials Utilization Status

Item	Total Amount of the Year (Tons)	Total Recycled Amount of the Year (Tons)	Recycle Rate of the Year
Silicon raw material	5,269.94	1,012.15	19.21%

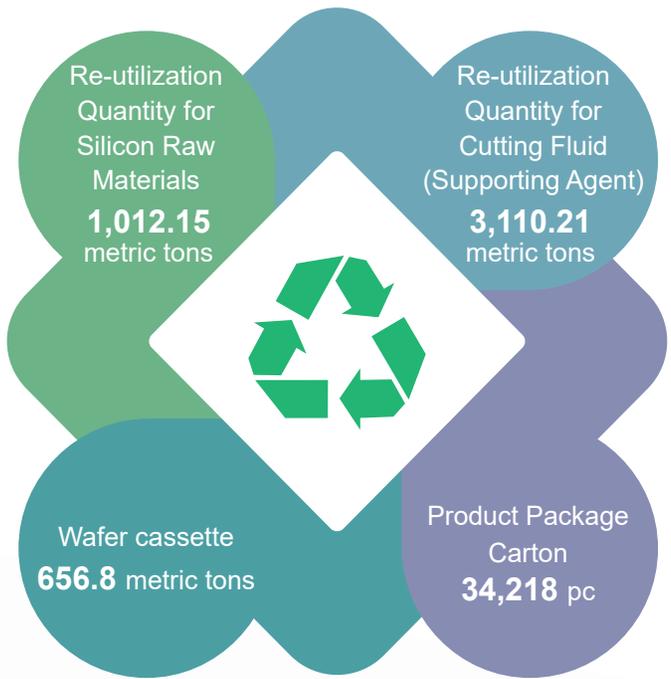
Note: This table includes GlobalWafers Headquarters, GlobalWafers Zhunan Plant, Taisil Branch, MEMC Electronic Materials S.p.A, GlobalWafers Japan Co., Ltd., MEMC Japan Ltd., MEMC Korea Company.

#### Single Factory Re-Utilization Rate

- GlobalWafers Zhunan Plant 24.55%
- Taisil Branch 18.13%
- GlobalWafers Japan Co.,Ltd 19.73%
- MEMC Electronic Materials S.p.A 14.79%
- MEMC Korea Company 21.65%

#### Single Factory Re-Utilization Rate

- Taisil Branch 62.8%
- MEMC Electronic Materials S.p.A 71.3%
- MEMC Korea Company 55.8%
- MEMC Japan Ltd. 59.92%



#### Single Factory Re-Utilization Rate

- GlobalWafers Headquarters 95.34%
- Taisil Branch 5.18%
- GlobalWafers Japan Co., Ltd 18.34%
- MEMC Japan Ltd. 14.78%
- MEMC Korea Company 55.07%

#### Single Factory Re-Utilization Rate

- GlobalWafers Headquarters 20.75%
- Taisil Branch (Hybox) 80.88%



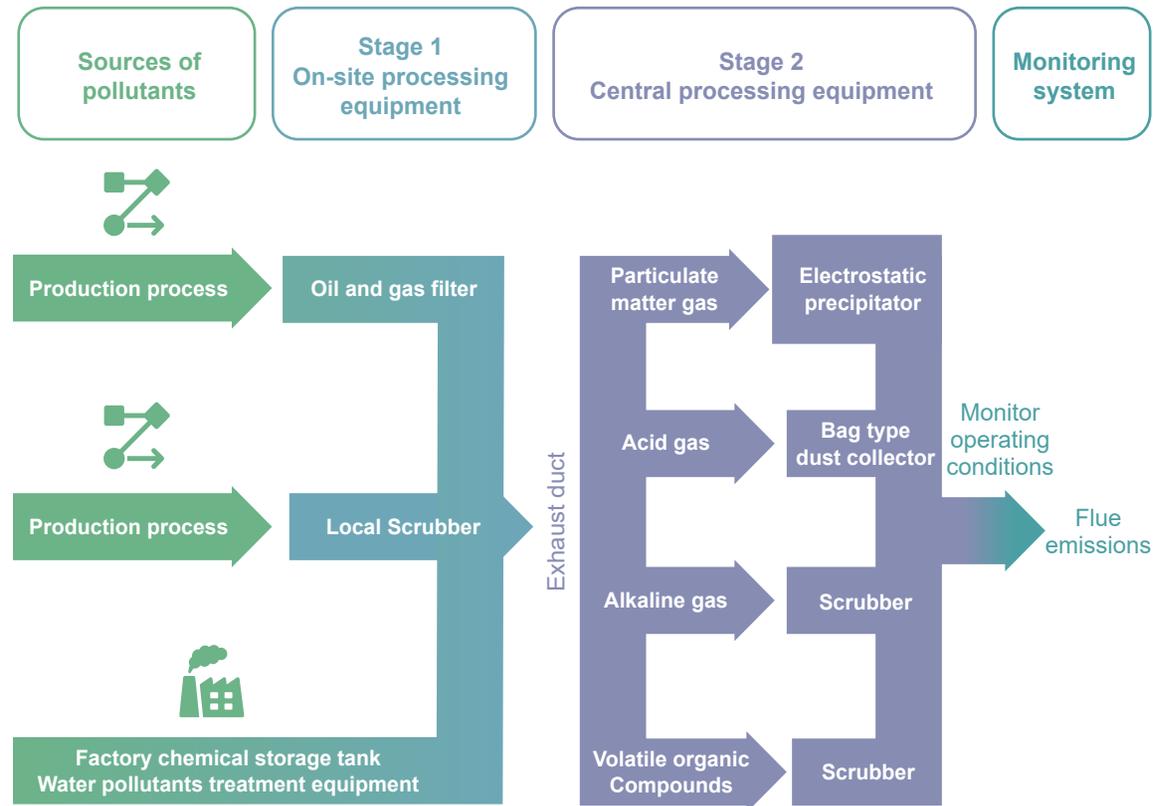
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## 3.4 Air Pollutant Emissions

GlobalWafers' production processes vary across different plants, leading to slight differences in process emissions at each location. For instance, in Taiwan, the Hsinchu Plant & Zhunan Plant produce three main types of emissions: acidic waste gas, volatile organic compounds (VOCs), and particulate matter. In contrast, the Taisil Branch produces four main types of emissions: acidic gases, nitrogen oxides, volatile organic compounds (VOCs), and particulate matter. Based on the characteristics of the process exhaust, we divert the flow at the source of the pollutants. For the vapor and combustible gases, first pre-treat high-concentration pollutants in the on-site processing equipment before sending the gas to the central processing equipment for the second stage of treatment. Treatment with terminal control equipment to improve air pollution treatment efficiency.

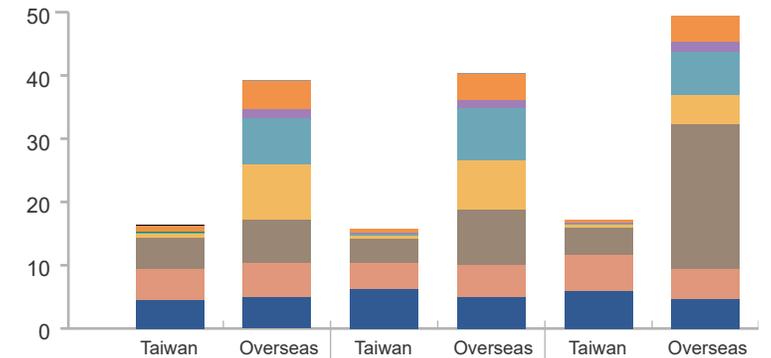
We continue to pay attention to the operational stability of air pollution control equipment. We have installed continuous and automatic monitoring flow meters and other monitoring instruments in discharge pipelines, as well as backup equipment. The backup equipment can be turned on in a timely manner in the event of an equipment malfunction. To maintain the stable operation of the control equipment and minimize the risk of pollution; in addition, the responsible unit performs daily on-site inspection of the control equipment, implements movement management, and confirms that the air pollution system is operating normally and that various operating parameters are within the control range. In 2023, we did not encounter any abnormal air pollution control equipment or other air pollution-related disciplinary incidents. In addition, we did not emit perfluorinated compound pollutants in 2023.

### Air Pollution Control and Treatment Process



### Air Pollutant Emissions from 2021 to 2023

(Unit: Metric Ton / Year)



	2021		2022		2023	
	Taiwan	Overseas	Taiwan	Overseas	Taiwan	Overseas
Sulfuric Acid	0.0022	0.097	0.0576	0.0975	0.072	0.05
PM	1.003	4.510	0.565	4.090	0.466	4.100
Hydrofluoric Acid	0.027	1.444	0.209	1.430	0.177	1.621
Phosphoric Acid	0.017	0	0.007	0	0.007	0
HCl	0.161	7.351	0.229	8.348	0.093	6.846
Nitric Acid	0.618	8.636	0.519	7.671	0.592	4.534
NH3	4.970	6.877	3.755	8.825	4.206	22.861
VOCs	4.964	5.370	4.053	4.940	5.674	4.710
NOx	4.5552	4.91	6.257268	5	5.9568	4.7

Note:

1. Taiwan: GlobalWafers Headquarters, Zhunan Plant, Taisil Branch
2. Overseas: GlobalWafers Japan, Co., Ltd., Kunshan Sino Silicon Technology MEMC Electronic Materials S.p.A(Novara plant), MEMC Korea Company, MEMC LLC., GlobiTech Incorporated., MEMC Electronic Materials Sdn. Bhd., Topsil GlobalWafers A/S.



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## Material Topics Target and Achievement

Key Performance Indicator	United Nations Sustainable Development Goals (SDGs)	2023 Goals	2023 Status and Achievements	Short-term goals (2024)	Mid-term goals (2025 - 2030)	Long-term Goals (2030 and beyond)
Talent Attraction and Retention	  	The average education and training hours for the Group's employees was 16 hours	Achieved	The completion rate of the talent pipeline assessment for plant chiefs reaches 75%	The completion rate of the talent pipeline assessment for plant chiefs reaches 80%	The completion rate of the talent pipeline assessment for plant chiefs reaches 80%
		100% of new recruits have received orientation education and training	Achieved	No less than 75% of executives above the manager level are promoted or transferred from within	No less than 80% of executives above the manager level are promoted or transferred from within	No less than 80% of executives above the manager level are promoted or transferred from within
		100% of new recruits have completed workplace violence prevention education and training within 30 days of arrival	Achieved	The turnover rate of new recruits within the year does not exceed 18%	The turnover rate of new recruits within the year does not exceed 15%	The turnover rate of new recruits within the year does not exceed 12%
		-	-	Total employee turnover rate between 5% and 10%	Total employee turnover rate between 5% and 10%	Total employee turnover rate between 5% and 10%
		-	-	Industry-academia collaboration with at least 3 high schools or universities in each country	-	-
		-	-	At least one engineering-related personnel from factories in each country is dispatched to assist an affiliated factory for more than one year, or have three instances of overseas business trips for support or discussions	-	-
		-	-	Each country's plant has at least one intern for a period of more than three months, with an executive serving as the mentor	-	-



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## 4.1 Human Resources

Diverse talents are the cornerstone of enterprise growth. We value the autonomy to select the right talents and foster work independence, and we are committed to achieving results together with our employees. In response to the challenges posed by globalization, technological advancements, organizational growth, and demographic shifts, we have developed short-, medium-, and long-term human resource management plans. These plans align with our corporate goals and include objectives such as attracting, integrating, retaining, evaluating, and developing talent. In sum, we have designed a structured interview process to effectively recruit knowledge-based professionals; placed significant emphasis on employee potential and personal development; implemented job rotations to cultivate versatility among our workforce; formed work teams to jointly formulate and execute projects; committed to creating a safe, happy, and healthy environment; upheld the fundamental rights of every employee; developed a performance-linked reward system; and encouraged employees and supervisors to collaborate in setting and achieving personal goals. We will continue to provide employees with high-quality human resources services to help them create higher value.

### Diverse Talent Pool

GlobalWafers upholds the people-oriented core values and respects diverse cultures worldwide. Our employees remain enthusiastic about collaboration, uphold integrity and comply with local laws and regulations, and continuously innovate to achieve excellence. The Company actively communicates its core values and vision with employees through various channels, including the Company's website, conferences, publications, and education and training.

In 2023, GlobalWafers had a total of 7,305 employees worldwide. Employees in Taiwan accounted for 23.96% of the total workforce, while overseas employees made up 76.71%. In terms of employment classification, there were 1,700 full-time employees and 1 non-full-time employee in Taiwan, while there were 5,065 full-time employees and 539 non-full-time employees overseas. Additionally, 222 employees required work visas, representing 3.04% of the total workforce. The Company had a total of 342 senior and mid-level managers (166 in Taiwan, 69 in other plants in Asia, 63 in Europe, and 44 in the Americas) and 340 junior managers (131 in Taiwan, 153 in other plants in Asia, 33 in Europe, and 23 in the Americas); 79 fellows, including associate fellows, fellows, and senior fellows (including 7 in Taiwan, 20 in other plants in Asia, 18 in Europe, and 32 in the Americas); 1,287 professional staff (273 in Taiwan, 650 in other plants in Asia, 228 in Europe, and 138 in the Americas); and 5,257 regular employees (1,124 in Taiwan, 2,880 in other plants in Asia, 883 in Europe, and 370 in the Americas).

GlobalWafers actively promotes gender equality in employment. In 2023, the total number of male employees was 5,628, accounting for 77.04%, and the total number of female employees was 1,677, accounting for 22.96%, with a male-to-female ratio of 3.36:1. By job position, female managers made up 18.62% of the total number of managers. The proportion of women in each position was 19.53% for middle and senior managers, 18.39% for lower-level managers, 5.06% for Fellows (including associate researchers and senior researchers), 22.69% for professionals, Support staff is 23.82%. The proportion of female employees in each region was 28.0% in Taiwan, 20.0% in other factories in Asia, 21.6% in Europe, and 29.8% in the Americas.

### 🕒 No. of GlobalWafers Employees Across All Levels

Employment Classification	Taiwan	Other Plants in Asia	Europe	The Americas	Total
Senior and mid-level managers	167 people	69 people	63 people	44 people	343 people
Junior managers	139 people	153 people	33 people	23 people	348 people
Fellow	7 people	20 people	18 people	34 people	79 people
Professional staff	271 people	652 people	228 people	136 people	1,287 people
Regular employees	1,117 people	2,878 people	883 people	370 people	5,248 people



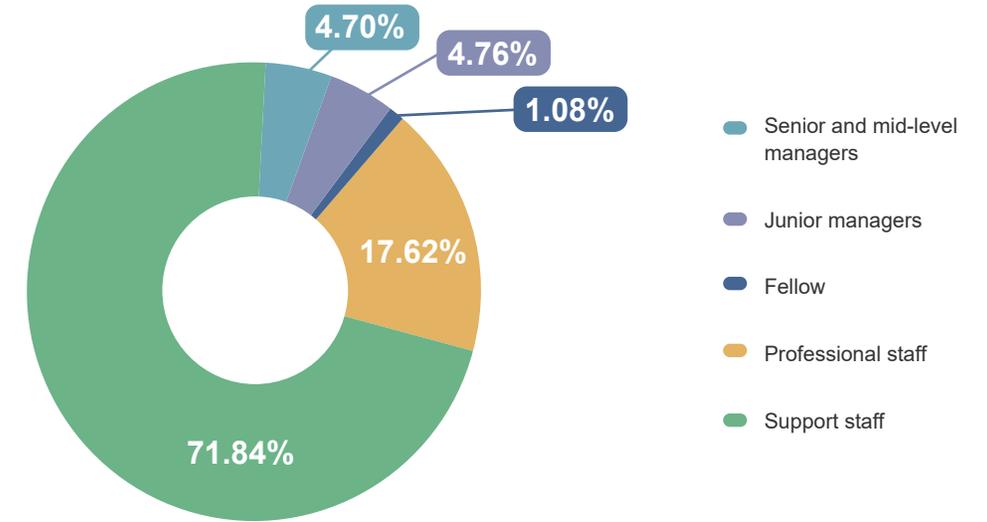
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🕒 **Man Power Structure in Global Factories**

Workforce structure		Year	2021	2022	2023
By gender	Male		5,446	5,590	5,628
	Female		1,649	1,701	1,677
Full-time/Part-time	Official		6,755	6,740	6,765
	Non-official		340	551	540
By employment contract	Non-fixed term		6,095	6,371	6,522
	Fixed term (contractors, interns, migrant workers, seasonal)		1,000	920	783
By nature of work	Direct		4,426	4,535	4,388
	Indirect		2,669	2,756	2,917
By education level	Dr.		62	67	76
	Master degree		493	543	561
	College		1,752	1,556	1,651
	Senior high school and vocational school		4,344	3,515	3,894
	Junior high school and below		444	1,610	1,123
By age	< age 30	Male	995	1,059	1,095
		Female	386	397	413
	Age 30-50	Male	2,950	2,621	2,667
		Female	902	858	878
	> age 50	Male	1,501	1,850	1,866
		Female	361	384	386
Foreign employees & overseas staff	Visa-exemption		236 <sup>Note</sup>	276 <sup>Note</sup>	7
	Visa required				222
Total			7,095	7,291	7,305

Note: In 2021-2022, foreign and overseas employees were not classified based on whether they required a visa.

🕒 **Percentage of People Across Different Levels at GlobalWafers**



**Move Forward with GlobalWafers for a Sustainable Future**

In terms of talent attraction and retention, GlobalWafers is dedicated to attracting and retaining high-quality job opportunities and a supportive workplace. We also encourage internal and external talents to continuously learn and expand their potential to strengthen their future career development. In 2023, GlobalWafers recruited 636 new employees. By gender, new male hires represented 6.57% of the total workforce, while new female hires accounted for 2.14%. In terms of age, employees under 30 years old had the highest recruitment rate at 4.70%, followed by those aged 30 to 50 at 3.01%. The new hire rates for 2022 and 2023 were 14.44% and 8.71%, respectively, while overall turnover rates for the same years were 13.08% and 9.12%. When employees submit a resignation, the HR department promptly schedules an exit interview to understand their reasons for leaving. This process allows HR to provide support, offer adjustments, and give detailed feedback on work content and personal fit. It also helps identify underlying issues, ensuring employees are better suited to their roles, ultimately reducing talent loss.

Statistical Analysis for New Employees

Year	2021								2022								2023							
Region	Taiwan				Overseas				Taiwan				Overseas				Taiwan				Overseas			
Age	Male (no. of people)		Female (no. of people)		Male (no. of people)		Female (no. of people)		Male (no. of people)		Female (no. of people)		Male (no. of people)		Female (no. of people)		Male (no. of people)		Female (no. of people)		Male (no. of people)		Female (no. of people)	
< age 30	113	6.75%	51	3.05%	223	4.11%	72	1.33%	103	6.02%	67	3.92%	358	6.42%	129	2.31%	51	3.00%	18	1.06%	222	3.96%	52	0.93%
age 30~50	104	6.21%	71	4.24%	99	1.83%	42	0.77%	102	5.96%	48	2.81%	143	2.56%	48	0.86%	35	2.06%	25	1.47%	121	2.16%	39	0.70%
Age 50 and above	3	0.18%	2	0.12%	22	0.41%	15	0.28%	1	0.06%	3	0.18%	29	0.52%	22	0.39%	3	0.18%	3	0.18%	48	0.86%	19	0.34%
Total	220	13.14%	124	7.41%	344	6.35%	129	2.38%	206	12.04%	118	6.90%	530	9.50%	199	3.57%	89	5.23%	46	2.70%	391	6.98%	110	1.96%

Statistical Analysis for Resigned Employees

Year	2021								2022								2023							
Region	Taiwan				Overseas				Taiwan				Overseas				Taiwan				Overseas			
Age	Male (no. of people)		Female (no. of people)		Male (no. of people)		Female (no. of people)		Male (no. of people)		Female (no. of people)		Male (no. of people)		Female (no. of people)		Male (no. of people)		Female (no. of people)		Male (no. of people)		Female (no. of people)	
< age 30	68	4.06%	31	1.85%	106	1.96%	64	1.18%	76	4.44%	35	2.05%	246	4.41%	119	2.13%	46	2.70%	24	1.41%	150	2.68%	35	0.62%
age 30~50	105	6.27%	52	3.11%	87	1.60%	33	0.61%	107	6.25%	55	3.21%	120	2.15%	67	1.20%	65	3.82%	58	3.41%	129	2.30%	46	0.82%
Age 50 and above	7	0.42%	7	0.42%	48	0.89%	31	0.57%	0	0.00%	4	0.23%	76	1.36%	49	0.88%	23	1.35%	14	0.82%	55	0.98%	21	0.37%
Total	180	10.75%	90	5.38%	241	4.45%	128	2.36%	183	10.70%	94	5.49%	442	7.92%	235	4.21%	134	7.88%	96	5.64%	334	5.96%	102	1.82%

Note: The percentage of new recruits and resigning employees is measured against the total workforce at the end of the said year.



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### 🕒 Hiring People with Disabilities

GlobalWafers adheres to Article 38 of the "People with Disabilities Rights Protection Act" and upholds the principle of equal opportunities to ensure that everyone has the chance to participate in the workforce.

In line with our commitment to social responsibility, we actively support the employment of individuals with physical and mental disabilities, creating opportunities in the workplace. We not only offer high-quality job opportunities for people with disabilities but also comprehensive support to help them fully express their talents and realize their potential. As of 2023, we have employed 68 individuals with disabilities, including 21 in Taiwan and 47 overseas, representing 0.93% of our total workforce. We remain dedicated to expanding employment opportunities for individuals with disabilities, helping them integrate into the workplace, and continuously practicing the principles of Diversity, Equity, and Inclusion (DEI). We respect and value the uniqueness of each employee, aiming to cultivate an inclusive organizational culture.

### 🕒 Overseas Talent Recruitment

In response to the trends of globalization, whether in industry, technology, or education, rapid advancements highlight the importance of talent cultivation and development. GlobalWafers is committed to recruiting exceptional talent and applying them to appropriate positions, providing high-quality education and training to retain these outstanding individuals within the company, thereby strengthening international competitiveness. As of 2023, 104 employees were hired in Taiwan, and 120 employees were hired in overseas regions, accounting for 3.07% of the Company's total workforce.

To address the potential risks brought about by hiring overseas talents, GlobalWafers actively conducts risk assessments, covering risks such as international regulations, visas, and contract expiration. Before recruitment, we assess the impact of visa regulations, labor market restrictions, and political and geopolitical conditions in the target country on recruitment. During recruitment, we follow and ensure that the recruitment procedures comply with local laws and regulations to reduce legal risks. After onboarding, we provide support to help new hires adapt to their new work and living environments, reducing the risk of talent turnover. We also implement corresponding measures to ensure effective risk management.

GlobalWafers provides comprehensive support measures to help foreign colleagues better adapt to the new working and living environment. Including newcomer education and training, dormitory placement, assistance from translation teachers, life management, and consulting services. At the same time, we hold regular communication meetings for migrant workers to maintain open communication channels and actively strive to improve their living conditions overseas. The Company also conducts advocacy from time to time to remind all employees to abide by the relevant regulations. To facilitate cultural exchange and communication, we commission a labor agency every year to organize Christmas celebrations or prepare Christmas gifts for Filipino migrant workers to promote interaction and inclusion.

GlobalWafers continues to practice DEI in the workplace and create a friendly and open workplace that supports and respects diversity of all genders, ages, races, sexual orientations, and other aspects of diversity. It is believed that DEI not only affects employee happiness, performance, and retention rate but also has a positive impact on the innovation ability, competitiveness, and social responsibility of enterprises. We continue to strive to promote cultural diversity and talent development to achieve the goal of sustainable development.



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## 4.2 Talent Attraction and Retention

Employees are a vital driving force behind corporate growth and success. We provide competitive remuneration and benefits to attract and retain talents from all areas, as well as offering substantial rewards for our employees' hard work and contributions to the Company.

GlobalWafers has established internal and external audit mechanisms, along with regular workforce system reviews and labor market analysis, to continuously enhance workforce development. These efforts aim to inspire employee potential, nurture their strengths, and foster mutual growth with the Company. Our goal is to ensure that employees understand GlobalWafers' commitment to sharing business success with them, maintaining strong teamwork, enhancing employee cohesion and identity, and creating a positive growth culture that makes the Company a highly desirable workplace for professionals.

GlobalWafers conducts an annual review of salary levels in the technology industry, using objective data such as macroeconomic indicators and price indices to adjust employee compensation appropriately. Our competitive salary structure is designed to attract and retain quality talent while rewarding employees for their performance. The alignment between the Company's business performance and employee compensation is carefully structured, with adjustments made based on talent needs and market dynamics. To ensure fairness, compensation standards are based on job-related factors such as job title, seniority, and professional skills, guaranteeing equal pay for equal work and eliminating discrimination based on gender, age, or other factors.

### Number of full-time employees as well as the average and median salary of non-supervisory positions in 2023

Item		2021	2022	2023	Difference compared to the previous year
Non-supervisory positions	Number of full-time employees (persons)	1,563	1,593	1,655	3.89%
	Average salary (NT\$ thousand)	1,205	1,307	1,386	6.04%
	Median salary (NT\$ thousand)	1,124	1,228	1,280	4.23%

Note :

1. "Full-time employees" refer to those whose working hours have reached the normal working hours or statutory working hours stipulated by the Company ; or the rough average working hours have exceed 35 hours per week for those whose normal working hours are not set.
2. "Full-time non-supervisory employees" refers to the number of full-time employees after subtracting the supervisor positions, part-time positions, and those eligible for exemption from statistics from all employees. Employees in supervisory positions refer to Company managers or "managers" within the scope as defined by the regulations of the competent authority: President and equivalent; vice president and equivalent; associate manager and equivalent; head of the financial department; head of the accounting department; and other persons who have the authority to manage the company's affairs, provide authorization signatures, and consistent within the scope of insiders (managers) and (managers) declared by the annual shareholders meeting report.
3. "Salary" refers to the employee's salary attributable to the current year according to the accrual basis based on the occurrence of powers and responsibilities. It shall include recurring salary (monthly basic salary, fixed allowance, and bonus), overtime pay (regardless of taxable or tax-free), and non-recurring salary (non-monthly allowances, bonuses, employee compensation, etc.).
4. The number of employees listed above is based on the weighted average statistical concept (the average number of employees for each month) and only covers GlobalWafers and the Taisil Branch.

### Connection Between Appraisal and Remuneration

We have conducted performance reviews on all employees each year and focusing on their commitment, duties, responsibilities, and contributions. The aim is to make salary adjustments based on future development potential and market salary levels. Additionally, we offer cash rewards and bonuses to recognize performance, ensuring that employee remuneration and development align with the Company's financial status and performance. This approach encourages employees to achieve breakthroughs and create personal value within GlobalWafers.

### Performance and Remuneration of the Senior Management Team

The remuneration structure for senior managers closely linked to the Company's performance. Each year, senior managers' salaries are proposed based on the Company's performance indicator scores. This proposal is reviewed by the Remuneration Committee and then submitted to the Board of Directors for approval. Additionally, the long-term incentive plan for high-ranking executives aligns with the Company's long-term performance and shareholders' interests.

To uphold the Company's commitment to sustainable development, ESG (Environmental, Social, Governance) factors are integrated into the performance evaluation of senior managers, including Presidents, Vice Presidents, and Heads of operational sites. ESG performance indicators and their respective weighting ratios are tailored to each role's responsibilities, encompassing international ESG ratings, climate change mitigation and adaptation measures (such as greenhouse gas emission reduction, energy conservation, and carbon reduction targets), and occupational safety and health initiatives. These ESG performance indicators are factored into the performance appraisal process, influencing the evaluation of their remuneration.



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### ⦿ Long-Term Retention Plan for R&D and Key Talent

For global R&D and key core personnel, tailored retention measures are implemented according to local market conditions. We offer specialized retention programs to encourage long-term service and sustained contributions from these valuable talents.

### ⦿ Comprehensive Benefits System

We aim for GlobalWafers to support employees in achieving peace and contentment in their personal and professional lives, while significantly advancing their careers. At our major operational sites, we offer full-time employees six key benefits: life insurance, medical insurance, disability insurance, parental leave, retirement plans, and, in Taiwan, an employee stock ownership plan. These comprehensive benefits ensure that employees can fully dedicate themselves to their work and remain committed to growing with GlobalWafers.

At our Taiwan facilities, we offer a comprehensive range of benefits, including labor and health insurance, labor retirement and group insurance, meal subsidies, annual travel subsidies, marriage subsidies, maternity subsidies, childcare subsidies, educational subsidies for employees and their children, health check-ups, holiday and birthday bonuses, Labor Day bonuses, marriage and funeral subsidies, hospitalization subsidies, social club activity subsidies, training subsidies, on-site medical services, cancer consolation payments, employee welfare savings trusts, and an Employee Assistance Program (EAP) to help employees balance work and life. In our overseas regions, we provide non-legal health insurance, including hospitalization coverage, cancer-related insurance, and employee health check-ups.

Continuous learning is the cornerstone of the Company's employee development strategy. We provide regular internal training and external training subsidies, and have established the "In-Service Education Regulations." We encourage employees to engage in various training programs to enhance their knowledge and skills, supported by tuition subsidies and flexible work hours. This approach aims to meet both the Company's operational needs and employees' personal development goals.

Note: Major operating sites refer to all operating and production sites

### ⦿ Rewards to Excellent Employees

The Company has established various rewards schemes to recognize proactive and outstanding employees, including rewards for exceptional achievements, project submissions, and patents. In Taiwan, we conduct an annual Model Employee selection process, where selected employees are publicly recognized and praised. This initiative aims to foster a more positive and dynamic corporate culture and to uphold our commitment to continuous improvement.

### ⦿ Group Insurance

The Company's group insurance includes term life insurance, accidental injury insurance, aviation accident insurance, major burns insurance, medical injury insurance, hospitalization medical insurance, and cancer insurance. Our goal is to provide comprehensive protection to ensure the safety and health of our employees.

The Company's group insurance includes term life insurance, accidental injury insurance, aviation accident insurance, major burns insurance, medical injury insurance, hospitalization medical insurance, and cancer insurance. Our aim is to offer comprehensive protection to ensure the safety and health of our employees.

### ⦿ Employee Stock Ownership Trust

In Taiwan, the Company matches 100% of the amount employees deposit into their monthly accounts. This initiative aims to encourage employees to benefit from regular investments in the Company's stock, thereby enjoying steady returns. We are committed to supporting employees' financial independence, enhancing their benefits, and aiding them in retirement planning. In 2023, the participation rate was approximately 46%.

### ⦿ Pension System

We allocate pension funds in accordance with the laws of the countries where we operate. In Taiwan, we adhere to the "Labor Standards Act" and the "Labor Pension Act" to establish our labor retirement guidelines. Additionally, we have set up a Labor Pension Reserve Supervision Committee and allocate a sufficient amount of labor pension funds each month to ensure that employees can apply for their pensions and protect their rights.

Our approach to benefits is designed to be flexible and responsive to employee needs, aiming to increase engagement. For instance, following feedback from our Novara, Italy factory, we launched the "Take Away, From the Factory to Home" program. This initiative, which combines health and convenience, allows employees to view the nutritional content of meals and order their favorites via the "Appetie" app. Employees can also take meals home to share with their families. This program supports work-life balance and integrates work into employees' lives, fostering harmony between family and work.

In addition, at MEMC Japan Ltd. in Japan, we have formalized an agreement with the kindergarten affiliated with Kiyohara Industrial Park to prioritize enrollment for the children of our employees. We are committed to providing a supportive environment that allows employees to work with peace of mind.



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### ☉ Fertility Support System: Maternity Leave, Paternity Leave, Prenatal Leave, Maternity Leave, Parental Leave

GlobalWafers encourages both male and female employees to actively participate in their children's growth. All of our operation sites offer maternity and parental leave policies to support employees in balancing career development with parenting responsibilities.

In Taiwan, employees are entitled to prenatal check-up leave, paternity check-up leave, maternity leave, flexible working hours, and other measures to comfortably balance work with childbirth needs. Following delivery, both male and female employees can apply for unpaid parental leave to care for their children up to the age of three, provided they have been employed for at least six months.

In addition to flexible working hours and holidays, our health center implements a maternal health protection plan for female employees of child-bearing age. This plan supports pregnant employees and includes features such as dedicated parking spaces, a Good Maternity Pack, and a breastfeeding room. These facilities provide additional rest time and support for breastfeeding to accommodate the needs of young children. We conduct health risk assessments for pregnant employees and those returning to work after childbirth, offering consultations and care services from physicians. Additionally, we have partnered with childcare service providers to offer employees discounts on childcare services that are more favorable than market rates. This initiative aims to enhance the workplace environment and support employees in balancing their professional and personal responsibilities.

In Japan, for example, employees can take childcare leave until their child reaches the age of three, during which they receive a government allowance. Upon returning to work, employees have the option to reduce their working hours by up to two hours per day until their child graduates from elementary school, although this reduced time is unpaid. This approach supports employees with childcare responsibilities, helping to mitigate staff turnover and encouraging employees to remain in the workforce while continuing to contribute their skills.

GlobalWafers adheres to or surpasses local laws regarding childcare-related leave at all global locations. In certain OECD countries, such as Denmark, Italy, and the United States, we have established paid maternity and parental leave policies. Research indicates that such policies generally contribute to increased female labor participation. Similarly, in our plants across Asian countries, including Malaysia, South Korea, and China, we provide parental leave policies that comply with local regulations and continually enhance support systems to align with International Labour Organization standards.

From 2021 to 2023, a total of 217 employees applied for childcare leave.

### ☉ Execution Results of Unpaid Child Care Leave Application

Item	Gender	Total number/ratio				
		2021		2022		2023
		Taiwan	Taiwan	Overseas	Taiwan	Overseas
Total employee staff number eligible for unpaid child care leave	Male	60	41	1,023	46	985
	Female	24	21	340	22	317
Total number of employees who actually took unpaid child care leave	Male	2	7	57	2	47
	Female	11	8	23	9	28
Total number of reinstated employees upon the expiration of their child care leaves	Male	2	6	55	4	45
	Female	10	7	21	12	26
Total number of employees who actually resumed their duties upon the expiration of their child care leaves	Male	2	2	54	3	45
	Female	8	6	19	6	26
Ratio of employees who resumed their duties upon the expiration of their child care leaves (reinstatement rate)	Male	100%	33.3%	98.2%	75%	100%
	Female	80%	85.7%	90.5%	50%	100%
Total number of employees still in service 12 months after expiration of their unpaid child care leaves	Male	2	-Note1	46	1	24
	Female	5	7	21	4	9
The ratio of employees still in service 12 months after expiration of their parental leaves (retention rate)	Male	100%	-Note1	-Note2	50.00%	44.44%
	Female	83.33%	87.5%	-Note2	66.67%	47.37%

Note 1: "-" means no one meets the criteria.

Note 2: "-" means no comparable data for the previous year.



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## 4.3 Talent Cultivation and Development

To continuously improve human capital and support the Company's growth and development, we have created a learning organization atmosphere through diverse learning resources and learning channels. We also actively strengthen on-the-job training and are committed to the comprehensive career development of all employees.

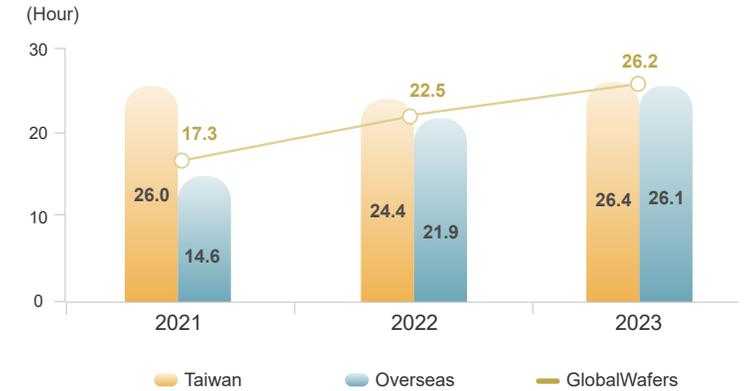
We have established a complete employee education and training system, covering six majors: New Orientation Academy, Logistics General Education Academy, Management Academy, Professional Core Academy, Environmental Safety and Health Academy, and Health Promotion Academy. Each year, the annual education and training plan is formulated and implemented according to the Company's development and policies, as well as the functions and needs of each position. Through in-plant training and OJT (On-Job Training), we aim to enhance employees' professional capabilities and job competencies. We also encourage employees to participate in courses offered by external professional training institutions, hoping to provide employees with various training opportunities through diverse training methods to promote the Company's continuous development.

In 2023, the total training hours for GlobalWafers in Taiwan and overseas amounted to 191,233 hours, with an average annual training time of 26.2 hours per employee, an increase of 16.6% compared to the previous year. Our plants' average hours of education and training for men and women according to gender were 23.7 hours and 34.6 hours, respectively. Based on employee classification, the average hours of education and training received by direct and indirect personnel are 26.7 hours and 25.4 hours, respectively.

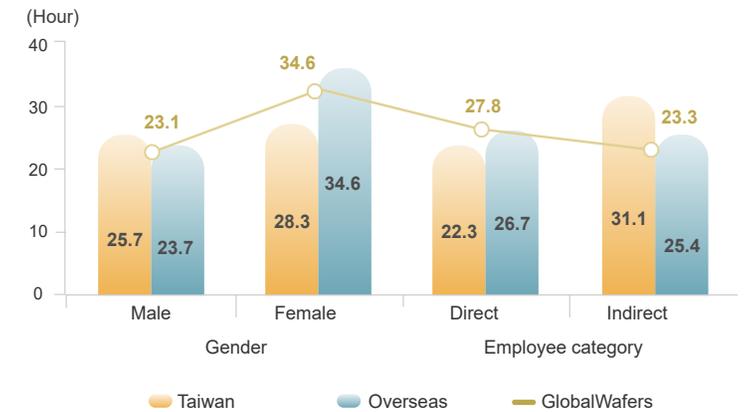
### Number of People and Hours for Education and Training From 2021 to 2023

Training type	Year	Number of sessions	Number of people	Total class opening hours	Total class hours
Competency training for new recruits	2023	316	1,282	1,586	9,553
Professional competency training		1,951	13,757	25,282	79,075
General management competency training		1,263	47,246	3,163	102,606
<b>Total</b>		<b>3,530</b>	<b>62,285</b>	<b>30,032</b>	<b>191,233</b>
Competency training for new recruits	2022	441	1,422	3,284	26,529
Professional competency training		1,580	15,471	5,463	80,770
General management competency training		747	29,832	13,235	56,456
<b>Total</b>		<b>2,768</b>	<b>46,725</b>	<b>21,982</b>	<b>163,755</b>
Competency training for new recruits	2021	295	1,092	1,571	9,259
Professional competency training		1,426	12,513	24,830	57,709
General management competency training		767	39,749	6,482	55,624
<b>Total</b>		<b>2,488</b>	<b>53,354</b>	<b>32,883</b>	<b>122,592</b>

### Average Training Hours Per Employee (by region)



### Average Training Hours Per Employee (by gender & category)



Note:

- The education and training statistics cover all operation & manufacturing sites including GlobalWafers Headquarters, GlobalWafers Zhunan Plant, GlobiTech Incorporated., GlobalWafers Japan Co., Ltd., Kunshan Sino Silicon Technology, the Taisil Branch, MEMC Electronic Materials Sdn. Bhd., MEMC Electronic Materials S.p.A., MEMC Japan Ltd., MEMC Korea Company, Topsil GlobalWafers A/S, MEMC LLC, Crystalwise Technology Inc., Yuan Hong (Shandong) Photoelectric Material Co., Ltd., Sunrise PV Electric Power Five Co. Ltd., Sunrise PV Four Co. Ltd., MEMC Electronic Materials France SarL, GlobalWafers B.V., Shanghai Sawyer Shenkai Technology Material Co. Ltd., and Yuan Hong Technical Materials Ltd.
- Direct personnel: personnel who actually engaged in production-related operations such as technical workers and foremen at the production site
- Indirect personnel: workers who do not directly involved in production such as supervisors, product designers, accountants, procurement, or engineers



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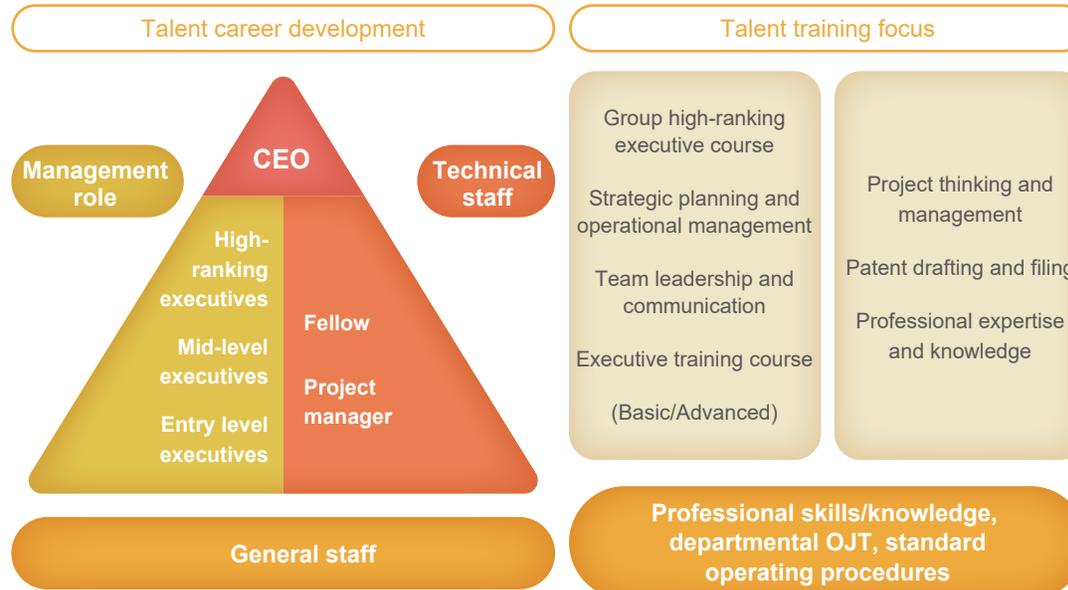
### ☉ Bronze Medal in the Talent Quality Management System (TTQS) Evaluation by Workforce Development Agency, Ministry of Labor

In 2023, we participated in the evaluation of the Talent Quality Management System, the only national testing standard for training quality in Taiwan. This evaluation, conducted by the government to assess training quality, awarded us the Bronze Medal honor. This highlights the Company's commitment to linking its education and training system with its business philosophy, strategy, and goals and its dedication to employee career development and professional growth. It effectively demonstrates the execution of talent cultivation, laying a foundation for sustainable operation.



### ☉ Employee Development and Career Planning

Regarding employee cultivation and career planning, GlobalWafers provides opportunities for promotion to management positions and emphasizes the cultivation and development of technical positions. We deeply understand the important role that technical personnel play in the Company's development. Therefore, we provide diversified promotion channels and development plans and give employees different opportunities to demonstrate their technical or management skills according to their expertise so that they can continue to grow. We are also constantly optimizing and adjusting the talent cultivation plan to adapt to the constantly changing market environment and the Company's needs.



### ☉ Executive Training Program

We have established a program to cultivate and enhance the management capabilities of employees at the executive level. This program helps executives to better understand and respond to management challenges, improve their leadership and decision-making skills, and effectively lead and motivate teams to achieve corporate goals. In addition to organizing internal training courses for subordinates, we also systematically train potential senior managers through external training institutions such as Carnegie Training and Corporate Managers Association R.O.C. At the same time, exchange opportunities with the leaders of other industries and jointly promote the development of the industry. Six executives participated in the external senior manager training in 2023, and a total of 19 have completed the training so far.

### ☉ Fellow Program

Since 2016, we have developed a well-rounded fellow program to encourage the Group's technical personnel to demonstrate their strengths. When their personal contributions have a positive impact on the Company and their achievements are recognized by the Company, we provide them with diverse career development options. Each time, factories around the world nominate technical elites to participate in the selection. After rigorous review and evaluation by the committee, 14 outstanding talents were selected in 2023. To date, a total of 79 employees within the Group have been recognized and promoted through this program.



Level	2023 Selection		Sum of Incumbents	
	Taiwan	Overseas	Taiwan	Overseas
Senior Fellow		1		6
Fellow		3	2	17
Associate Fellow	2	8	5	49
<b>Total</b>	14		79	



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### ☉ Diverse Talent Cultivation Channels

To cultivate outstanding talent, we have collaborated with colleges and universities since 2017. So far, we have successfully cultivated more than 45 students to work for companies to accumulate experience before graduation, providing them with professional skills training and the ability to cope with practical fields. These students come from Tsing Hua University, Central University of Technology, Chiao Tung University, National Taiwan University of Science and Technology, National Yunlin University of Science and Technology, and other institutions. They specialize in fields such as electronics, industrial engineering, mechanical engineering, psychology, and more. They are assigned to internships in research and development, process engineering, manufacturing, and other support departments. Providing interns with valuable learning and growth opportunities is helpful for a smooth start to their careers.

In addition, we collaborated with the National Yang Ming Chiao Tung University on the talent development project—Semiconductor and Key Technology Industries Talent Development Base. We held three corporate recruitment conferences in 2023, with a total of 90 - 120 participants, to facilitate the matching of diverse talents with practical experience and communication.



### ☉ Industry-Academia Research Collaboration

We engage in industry-academia collaboration, strategic alliances with academic units, and exchange professional knowledge and technology through collaborative research projects. We complement each other's advantages and jointly solve technical problems in the product development process. In addition to continuously improving the professional skills of the Company's R&D personnel, we also cultivate high-quality academic talents to promote technological innovation and industrial development. In 2023, there were 23 ongoing collaboration projects, with an average of about six people participating and more than 121 people participating. The collaboration projects include National Tsing Hua University, National Yang Ming Chiao Tung University, National Central University, and National Kaohsiung University of Science and Technology.

## 4.4 Human Rights

The Company recognizes and supports the Universal Declaration of Human Rights, the United Nations Global Compact, and the International Labour Conventions, which outline the spirit and basic principles of human rights protection. In accordance with relevant labor laws and the aforementioned international human rights conventions, we have established a "Human Rights Policy" dedicated to creating an equal, safe, and dignified working environment.

GlobalWafers respects the right of employees to freely associate, negotiate, and communicate with the Company. Employees can choose to join organizations or not participate in any organizations. The Company and employees respect each other and work together to create fair working conditions, equal opportunities, and good labor-management relations.

We respect the activities of trade unions and other forms of employee activities. We ensure that no employee is discriminated against, subjected to retaliation, harassed, or adversely affected by their requests to join or form a labor union or collective bargaining because of their behavior.

On the basis of mutual trust, we strive to solve problems in good faith and have constructive discussions, taking into account the practices of various regions.

GlobalWafers has a total of 2,084 employees in its overseas regions who participate in trade unions or industry unions in their respective countries, including the Italy plants (MEMC Electronic Materials S.p.A), the Korea plant (MEMC Korea Company), the Japan plants (GlobalWafers Japan Co., Ltd., MEMC Japan Ltd.), and the U.S.A. plant (MEMC LLC). The percentage of employees covered by collective bargaining agreements was 28.52%. Regardless of whether employees participate in a union, they can submit suggestions for improving the work environment or working conditions to the Company's management team via meetings, phone calls, or emails, anonymously or otherwise, to strengthen the good communication between the Company's anagement team and employees.

Operating Locations	Number of Unionized Employees
Italy Plants (MEMC Electronic Materials S.p.A)	In Italy, employees can join the 3 major trade union federations (CGIL, CISL, and UIL) by registering their membership card. The 156 employees of the Italian factory are affiliated with these trade union federations.
Korea Plant (MEMC Korea Company)	608 people
Japan Plants (GlobalWafers Japan Co., Ltd., MEMC Japan Ltd.)	1,312 people
USA Plant (MEMC LLC)	8 people



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In the Taiwan Plants, labor-management meetings and Employee Welfare Committee meetings are held in accordance with the law, and each unit selects the representatives according to the proportion of the number of members. Labor representatives communicate with employers and strive for their rights through quarterly labor-management meetings, achieving a 100% employee coverage rate.

Item	No. of meetings in 2023	Description
Labor Management Meeting	8	A meeting is held quarterly at both GlobalWafers headquarters and the Zhunan Plant (jointly) and at the Taisil Branch.
Migrant Worker Communication Meeting	4	Communication meetings are held in migrant workers' dormitories, with dormitory management staff on-site to assist with interpretation.
Employee Benefits Meeting	4	A joint meeting is held quarterly at the GlobalWafers headquarters, the Zhunan Plant, and the Taisil Branch.
Electronic bulletin board [Have Something to Say]	19 entries	Employees are free to express opinions or improvement suggestions on the Company's electronic bulletin board, and relevant units will reply and explain.

### ☉ Employee Satisfaction Survey

The annual employee satisfaction survey was conducted at GlobalWafers headquarters, Zhunan plant, and Taisil Branch, focusing on six aspects: engagement, leadership and communication, rewards and recognition, career development, work environment, and work-life balance. The survey aimed to comprehensively understand employees' work experiences and their suggestions for the company, analyze the company's strengths and areas for continuous improvement, and develop improvement actions based on the survey results.

GlobalWafers headquarters, the Zhunan Plant, and the Taisil Branch.	In 2023, the overall employee satisfaction score was 3.88 points/out of 5 points
Taisil Branch	In 2023, the overall employee satisfaction score was 3.79 points/out of 5 points

GlobalWafers' influence on the world is increasing due to its continuous pursuit of product quality, innovative technology, and the growth of operation sites. While pursuing development, we are obliged to carefully conduct human rights due diligence to confirm the potential impact of business activities on employees, suppliers, customers, communities, the environment, and other stakeholders. We are committed to establishing corresponding policies and measures to manage and reduce human rights risks while ensuring our operations comply with legal and regulatory requirements.

In response to material human rights issues, the Company has established the "[Human Rights Policy](#)" and formulated the following management guidelines:

- ★ 1.Continue to create diversity, inclusiveness, and equal opportunities, and prohibit any form of discrimination (gender (including sexual orientation), race, nationality, class, age, marriage, language, ideology, religion, political affiliation, place of origin, place of birth, appearance, facial features, physical and mental health, etc.)
- ★ 2.Forced labor and child labor are prohibited.
- ★ 3.Establish a safe and healthy work environment.
- ★ 4.Provide fair and reasonable wages and working conditions.
- ★ 5.Provide a channel and environment for the free expression of opinions and respect the right of employees to freely associate with each other.

### ☉ Working Hour Management

In Taiwan, in compliance with regulations and RBA working hours requirements, we have established an "Attendance System" and an "Overtime Reporting System." Overtime requires mutual consent from both employer and employee, and compensation is provided afterward in the form of overtime pay or compensatory time off. Provide work assignments and working hour management for department executives through management and analysis.

### ☉ Complete grievance and employee assistance channels are provided.

GlobalWafers encourages open communication with employees and affiliated parties. When they encounter illegal infringement or have any concerns, whistleblowers can report by name or anonymously. The Company provides 24/7 open access for complaints and accepts complaints in various languages, including but not limited to Chinese, English, Japanese, Korean, Italian, or Danish, so that stakeholders are not subject to any language or time restrictions when they file complaints.

Reporting illegal and unethical or dishonest conduct	886-3-577-2255#2370 whistleblower@sas-globalwafers.com
Employee complaint mailbox	886-3-577-2255#2398 Wecare@sas-globalwafers.com Pub_GWC_HR@sas-globalwafers.com



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### ⦿ Human Rights Due Diligence

According to the UNGPs, all companies have the responsibility to respect human rights. Human rights due diligence is an integral part of GlobalWafers' operational policies and activities. We follow the framework outlined below to ensure we cover the core elements recommended by international human rights organizations:



### ⦿ Feedback and Evaluation

Parties	Risk Topic	Content Description	Common Assessment Factors	Individual Assessment Factors	Assessment Tools
GlobalWafers Group, its subsidiaries, and suppliers	Labor Laws and Regulations	Fulfill the basic commitments of labor-related laws and regulations, including recruitment, interviews, contracting, employment, working hours, overtime, leave, salary, insurance, pensions, workplace safety, gender-friendliness, job transfers, disciplinary actions, and employee resignation, retirement, or dismissal.		Number of fines imposed by competent authorities for violation of labor laws and regulations	<ol style="list-style-type: none"> <li>1. Labor law compliance</li> <li>2. RBA SAQ</li> <li>3. Employee health checks</li> <li>4. Employee complaint mechanism</li> <li>5. Labor-Management Meeting</li> <li>6. Employee Assistance Program (EAP)</li> <li>7. Internal control system</li> <li>8. Maternity protection-related hazard assessment</li> <li>9. Supplier risk assessment and on-site audit</li> <li>10. Supplier Code of Conduct and Supplier Commitment Letter</li> </ol>
	Child Labor	We do not employ child labor in any of our operations. "Child labor" refers to any hired worker between the ages of 15 and 16.		Whether identity checks are carried out during the recruitment process	
	Forced Labor	Work or services that are not provided voluntarily include but are not limited to the following: abuse of vulnerable position, deception, movement restriction, isolation, physical and sexual violence, intimidation and threats, withholding of identity documents, withholding of wages, repayment of debt, working and living conditions, and working overtime.		Number of substantiated human rights complaints	
	Working Conditions	Ensure that employees work in a healthy and safe working environment, including that the number of working hours per week does not exceed 60 hours, the wages should comply with all payroll laws, avoiding harsh or inhumane treatment of employees, and ensuring the operation of the occupational safety and health system.		<ol style="list-style-type: none"> <li>1. No. of people who work more than 12 hours in a single day for more than 6 consecutive days.</li> <li>2. No. of fines imposed for violating laws and regulations on working hours, wages, and occupational safety.</li> <li>3. No. of occupational accident cases</li> <li>4. Irregular workload identification and risk investigation</li> </ol>	



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Parties	Risk Topic	Content Description	Common Assessment Factors	Individual Assessment Factors	Assessment Tools
GlobalWafers Group, its subsidiaries, and suppliers	Discrimination and Harassment	Employees must not be discriminated against or harassed in recruitment and actual work due to race, color, age, gender, sexual orientation, gender identity and expression, race or ethnicity, disability, pregnancy, belief, political stance, group background, veteran status, protected genetic information, or marital status. This includes impacts on wages, promotions, rewards, and opportunities for training.	1. Hours of human rights-related education and training received  2. Whether the supplier has signed the supplier code of conduct	Number of substantiated human rights complaints	1. Labor law compliance 2. RBA SAQ 3. Employee health checks 4. Employee complaint mechanism 5. Labor-Management Meeting 6. Employee Assistance Program (EAP)
	Human Trafficking	It is prohibited to exploit others' inability, ignorance, or difficulty in seeking help, or any other means against their will, to engage in the recruitment, buying, selling, pledging, transportation, delivery, receipt, harboring, hiding, mediating, or accommodating of domestic or foreign residents.			
	Freedom of Association	Employees and/or their representatives can openly communicate with the management and share their thoughts and concerns about working conditions and management methods without fear of discrimination, retaliation, threats, or harassment.		No. of employees participating in la-bor unions and societies	7. Internal control system 8. Maternity protectionrelated hazard assessment 9. Supplier risk assessment and on-site audit
	Equality and Equal Pay for Equal Work	Employees of the same position and under the same working conditions, with different gender, identity, household registration, or employment forms, shall be paid the same amount of labor as long as the quantity and quality of labor provided are the same.			
	Maternity Care	The measures taken for female workers to perform work that may involve maternal health hazards include hazard assessment and control, physician consultation instructions, risk classification management, work suitability arrangements, and other related measures.			

🕒 **Actions and Effectiveness**

Parties	Risk Topic	Mitigation Measures	Remedial Measures	Implementation Results
GlobalWafers Group, its subsidiaries, and suppliers	Labor Laws and Regulations	<ol style="list-style-type: none"> <li>1. Work rules are formulated and announced in a conspicuous place that is easily accessible. In addition, during the training of new employees, work rules, regulations, and measures are taught in the employees' native languages so that the employees can fully understand their labor rights and interests.</li> <li>2. Regularly review and revise all rules and regulations through the internal control system and internal audit to ensure that all operations comply with labor laws and regulations.</li> <li>3. Establish multiple communication channels: All factories in Taiwan and overseas have communication and grievance channels, such as labor and management meetings, dedicated emails, hotlines, and whistleblower systems, to understand problems at the workplace in a timely manner and make improvements.</li> <li>4. Fully consult the Company's internal professional legal department in case of changes to the employment conditions to ensure that the rights and interests of employees are protected.</li> </ol>	<ol style="list-style-type: none"> <li>1. The Human Resources Department and the Compliance Unit will intervene in the investigation. While fully considering the personal interests of the employees and maintaining confidentiality throughout the process, they will communicate with the parties involved along with the department supervisor. After the communication is completed, they will report to the top management and take compensatory and corrective actions.</li> <li>2. If any audit activity reveals procedures or operations that do not comply with labor regulations, the root cause will be immediately investigated, and corrective actions will be taken within a specified time frame.</li> <li>3. The HR Department handles employee complaints and establishes a committee to make adjudications when necessary to ensure fairness.</li> </ol>	No illegal incidents occurred at each operation site



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Parties	Risk Topic	Mitigation Measures	Remedial Measures	Implementation Results
GlobalWafers Group, its subsidiaries, and suppliers	Child Labor	<ol style="list-style-type: none"> <li>During the recruitment stage, identity documents are strictly verified, and conversations and observations are used to ensure that no child laborers under the age of sixteen are hired.</li> <li>Employees under the age of 18 are not permitted to engage in any work that could endanger their health and safety, nor are they allowed to work at night.</li> </ol>	<ol style="list-style-type: none"> <li>The remediation plan continues for six months or until the child laborer reaches sixteen years of age. If child labor is discovered, the child will be immediately removed from the workplace, sent back to their original residence, parents, or guardians, and their education expenses will be compensated.</li> <li>Child laborers will be given a medical examination to ensure their health has not been affected by the work. The company will fully cover the resulting medical and living expenses if any health issues are found.</li> </ol>	No illegal child labor at any operation site
	Forced Labor	<ol style="list-style-type: none"> <li>The "Personnel Appointment Regulations" clearly stipulates that the employment of forced, intimidated or involuntary labor is prohibited.</li> <li>Formulate a supplier code of conduct in accordance with the RBA framework and ensure that all suppliers are committed to complying.</li> <li>Employee attendance and analysis are summarized on a monthly basis for executives to use as a basis for working hour management. To ensure employees' physical and mental health, we provide realtime warnings of working hours management through the system every day, and the Human Resources Department and department executives jointly formulate countermeasures to ensure the implementation of preventive and remedial measures.</li> <li>Hold meetings with foreign migrant worker agencies from time to time to ensure that they do not charge unreasonable fees or unlawfully withhold identity documents.</li> </ol>	<ol style="list-style-type: none"> <li>Implement multiskilled training to increase the flexibility of personnel utilization to prevent excessive reliance on a single person and cause excessive workload. Implement a rotating shift system to ensure employees' family life and personal wellbeing.</li> <li>Upon investigation, the Company shall immediately stop charging unreasonable fees to migrant workers and compensate them for any excess fees.</li> <li>If any noncompliance issues are found with a supplier, they are required to make immediate improvements, and their continued cooperation will be evaluated.</li> </ol>	<ol style="list-style-type: none"> <li>No forced labor complaint has been investigated by the competent authority at any of our operation sites.</li> <li>In 2023, all GlobalWafers locations conducted selfassessments according to the RBA SAQ questionnaire, and no highrisk situations occurred. The Company's selfassessment score was 87 points, which was determined to be low risk.</li> </ol>
	Working Conditions	<ol style="list-style-type: none"> <li>Through annual salary surveys, we measure the market salary level and overall economic indicators, adjust employee salaries appropriately, and provide competitive starting salaries.</li> <li>The Employee Assistance Programs (EAPs) provide employees with free, professional, and highly confidential consultation services in five areas: psychological, management, legal, health, and finance.</li> <li>Regular health checks are conducted for existing employees.</li> <li>To ensure the operation of occupational safety and health systems, mechanisms for hazard assessment and tiered management are established, emergency response teams are set up in each plant, and comprehensive occupational safety and health education and training are provided.</li> <li>EHS organizations and occupational safety and health committees are established by the highest executive at each plant.</li> <li>We have formulated the "Regulations for the Employment and Management of Interns from Domestic and Foreign Universities" to provide internship opportunities for college students.</li> </ol>	<ol style="list-style-type: none"> <li>Ergonomic hazards: Risk surveys are conducted for each department, with gradual engineering/operation improvements carried out annually.</li> <li>Irregular workload: The working hours are in compliance with laws and regulations, the health and education consultation is arranged based on the physical examination report, overwork and risk assessment and analysis, and the work scheduling and employee adjustment are coordinated with the supervisor.</li> <li>Through professional employee assistance agencies, we offer support to help employees resolve their life and psychological issues.</li> <li>Providing health checks that exceed legal requirements, identifying highrisk groups through health checks, and continually tracking and managing them, we also arrange for professional occupational safety physicians to provide onsite services.</li> <li>In the event of an occupational accident, a formal investigation and counseling process will be launched immediately, and the relevant units will provide comprehensive assistance, such as insurance claims, emergency assistance, working hours adjustment, psychological counseling, etc.</li> <li>A flexible working hour system is provided to allow employees to choose their commute time based on their individual needs to ensure that employees can take care of their family life needs.</li> </ol>	<ol style="list-style-type: none"> <li>In 2023, 13,489 people participated in human rightsrelated education and training, and the cumulative training hours were 16,449.</li> <li>In 2023, the total no. of people who received EAP consultations was 79 (including the parent company, SinoAmerican Silicon Products Inc.. To protect user privacy, EAPC does not provide differentiated statistics).</li> <li>In 2023, we received the Healthy Workplace "Health Promotion Badge" Accreditation from the Health Promotion Administration, Ministry of Health and Welfare, Taiwan.</li> <li>In 2023, we were honored with the "Excellent Organization for Promoting Work Equality in the Workplace in Hsinchu Science Park."</li> <li>In 2023, 164 employees, accounting for approximately 9.64% of our workforce in Taiwan, were monitored for irregular workload management.</li> <li>In 2023, there were a total of 22,535 participants in occupational safety and healthrelated training sessions.</li> </ol>



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Parties	Risk Topic	Mitigation Measures	Remedial Measures	Implementation Results
GlobalWafers Group, its subsidiaries, and suppliers	Discrimination and Harassment	<ol style="list-style-type: none"> <li>1. Conduct education and training for all employees on the avoidance of discrimination and harassment every year, and make the supervisors required trainees to avoid coercion, bullying, and workplace violence due to power asymmetry.</li> <li>2. Employment opportunities for people with disabilities are guaranteed.</li> <li>3. Established the "Sexual Harassment Preventive Measures Complaint and Disciplinary Measures" and posted the statement of prevention of workplace violence in a conspicuous place to demonstrate GlobalWafers' determination to eliminate such sexual abuse from happening.</li> <li>4. Due to the aging global population, to ensure the health of middleaged and elderly employees and their suitability for workload, hazard identification and risk assessment, prevention and improvement measures, and implementation result tracking are carried out to protect the health of middleaged and elderly employees.</li> </ol>	<p>The HR Department will initiate the committee to form a committee to protect the parties concerned, adjust working conditions, hold meetings, adjudicate, further education, and provide the required resources to protect the rights and interests of the parties concerned and prevent recurrence.</p>	<ol style="list-style-type: none"> <li>1. In 2023, we employed 68 individuals with disabilities, representing approximately 0.93% of all employees.</li> <li>2. No discriminatory incidents occurred at any of the operating sites</li> <li>3. In 2023, we received four complaints of harassment at overseas factories. The relevant personnel were interviewed, and immediate corrective actions were required.</li> <li>4. In 2023, 328 middle-aged and elderly employees, accounting for 19.28% of our workforce in Taiwan, were monitored for health protection.</li> </ol>
	Human Trafficking	Each operating site conducts the RBA SAQ selfassessment every year to assign a risk rating and a rating to the management system and to detect and correct human trafficking in operations in a timely manner.	Identify whether human trafficking is a highrisk item for GlobalWafers through RBA SAQ. If so, management measures and action plans will be immediately formulated to ensure that all production processes are free of human trafficking.	No human trafficking was detected at any of our operation sites
	Freedom of Association	Encourage employees to form clubs and participate in group activities organized by the Company.	<ol style="list-style-type: none"> <li>1. Formulate rules and measures to ensure the rationality of club activities and provide operating subsidies to clubs.</li> <li>2. Regularly elect labor and management representatives and hold labor and management meetings. Employees can communicate formally with the Company on working conditions and benefits on the equivalent platform.</li> </ol>	In 2023, a total of 2,084 employees joined the labor union, accounting for 28.53% of all employees.
	Equality and Equal Pay for Equal Work	<ol style="list-style-type: none"> <li>1. Established the "Regulations on Salary, Allowances and Bonuses" and prepared job descriptions to determine salaries based on objective conditions rather than subjective determinations.</li> <li>2. Supervisors can consult management problems through the Employee Assistance Programs (EAPs) to effectively avoid uneven work and rest and ensure nondiscriminatory work.</li> </ol>	In addition to defining salary ranges based on job nature to ensure equal pay for equal work, we conduct annual performance evaluations. Salary adjustments are made for employees with superior performance, linking compensation closely with performance. This ensures that salaries are awarded based on objective criteria without differential treatment due to personal characteristics.	GlobalWafers conducts annual assessments of market levels and individual performance for salary adjustments.
	Maternity Care	<ol style="list-style-type: none"> <li>1. The "Maternal Health Protection Management Regulations" are established to identify and track the working conditions of breastfeeding employees to ensure that female employees can work with peace of mind during the breastfeeding period.</li> <li>2. Breastfeeding rooms are provided at each plant for employees who need them.</li> </ol>	According to the regulations of the competent authority, we adjust the working hours, locations, and contents of work for qualified employees according to their wishes. We also conduct hazard assessments and follow up on the risks caused by not being identified in real time to ensure their health.	In 2023, the number of employees in the Taiwan plants who had been identified, classified, and implemented maternity protection measures was 13.



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### 🕒 Stakeholder Engagement

GlobalWafers continuously communicates with all its stakeholders through diverse communication channels, including employees, suppliers, customers, communities, and investors. We proactively disclose human rights due diligence information on our official website, in media, sustainability reports, and annual shareholders' meeting reports. This information is provided in both Chinese and English, ensuring that stakeholders from around the world can easily read it. The disclosed information includes our corporate commitments, due diligence processes, policies and actions, and identification and evaluation details. GlobalWafers upholds the core value of integrity and is committed to the authenticity of the information disclosed.

In most of our operation sites, we conduct human rights-related education and training for new employees. In 2023, a total of 13,489 participants received human rights education training, with a total training time of 16,449 hours. Additionally, for current employees, we periodically organize related courses on workplace violence and sexual harassment prevention. For personnel with business relationships with GlobalWafers (such as suppliers), human rights information is made available on our official website, and we provide the "Supplier Code of Conduct" as a standard for implementation.

## 4.5 Social Participation

### 4.5.1 Social Care

The GlobalWafers Group adheres to the concept of "Caring for the Society and Sustainable Development" to fulfill its corporate social responsibility. It has long taken "giving back to the people" and "caring for the disadvantaged" as its action directions to protect Taiwan with "love and responsibility." To support and respond to public welfare, the Company has actively participated in public fundraising activities such as "Caring for the Rural Areas and the Vulnerable," extending employees' donations and warmth to more places needing help.

Charity Events	Recipient Organization	Donation/ Participation
Mid-Autumn Festival Care Donation	Shiguang Nursing Home, Huakuang Mental Development Center, Hiangyuan Memorial Correctional Home	NT\$64,000
2023 Turkey-Syria Earthquake Relief Donation Event	World Vision Taozhumiao Office	NT\$921,000
2023 Spring STEM Innovation Competition	Optoelectronics Technology Manufacturers Association	NT\$50,000
Paul Chiang Art Promotion Program and Operation Preparations for Paul Chiang Art Park	The Alliance Cultural Foundation	NT\$5,000,000
Public Restroom Adoption Program	Hsinchu County Xionglin Township Office	NT\$48,000
Early Intervention Fundraising Project	Syin-Lu Social Welfare Foundation	NT\$250,800
Local Care, Helping Miaoli Nursing Home Equipment Renewal Project	Genesis Social Welfare Foundation	NT\$238,600
Winter Warmth Charity Carnival Sponsorship	Hsinchu Family Support Center	NT\$10,000
Employee Blood Donation Activity	Hsinchu Blood Donation Center	A total of 182 employees participated, collectively donating 75,250 c.c. of blood.
Beach Cleanup Activity	Long Fong Fishing Port, Miaoli County	A total of 92 people were called to participate, and more than 100 kilograms of garbage were removed.
Environmental education activities at Guanyidu Ecological Park in Zhunan, Miaoli	Employees/Family Members/Community Residents	GlobalWafers organized the event and called on more than 100 employees in the industrial park and the community to participate



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## Donation to World Vision Taiwan - Turkey-Syria Earthquake Relief Donation

In the early morning of February 6, 2023, a 7.8-magnitude earthquake occurred in southeastern Turkey, close to the border with Syria, resulting in the loss of over 55,000 lives and leaving at least 850,000 children homeless. In light of the severe earthquake disaster in Turkey and Syria and the dire living conditions faced by the victims, Sino-American Silicon and GlobalWafers collaborated with the Taiwan World Vision Foundation to launch an internal fundraising campaign among employees. This initiative not only aimed to encourage employees to care for and support disadvantaged groups in society but also hoped to assist those in need through donations, helping them overcome their immediate challenges.

With the enthusiastic participation of employees and a matching donation from the Company (matching every employee donation 1:1), NT\$921,000 was raised. The funds were provided to the Taiwan World Vision Foundation to assist the children and families affected by the disasters in Turkey and Syria and offer support from immediate emergency relief to long-term post-disaster recovery, helping them heal and rebuild their lives.



## Syin-Lu Social Welfare Foundation Hsinchu Branch - Local Care and Fundraising for Early Intervention Therapists

According to statistics from the Ministry of Health and Welfare, over 26,000 children aged 0 to 6 years have been reported as developmentally delayed each year since 2020. Studies have shown that if children with developmental delays are not given early assistance (such as medical rehabilitation, special education, etc.), they may become physically and mentally disabled children, causing a burden on families and society. Providing necessary support for developmentally delayed children often requires significant financial expenditure from parents. Due to insufficient social resources, many children cannot receive the essential assistance and care they need. With the philosophy of "Taking from Society and Contribute to Society," Sino-American Silicon and GlobalWafers Group are committed to contributing to society. Recognizing that many developmentally delayed children lack necessary assistance and proper care, the Group collaborated with the Hsinchu Branch of the Syin-Lu Social Welfare Foundation, hoping to aid these children through donations for early intervention, relieve the financial pressure on families, and ensure sufficient social welfare resources for professional treatment.

With the support of employees and the Company's assistance, a total of NT\$250,800 was raised for this charity event. This fund will be used by the Syin-Lu Social Welfare Foundation to assist families with developmentally delayed children in accessing professional early intervention resources by hiring dedicated physical therapists or occupational therapists for the children.





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## Genesis Social Welfare Foundation Miaoli Branch - Local Care and Assisted with Equipment Upgrade at Genesis Nursing Home in Miaoli

GlobalWafers Group has long been committed to supporting disadvantaged groups in society. The Genesis Social Welfare Foundation is Taiwan's sole organization dedicated to caring for impoverished vegetative patients. Due to limited public awareness about vegetative patients, fundraising for this cause can be challenging. Therefore, in 2022, the Group collaborated with the Genesis Social Welfare Foundation's Miaoli Branch to launch the "Guardian of Home" fundraising campaign. This initiative aimed to collect funds to provide one day of meals for vegetative patients, demonstrating support for these patients and their families. Moreover, the Genesis Social Welfare Foundation's Miaoli Branch, established for over 20 years, faces the challenge of outdated hospital equipment requiring urgent replacement. The hospital expanded from 55 to 87 beds in May 2018, necessitating additional equipment. Consequently, a fundraising campaign was initiated in the second half of 2023 to address these needs. This fundraising effort translated love into practical action, enhancing the care environment for vegetative patients.

This event saw GlobalWafers Group's employees donate NT\$238,600, which will profoundly impact the quality of life for the vegetative community, turning their compassion into action to enhance their living conditions.



## Hsinchu Family Support Center - Winter Warmth Kindergarten Party Charity Event Sponsorship

The Hsinchu Family Support Center organized a garden party aimed at fostering stronger bonds among beneficiary families and enhancing parent-child relationships. During the event, we recognized and praised supporters and outstanding volunteer role models, expressing gratitude to enterprises for their sustained contributions to assisting disadvantaged children and families in overcoming life challenges.

For the 14th consecutive year, the Group sponsored the expenses of the Family Support Center Winter Warmth Kindergarten Party, sharing joy with disadvantaged families. This event included a donation of NT\$10,000.



## Mid-Autumn Festival Moon Cake Donation Charity Event

GlobalWafers has annually delivered Mid-Autumn Mooncake gift boxes to colleagues. The company has also organized an employee fundraising event, matching donations from colleagues to support the disadvantaged and fulfill its corporate social responsibility in charity and public welfare. In the recent initiative, employees and the company donated NT\$16,000 to "Shiguang Nursing Home," NT\$16,000 to "Huakuang Mental Development Center," and NT\$32,000 to "Hianguan Memorial Correctional Home."





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## Blood Donation Activity

Sino-American Silicon Group and GlobalWafers Group organize annual in-house blood drives to encourage colleagues to actively participate, roll up their sleeves, and contribute to society. In Taiwan, a total of 182 employees participated, collectively donating 76,250 c.c. of blood. In addition to our Taiwan fabs, GlobalWafers Japan Co., Ltd. also organized a blood donation drive, with many employees responding enthusiastically, turning their donations into a source of warmth in society.



## Technology Talent Cultivation - Sponsored PIDA 2023 Spring Foundation STEM Innovation Competition

GlobalWafers encourages youth participation in technological competitions and is committed to cultivating technological talents. We continue to sponsor the "Spring Foundation STEM Innovation Competition," which involves public and private high school students from Taiwan and Chinese high school students in Southeast Asia. The competition aims to cultivate students in practical problem-solving and teamwork, fostering solid theoretical knowledge and cooperative attitudes essential for future technological roles in both country and industry. In the 2023 finals, 16 teams from across Taiwan and Southeast Asia advanced after competing through three stages over five months. National Changhai Girls' Senior High School clinched the gold medal, with Hui Deng High School and Shu Guang Girls' Senior High School earning silver medals. Bronze medals were awarded to National Hsinchu Senior High School, Stella Matutina Girls' High School, and Catholic Franciscan School Li-Ming High School.



## Support Cultural Undertakings - Sponsored the Paul Chiang Art Promotion Projects and the Preparations for the "Paul Chiang Art Park"

GlobalWafers has a longstanding commitment to rural areas, actively engaging in social initiatives and supporting domestic cultural and artistic development in alignment with government policies. In 2023, in collaboration with the Alliance Cultural Foundation, GlobalWafers invested NT\$5 million to sponsor the Paul Chiang Art Promotion Project and the development of the "Paul Chiang Art Park," aiming to integrate various resources in the Hualien and Taitung areas. This initiative seeks to revitalize local communities through art and foster sustainable cultural development in the region.

To further promote public participation in arts and culture, GlobalWafers sponsored the "Paul Chiang 2023 Solo Exhibition" at the Kaohsiung Museum of Fine Arts from December 2, 2023, to March 10, 2024. The exhibition attracted 72,006 visitors and featured over a hundred pieces showcasing Paul Chiang's life journey, from his years abroad to his return to Taiwan. The artworks reflect his deep connection with Taiwan's landscapes, nature, and ocean. Through these cultural endeavors, GlobalWafers aims to inspire public appreciation for the environment and cultural heritage, contributing positively to society. Paul Chiang, a renowned Taiwanese artist known for his abstract creations, spent three decades in Paris and New York before settling in Taitung in 2008. Inspired by Taitung's natural beauty, he conceived the "Paul Chiang Art Park" in Jinzun, Taitung City, where art and architecture will harmonize with the local landscape. Scheduled for completion and opening in 2024, the park will serve as an international-level art landmark, inviting both domestic and international artists to engage with Taitung's indigenous culture, sustainable lifestyle, and natural advantages.





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## USA Plants - Christmas Gifts and Living Supplies Donation

Christmas is an important holiday in Western countries. GlobiTech Incorporated, a subsidiary of GlobalWafers based in the United States, initiated a Christmas gift-giving event to spread Christmas blessings to disadvantaged families through the distribution of gifts. Additionally, GlobiTech collaborates with the MasterKey Ministry Foundation to organize donation activities for supplies, ensuring that disadvantaged families have adequate living essentials and access to improved educational resources.



## Italy Plant - Local Charities and Care

GlobalWafers' Italian subsidiary, MEMC Electronic Materials S.p.A., is deeply committed to community care. In 2023, colleagues from the Italian plant participated in charity running and charity football matches, with all registration fees from both events donated to disadvantaged groups. These activities not only fostered camaraderie among colleagues and promoted physical health but also brought warmth to the community. In response to the Red Cross's global humanitarian aid efforts, the Merano plant, a subsidiary of the Italian company, donated several containers in 2023. This support enabled the Red Cross to transport supplies and rescue equipment to various locations, providing aid to those in need. Furthermore, the Merano plant responded to International Women's Day by fundraising among its employees. The proceeds were donated in full to the Italian Women Against Violence Association, contributing to the cause of women's rights and empowerment.



## Korea Plant - New Engineers Participating in Volunteer Activities

In 2023, the MKC factory in South Korea collaborated with the local children's social welfare organization to organize a kimchi-making charity event, ensuring children have sufficient kimchi during the winter.



Many new engineers enthusiastically participated, and although the process was not easy, their love and care will support the growth of these children.

## Japan Plant - Environmental Maintenance Activities

In line with the spirit of environmental protection and sustainability, GlobalWafers Japan Co., Ltd., a subsidiary in Japan, initiated a collaborative garbage collection event. This activity aimed to clean up litter left in natural environments due to human activities. It encouraged employees, their families, and friends to actively participate in environmental protection efforts, contributing to the preservation of our living environment.





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## 4.5.2 Environmental Conservation

Extreme climates have caused mankind to face various environmental problems, such as global warming, biodiversity loss, air pollution, and water pollution. To achieve a sustainable future, GlobalWafers is committed to various environmental conservation activities.

### GWC Earth-Friendly : You and I Beach Cleanup Activity

GlobalWafers adheres to the principles of environmental conservation and community engagement. It has adopted and maintained the Long Fong Fishing Port coastline, actively promoting and participating in environmental protection activities. The annual beach cleaning event in 2023 marked its fourth year, aiming to encourage employees, families, and friends to actively participate in environmental conservation. This initiative seeks to raise awareness among staff about protecting the oceans and the environment, leveraging their influence to reduce plastic waste and promote waste reduction in the surrounding areas.



## Biodiversity

Biodiversity represents the continuity of the earth's ecological environment and the nurture of diverse species. However, with the impact of climate change, biodiversity on earth is gradually being impacted or disappearing, which highlights its value and contribution to sustainable development. GlobalWafers officially released the [Biodiversity Policy](#) signed by the Chairperson in December 2023 to address the operational impact of climate change and the resulting challenges, assess biodiversity using this commitment framework, take positive actions, and respond to initiatives such as the UN Convention on Biological Diversity to preserve biodiversity.

### Assessment of Biodiversity-Sensitive Areas:

Since 2022, GlobalWafers has been conducting yearly biodiversity risk assessments for its operations. We have included Global or National Important Biodiversity Areas, the network of nature reserves (Natura 2000), and the risk assessment measures announced by the United Nations Educational, Scientific and Cultural Organization (UNESCO). The World Heritage Site's location and the Key Biodiversity Areas (KBA) coverage are analyzed on an overlay map of the Company's plant locations. As of the end of 2023, the Company is not located in or near such biodiversity-sensitive areas.

### Biodiversity Risk Assessment:

In addition to conducting sensitive area assessments for existing plant locations, GlobalWafers first refers to the ENCORE database for the industry's general risk nature and then adopts the "biodiversity risk analysis tools and data established by the World Wildlife Fund (WWF)" to assess the risks to biodiversity from the Company's operations at both the Company-wide and regional levels. After identifying the overall risks of our 20 global operation sites (including offices), the figure below shows the top 10 risks. The overall physical risk (=2.998) and reputational risk (=3.176) are medium risks. For risk identification results rated as "Medium Risk (2.6)" or higher, GlobalWafers focuses on "Avoidance (avoiding impact)" and "Minimization" as the primary levels of source control risk based on its dependency on biodiversity and the degree of impact from risks. We set targets and take mitigation measures based on the identification results to reduce the ecological impact of our operational activities.

### Number of sites by top 10 risk indicators

3.6 Tropical Cyclones	4	4	12
3.1 Landslides	1	7	5
3.5 Extreme Heat	3	7	2
8.1 Media Scrutiny	3	17	
6.1 Protected/Conserved Areas	4	2	14
6.2 Key Biodiversity Areas	5	6	9
7.3 Labor/Human Rights	4	7	9
8.3 Sites of International Interest	12	8	
2.2 Water Condition	6	9	5
6.5 Range Rarity	12	3	5

### Supply Chain Biodiversity Management:

We collaborate with our supply chain partners to ensure compliance with biodiversity conservation regulations and to prevent operational activities from impacting critical biological habitats, thereby avoiding significant environmental impacts.



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## Material Topics Target and Achievement

Key Performance Indicator	United Nations Sustainable Development Goals (SDGs)	2023 Goals	2023 Status and Achievements	Short-term Goals (2024)	Mid-term Goals (2025 - 2030)	Long-term Goals (2030 and beyond)
Occupational health and safety (including issues like occupational safety and hygiene, occupational health)	 	0 work-related ill health 0 major work-related accidents	Achieved	0 major work-related accidents	0 major work-related accidents	0 major work-related accidents
		Environmental safety, emergency rescue, disaster prevention drills, and other education and training courses are held at least once every six months	Achieved	Hold first-aid or disaster prevention drills at least once every six months.	-	-
		100% of new recruits have completed workplace violence education and training within 30 days of arrival	Achieved	New employees should complete 100% of education and training within 30 days of arrival (including ESH, RBA, integrity/ethics, bullying and sexual harassment prevention)	New employees should complete 100% of education and training within 30 days of arrival (including ESH, RBA, integrity/ethics, bullying and sexual harassment prevention)	New employees should complete 100% of education and training within 30 days of arrival (including ESH, RBA, integrity/ethics, bullying and sexual harassment prevention)
		All employees receive ESG-related education and training at least once a year	Achieved	On average, each employee receives at least 10 hours of occupational safety and health-related training.	On average, each employee receives at least 15 hours of occupational safety and health-related training.	On average, each employee receives at least 20 hours of occupational safety and health-related training.
		-	-	Health/safety-related promotions are published in the corporate newsletter (CONNECTION) quarterly.	-	-
		-	-	Establish/re-examine the labor ethics policy of each plant	-	-
		-	-	Establish/re-examine the labor ethics procedures of each plant	-	-
		-	-	All employees are to complete education and training related to labor ethics.	-	-



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## 5.1 Safe Environment

GlobalWafers strives to create a better, safer, and healthy working environment in order to promote sustainable development for the Company. In order to construct a safe working environment, all colleagues must participate in safety and health management activities through review, audit, communication, education and training, as well as hygiene management and timely adopt the corrective measures in addition to complying with relevant local safety and health regulations. Supervisors at all levels must provide sufficient resources and support; and departments are also encouraged to actively proposal improvement and training topics while taking the initiative to make "zero work injury & zero disaster" the basic attitude of self-requirement. The goal is to raise the awareness of oneself, the environment, the machines, and the products during construction in order to strengthen the overall safety of colleagues, manufacturers, and guests while creating a sustainable business environment.

All GlobalWafers' plants worldwide have gradually implemented the occupational health and safety management system<sup>Note</sup> (ISO 45001) and used the systematic management mechanism (P → D → C → A) to fulfill the continuous improvement spirit of occupational safety and health management. The goal is to eliminate work environment hazards, reduce hazard risks, ensure all hazards are within the effective control range, continue to prevent occupational hazards and fulfill the duty to ensure employee safety and health. Each year, the company implements internal audit to review management system fulfillment, and commissions third party verification unit for system external verification and review in order to ensure management system effectiveness.

Note: Number of people covered by the Occupational health and safety management system verification: 90.14% employees (calculated based on 6,585 people compared to 7,305 total employees), and 94.33% non-employees (calculated based on 799 people compared to 847 total non-employees).

### Occupational Health and Safety Worker Participation

In Taiwan, we have established Occupational Health and Safety Committees according to the plant regions. The committees are composed of management, engineering, technical, and labor representatives, as well as medical staff and safety and health personnel. The labor representative ratio is higher than that required by laws and regulations, which accounts for over 1/3 of the total number of committee member seats. A regular Occupational Health and Safety Committee meeting is convened once every three months. This committee is responsible for the deliberation, coordination, and promotion of occupational health and safety related issues; and allowing employees to participate, consult, and communicate regarding the performance of the occupational health and safety management system.

### Workers' Consultation and Communication

The Company has established communication mechanisms such as employee suggestion boxes, labor-management meetings, communication meetings, employee relations systems, internal meetings between various departments, and website announcement boards to facilitate consultation and participation, as well as listen to the needs and expectations employees and stakeholders. The Company has also provided education, training, and consultations in order to improve health and safety, environmental protection, and energy conservation awareness and competency.

Moreover, we also actively communicate with other workers who are not employees to establish contractor partnerships as well as operation management methods, and implement our commitment to health and safety. In addition to requiring the contractor to comply with the safety and health management laws and regulations, the contractor must also meet the Company's qualifications for construction personnel, equipment and materials, and safety protection before signing a contract with the Company. The Company shall inform the contractors of any working environment, project hazard risks, or relevant safety and health regulations before they enter the Company; and require them to participate in safety meetings convened by the safety and health management personnel.

### Hazard Identification, Risk Assessment, and Incident Investigation

We identify possible hazards in all Company operations, including workers and workers under the control of the Company. We assess the risk and potential harm these hazards may cause, such as hazards associated with machinery, chemicals, confined spaces, and warehouse forklifts. We then implement evaluations and control improvements to mitigate these risks.

The main risk assessment models for routine and non-routine operations in the plant include Job Safety Analysis (JSA), Failure Modes and Effects Analysis (FMEA). Qualified personnel are trained by each unit to perform hazard identification and risk assessment for their operations and activities, and the identification results are regularly reviewed annually.



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We have established various workplace safety and health management procedures, work standards, special hazard work controls, chemical management standards, and work environment monitoring provisions to serve as guidelines for colleagues. The objectives are to prevent occupational injuries and diseases, promote employees' physical and mental health, create a high-quality and safe, and healthy working environment, eliminate hazards, reduce environmental safety and health risks, and provide employees with a safe working environment. In addition, GlobalWafers has established procedures for the investigation of incidents and the management of non-conformities. Regardless of the severity of an incident, it should be investigated. The personnel involved in the investigation include the management, supervisors, operators, and labor representatives. Those who are qualified for incident investigation education and training should find the root cause of incident investigation, re-examine and adjust the hazard risk assessment, and take remedial and improvement measures to eliminate the cause of the accident and prevent it from happening again and the safety and health personnel will follow up and review.

If any immediate danger at workplace is discovered, the worker can stop the operation and retreat to a safe location on his/her own without endangering the safety of other workers, and immediately notify the on-site supervisor without receiving any unfavorable punishment from the Company.

### ⦿ Special Hazardous Operation Control

The Company has established the relevant operation control measures for operation projects with high potential risks such as special operations at elevated, hot and confined space, hanging, and fire-fighting interruption sites. Colleagues must apply in advance before executing such special operations, and conduct work safety inspections in advance to ensure work safety. Daily patrol inspection system must be implemented to detect anomalies in advance, avoid potential hazards, strengthen the safety and hygiene, prevent accidents, and achieve the hazard prevention objective in the work environment.

### ⦿ Chemical Control

The Company has continued to conduct risk assessment of all chemical operations in the plants, established a chemical database and safety data sheet area, mastered high-risk operations, and develop risk mitigation plans to protect labor health and safety.

The safety and health unit has gained a full understanding of the chemical risks and management measures in the factory via the safety data sheet information provided by the chemical supplier and the Chemical Control Banding (CCB) tool, and conducted regular chemical reporting to the competent authority pursuant to the relevant laws and regulations. The chemical machines at the work site are equipped with local exhaust devices, affixed with chemical GHS labels in both Chinese and English, and the work area is equipped with a safety data sheet (SDS) to give colleagues a full understanding of chemical storage, hazards, and preventive measures during operations. In addition, highly flammable chemicals are stored in safety explosion-proof cabinets after use to reduce the risks of such chemicals. In addition to providing personal protective equipment according to the different features of the work area, colleagues are also arranged to conduct respiratory protective equipment snugness test every year to ensure proper protective equipment effectiveness.

### ⦿ Procurement Management

GlobalWafers has integrated the engineering, property, or labor service safety and health requirements into the procurement management operating procedures. During procurement proposals, the safety and health specification requirements, safety inspections, and related record documents required for the case, such as industrial safety facilities, protective gear, qualifications/operator techniques, safety protection that should be installed or used with mechanical equipment, equipment safety performance verification documents or test reports, and other items required according to laws, regulations, or international standards, etc., must be submitted in order to prevent safety and health hazards or risks that may occur during purchases and ensure they meet the requirements before acceptance.

### ⦿ Respiratory Protection Plan

The Company has referenced the relevant respiratory protection plans, measures, guidelines, and manuals to formulate the "Respiratory Protection Plan Procedures." We have also conducted the respiratory protective equipment fit test each year to evaluate whether employees are using and wearing protective equipment correctly if the respiratory protective equipment can meet the tightness factor required by regulations, and ensure the masks can completely fit the employees' face shapes. We required users to complete the physiological self-assessment questionnaire before the test. If there is a potential risk in the physiological test, the medical department will arrange an interview with an occupational doctor in the factory to reduce the risk of exposure to respiratory hazards.

### ⦿ Monitoring of Operation Environment

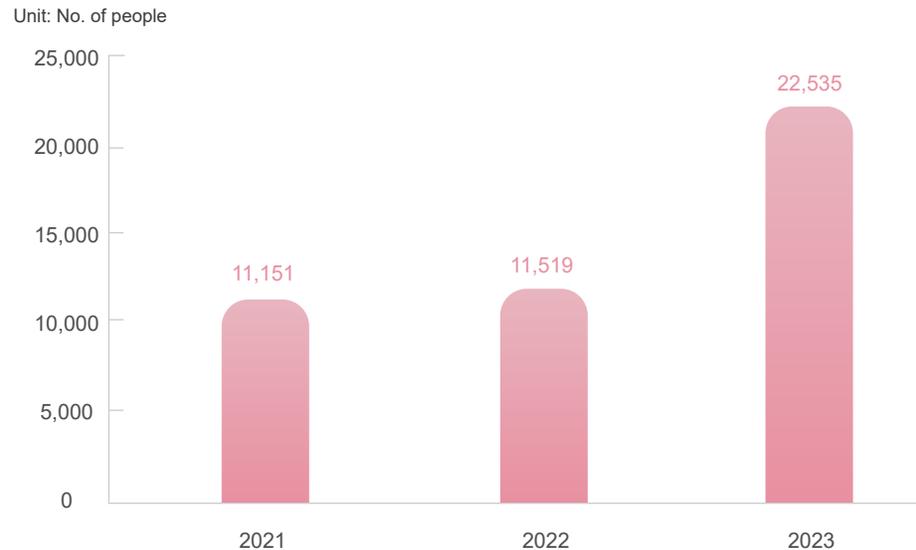
To ensure workplace safety, the Company has appointed qualified industrial and mining sanitation technicians and work environment monitoring agencies to regularly study the operation monitoring plan pursuant to the "Regulations Governing Labor Work Environment Monitoring Implementation," performed risk classification management for health risk hazard chemicals defined by the "Standards of Permissible Exposure Limits at Job Site" and met the national standard CNS 15030 in reference to the "Hazardous Chemicals Assessment and Classification Management Measures," and exceeded the legal requirement in terms of gaining a full understanding of the possible hazardous exposures for colleagues in the working environment. The working environment monitoring results are publicly disclosed on the Company's bulletin board and inspected to ensure compliance with the laws and regulations. Any anomalies found in the monitoring results are corrected immediately to ensure a safe working environment for colleagues.

## 5.2 Occupational Health and Safety Worker Training

GlobalWafers has listed the following safety and health education training as compulsory courses for new and on-the-job employees: Hazardous substance identification, emergency escape drills, personal protective equipment wearing, fire training operations, mechanical protection, human musculoskeletal injury prevention, AED & CPR first aid training, etc. Through training and publicity, employees will gain sufficient environmental safety and health knowledge as soon as they enter the job, and reduce or eliminate any possible hazards or accidents. Employees engaging in special operations such as stackers, aerial work vehicles, hoisting cranes, etc., must receive professional training in order to obtain qualification certificates, and must wear the relevant personal protective gears in order to perform their work. The same requirements are also implemented for contractors. Fire drills, emergency response training, AED & CPR first aid training, and several occupational safety and health education and training were held in 2023. Trainings for occupational safety-related license personnel are also handled in accordance with relevant laws and regulations, and are managed and regularly tracked by our education and training system.

We have also provided education and training for employees engaging in noise, organic solvent, and specific chemical substance exposure conditions that are particularly hazardous to health; issued appropriate safety protection equipment; and implemented pre-employment physical exam as well as in-service annual physical exam health management to ensure the safety and health of employees at work. There has been no occupational disease involving employees engaged in special operations. In 2021 and 2022, over 11,151 and 11,519 employees have received safety and health education and training, respectively; that number exceeded 22,535 in 2023. This number increased significantly due to the inclusion of training data from overseas production sites at the beginning of the year. This continuous rise in training numbers reflects our commitment to promoting employee safety awareness and shows the Company's commitment to advocating employee safety awareness.

### No. of people who received safety and health education and training



Note: 2021-2022 scope of statistics - GlobalWafers Headquarters, GlobalWafers Zhunan Plant, and Taisil Branch  
 2023 scope of statistics - GlobalWafers Headquarters, GlobalWafers Zhunan Plant, GlobalWafers Japan, Kunshan Sino Silicon Technology Co., Ltd., MEMC Electronic Materials S.p.A, MEMC Korea Company, MEMC LLC, MEMC Japan Ltd., GlobiTech Incorporated., MEMC Electronic Materials Sdn.Bhd., Topsil GlobalWafers A/S

### Contractor Management

GlobalWafers has formulated the contractor management measures to prevent personnel hazards or equipment loss caused by the relevant contractor operations in the Company, divide construction operations into general operations and special hazardous operations (open-fire, confined space, hanging, elevated, and other high-risk operations), and strictly controlled construction applications and risks. In addition to requiring contractors to assign supervisors to monitor the work on-site during construction, the project leader must also perform on-site supervision and management. Safety and health management personnel shall conduct irregular inspections to ensure all operations conform to safety, health, and environmental protection regulations; and to strengthen the construction safety management for contractor workers in the plant.

Moreover, GlobalWafers has also continued to promote occupational safety proposal competitions in recent years in order to create a comfortable and safe working environment. The award-winning units are selected based on the proposal contents and weighted scores, and are praised by the safety and health committee every quarter and issued bonuses for encouragement. The goal is to inspire employees to raise their safety and health awareness, promote active participation, and reduce occupational disaster incidents.



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## 5.3 Emergency Response

Our emergency response management aims for the ability to handle in-factory emergencies in a timely manner and prevent them from further aggravation. To ensure accurate and effective response strategies upon occurrences of urgent abnormal incidents, and minimize possible personnel injuries, casualties and impact on the environment caused by accidents, we conduct emergency response team training and emergency evacuation drills each year for the purpose of enhancing our capabilities for factory disaster rescue as well as employees' knowledge and familiarity over their work environments and escape routes. In addition, all plants in Taiwan have established poison response personnel in accordance with the law. The emergency response training held in 2023 included emergency response equipment training, toxic chemical substances and chemical leakage treatment drills, earthquake drills, cardiopulmonary resuscitation, Heimlich maneuver emergency rescue training, firefighting emergency evacuation, and cooperation with the fire department to conduct fire drills for chemical warehouse fires.



### Firefighting Emergency Escape Training



### First Aid Training



### Chemical Spill Response Drill



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## 5.4 Occupational Disaster Management

### Disabling Injuries

Pursuant to the Occupational Safety and Health Act, GlobalWafers has established the "Occupational Disaster Prevention Plan" and "Injury, Disease, Incident Reporting Procedure" to serve as guidelines for incident investigation and handling. We have also established preventive and improvement measures to manage, track, and report occupational injuries and diseases to ensure the safety of employees.

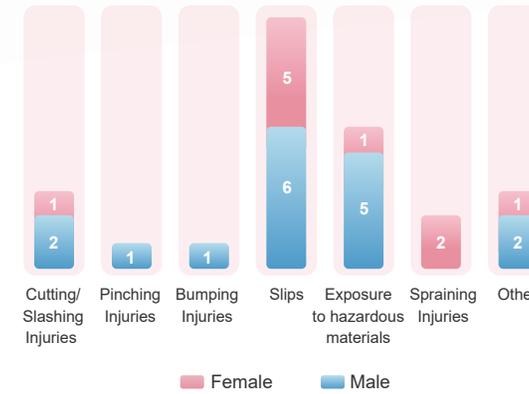
The department head as well as the safety and health personnel shall conduct accident investigation and analysis when an accident occurs, and the accident unit shall be responsible for tracking and handling the accident until the case is closed. The safety and health management unit shall report occupational disaster statistics to the Occupational Safety Department of the Ministry of Labor every month.

We have regularly implemented occupational safety and health education and training for employees and contractors to effectively prevent occupational disasters; and conducted work environment inspections and internal/external audits in order to review the Company's environmental, safety, and sanitary operations. The goal is to ensure environmental safety for workers and achieve the zero accident target.

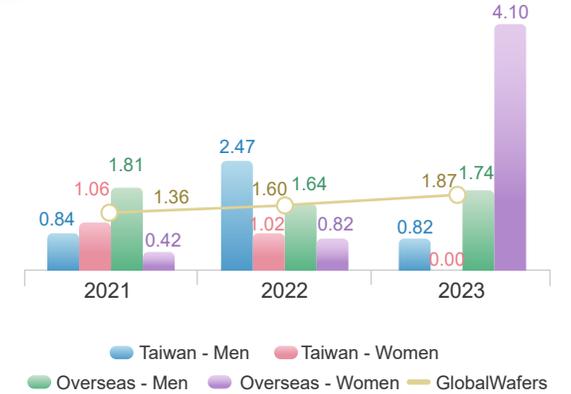
Our occupational hazard statistics analysis data are generated based on disability injuries statistics indicator published by the Ministry of Labors and GRI Standards. One million work hours being the base line, our statistics are mainly based on the Disabling Frequency Rate, (FR), Disabling Severity Rate (SR), Occupational Disease Rate (ODR) and Absence Rate (AR) (with disabling injury statistics excluding traffic accidents outside factories).

In 2023, there were 2 work-related injuries and disability incidents in Taiwan and 25 work-related injuries and disability incidents at overseas plants. Among the types of accidents, falls accounted for 40.74% of total workplace injuries, while harmful substance exposure accounted for 22.22%, making these the two most common types. The disability injury rate in plants worldwide was 1.87 (1.54 for men and 2.96 for women), and the severe disabling injury rate was 43 (29 for men and 88 for women). There were no occupational diseases. According to the statistics on occupational accidents in the past three years, the frequency of disabling injuries in 2023 increased slightly from the previous year, mainly due to four more work-related injuries than the previous year. Regarding the severity rate of disabling injuries, there was one major occupational accident in 2022. After a thorough review of the process and the introduction of improvement measures, the severity of disabling injuries was significantly reduced in 2023. In addition, in 2023, there were no work-related injuries among contractors operating in domestic and overseas plants.

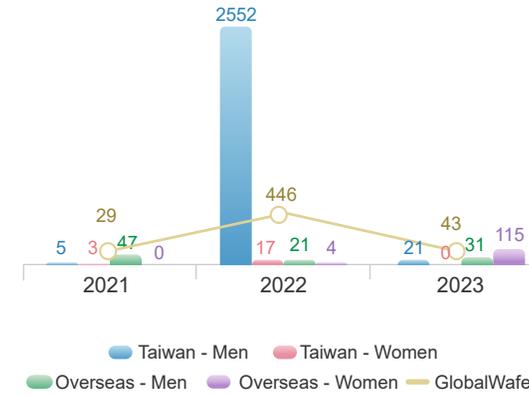
Statistics of Work Injury Types in 2023



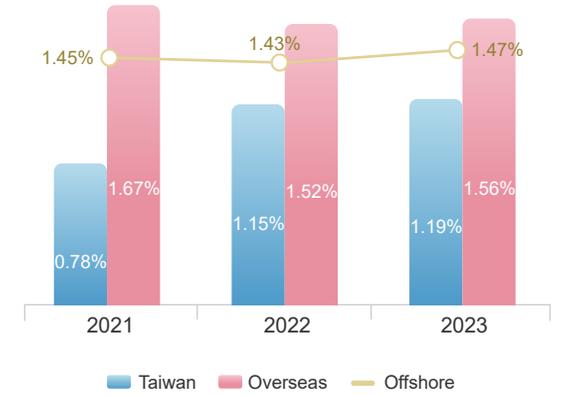
Disabling Frequency Rate (FR)



Disabling Severity Rate (SR)



Absence Rate (AR)



Note:

- Taiwan: GlobalWafers Headquarters & Zhunan Plant, the Taisil Branch, Crystalwise Technology Inc., Sunrise PV Electric Power Five Co. Ltd., Sunrise PV Four Co. Ltd.
- Overseas: GlobiTech Incorporated., GlobalWafers Japan Co., Ltd., Kunshan Sino Silicon Technology, MEMC Electronic Materials Sdn.Bhd., MEMC Electronic Materials S.p.A., MEMC Japan Ltd., MEMC Korea Company, MEMC LLC, Topsil GlobalWafers A/S, Yuan Hong (Shandong) Photoelectric Material Co., Ltd., MEMC Electronic Materials France SarL, GlobalWafers B.V., Shanghai Sawyer Shenkai Technology Material Co. Ltd., and Yuan Hong Technical Materials Ltd.
- Disabling Frequency Rate (FR) = total number of disabled employees × 10<sup>6</sup> / Total work hours
- Disabling Severity Rate (SR) = Total number of work days lost to injuries × 10<sup>6</sup> / Total work hours
- Total work hours: Mandatory work days in respective factories × mandatory work hours × total number of employees for that factory
- Absence Rate Coverage Disclosure Sites: GlobalWafers Headquarters, GlobalWafers Zhunan Plant, the Taisil Branch, GlobiTech Incorporated., GlobalWafers Japan Co., Ltd., Kunshan Sino Silicon Technology Co., Ltd., MEMC Electronic Materials Sdn.Bhd., MEMC Electronic Materials S.p.A., MEMC Japan Ltd., MEMC Korea Company, MEMC LLC, Topsil GlobalWafers A/S



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### 2021-2023 Major Occupational Disaster Statistics

Occupational Disaster Statistics	2021		2022		2023			
	Taiwan		Taiwan		Taiwan		Overseas	
	Employees	Workers who are not employees	Employees	Workers who are not employees	Employees	Workers who are not employees	Employees	Workers who are not employees
No. of people	1,674	88	1,711	110	1,701	133	5,604	714
Work hours	3,321,216	265,810	3,408,312	320,011	3,372,672	377,512	11,044,612	1,416,100
No. of disability injuries	3	0	7	0	2	0	25	0
Days of disabling injuries	14	0	6,218	0	52	0	561	0
Death toll due to work	0	0	1	0	0	0	0	0
No. of severe occupational accidents	0	0	0	0	0	0	0	0
No. of recordable occupational injuries	10	0	34	0	30	0	25	0
Recordable occupational injury rate (IR)	0.602	0	1.995	0	1.779	0	0.453	0
No. of people with occupational disease rate (ODR)	0	0	0	0	0	0	0	0

Note:

- Other non-employee workers: Refer to workers who are not employees but whose work and/or workplace are controlled by the organization. Divide the total number of workers for the year by 365 to calculate the average number of people entering the plants every day.
- Work hours: Employees - calculated based on the actual work hours of the year. Other non-employee workers - calculated based on the total number of workers for the whole year, followed by 8 hours per day.
- Severe occupational disasters: Injuries in which workers are unable or cannot recover to their pre-injury health status within 6 months after the occupational injuries.
- Recordable occupational injuries: Refer to occupational injuries that caused death, loss of work, restricted work, or work transfer; emergency care or higher level medical treatment; loss of consciousness; and serious injury or illness diagnosed by a doctor.
- Recordable occupational injury rate (IR): (No. of recordable occupational injuries/total number of hours worked) \*200,000
- Occupational disease rate (ODR): (No. of work-related ill health cases/total number of hours worked) \*200,000
- For 2021 and 2022, only data for Taiwan were disclosed. Starting from 2023, data for overseas regions was also disclosed.
- Taiwan: GlobalWafers Headquarters & Zhunan Plant, the Taisil Branch, Crystalwise Technology Inc., Sunrise PV Electric Power Five Co. Ltd., Sunrise PV Four Co. Ltd.
- Overseas: GlobiTech Incorporated., GlobalWafers Japan Co., Ltd., Kunshan Sino Silicon Technology, MEMC Electronic Materials Sdn. Bhd., MEMC Electronic Materials S.p.A., MEMC Japan Ltd., MEMC Korea Company, MEMC LLC, Topsisil GlobalWafers A/S, Yuan Hong (Shandong) Photoelectric Material Co., Ltd., MEMC Electronic Materials France SarL, GlobalWafers B.V., Shanghai Sawyer Shenkai Technology Material Co. Ltd., and Yuan Hong Technical Materials Ltd.



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## 5.5 Health Promotion and Care

Employees are the most valuable asset to GlobalWafers. We are committed to creating a safe and comfortable working environment and regard the health of employees as a key factor for the Company's success and sustainable development. Take Taiwan sites as example, the Company has full-time nurses and regular on-site clinic visits by an occupational medicine specialist to organize internal planning based on the five major aspects of maternity protection, prevention of irregular workload, health protection of middle-aged and elderly employees, prevention of workplace illegality, and human-induced hazard prevention. The Employee Caring Program (ECP) provides comprehensive care for employees, including the introduction of the Employee Assistance Program (EAP) of Hsinchu Lifeline Association to protect the physical and mental health of employees; in 2023, GlobalWafers received the "Badge of Accredited Healthy Workplace" from the Health Promotion Administration, Ministry of Health and Welfare, and the Award of Excellence in the 2023 Hsinchu Science Park Awards for Promoting Equal Workplace Rights. We are committed to becoming a model of a happy and healthy workplace. GlobalWafers' global plants are gradually implementing and providing occupational health services based on the framework of the Occupational Health and Safety Management System (ISO 45001) to achieve the goal of safeguarding employee health.



### The Five Pillars of Health Protection

Pillars	Execution Direction	Results in 2023
Maternity Care	Conduct health risk assessments for pregnant female employees who want to return to the workplace after childbirth, offer physician consultation and care services, and provide expecting mothers with a good maternity pack to protect the physical and mental health of pregnant, postpartum, and breastfeeding colleagues.	Level-I management: 13 people Level-II management: 0 people (8 people in GlobalWafers Headquarters & Zhunan Plant; 4 people in the Taisil Branch; 1 person in the Crystalwise Technology Inc.) Health risk assessment completion rate: 100%
Prevention of Irregular Workload	Based on employee health examination data, the Framingham Risk Assessment Scale, the overwork scale, and other data were used to analyze the high-risk overload groups and provide on-site medical consultation and protection guidance measures for such groups. The nursing staff has regularly distributed health messages to help prevent overwork and continue implementing employee tracking and care.	Tracking management: 164 people (87 people in GlobalWafers Headquarters & Zhunan Plant; 70 people in the Taisil Branch; 7 people in the Crystalwise Technology Inc.)
Middle-Aged and Elderly Employees Health Protection	To ensure the health of middle-aged and elderly employees and their suitability for workload, hazard identification and risk assessment, prevention and improvement measures, and implementation result tracking are carried out to protect the health of middle-aged and elderly employees.	Tracking management: 328 people (174 people in GlobalWafers Headquarters & Zhunan Plant; 154 people in the Taisil Branch)
Prevention of Unlawful Infringement	To provide a healthy and positive workplace, we conduct a risk assessment for the entire factory every two years. Positivity courses like unlawful violation and spiritual growth are arranged to construct an excellent work environment.	All new recruits have completed the education and training on workplace violence prevention and sexual harassment within 30 days of arrival. Physical lectures are arranged, and mood articles are shared monthly to care for employees' physical and mental health.
Ergonomic Hazard Prevention	We conduct ergonomic hazard risks surveys on all departments based on their work content/operation. Operation observation, personnel interviews and medical treatment record investigation are conducted to screen and identify priority improvement targets (operation). Next, based on their operation hours, loading of weight, postures and work conditions, a quantitative risk assessment is in place for the risk grade calculation (Key Indicator Methods, KIM) to gradually improve the operation/construction by the year and to prevent the ergonomic hazards.	-



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### Maternity Health Protection

To prevent workplace health hazard exposure to female colleagues, we have established a maternal health protection plan and implemented the maternal health risk assessment accordingly in order to protect the health of female colleagues of childbearing age in the workplace and prevent female colleagues who are pregnant or have a child of less than 12 months old from exposure to health hazards at workplaces that may affect embryonic development or affect the health of mothers and infants during pregnancy or lactation. GlobalWafers has implemented hierarchical management and work adjustments after referencing comprehensive evaluations from professional medical doctors to provide exclusive parking spaces, breast collection rooms, and care armbands for pregnant colleagues and create a friendly working environment for working mothers. Since 2021, our breastfeeding rooms have received the Excellent Certification for Friendly Breastfeeding Rooms from Hsinchu County and City. To encourage pregnant colleagues to report the pregnancy as soon as possible so they can receive immediate maternal workplace health assessment and initiate protective measures, the Company has started offering the "Good Pregnancy Pack - a breastfeeding pillow (moon pillow)" in 2021. The goal is to create a mother-friendly workplace environment so colleagues can feel at ease while nurturing new life at work.

#### Exclusive parking spaces and care armbands for pregnant colleagues



#### Breastfeeding Room



#### Good Pregnancy Pack



### Prevention of Diseases Triggered by Irregular Workloads

To prevent diseases triggered by work shifts, nighttime work, long work hours, and other irregular workloads, we have established plans to prevent diseases triggered by work overloads. The summarized analysis is conducted based on all employees' health examination data, work hours, and overwork questionnaire results. Tier management is implemented, and high-risk groups are listed accordingly via occupational doctor interviews, health guidance, and relevant preventive measures. We have also delivered regular health and fatigue prevention articles to help reduce disease risks and ensure colleagues' physical and mental health.

### Middle-Aged and Elderly Employees Health Protection

In response to our country's aging population structure and to ensure the health suitability of middle-aged and elderly employees for their workloads, we have established a Health Protection Plan for Middle-Aged and Elderly Employees. This plan involves hazard identification and risk assessment, preventive and improvement measures, and tracking the effectiveness of these implementations. The goal is to protect the health of middle-aged and elderly employees, promote their physical and mental well-being, and prevent occupational hazards.

### Prevention of Unlawful Infringement

To provide a friendly workplace environment, the plants have established workplace unlawful infringement protection management measures to prevent physical or mental unlawful infringement due to other people's behavior when performing duties; posted a workplace unlawful infringement prevention statement on the factory's announcement board; provided multiple complaint channels to employees; conducted regular workplace unlawful infringement risk assessments; planned the relevant safety measures based on the survey results; and regularly conducted seminars on workplace unlawful infringement prevention, sexual harassment prevention, and interpersonal relations to ensure employee safety at work and protect their physical and mental wellbeing.

### Ergonomic Hazard Prevention

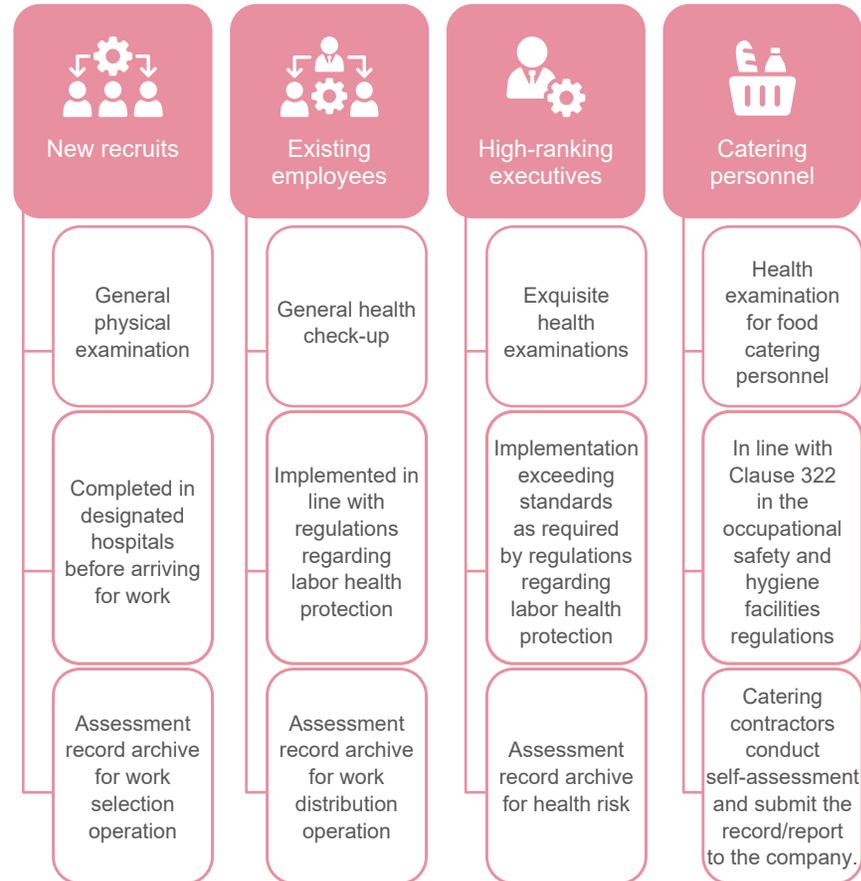
To prevent human-factor hazards and avoid repetitive musculoskeletal injuries, a human-factor hazard prevention plan has been established to issue a comprehensive musculoskeletal injury survey questionnaire. The goal is to investigate and screen suspected medium- and high-risk hazard cases, conduct on-site job evaluation by occupational health managers and provide professional medical doctor interviews and guidance, and recommend improvements based on the evaluation results.



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### Health Promotion and Reinforcement of Health Concepts

GlobalWafers has implemented diversified health care for employees. Each year, the Company has formulated a health management and improvement plan in order to maintain the health of employees according to the overall employee health exam data analysis. The relevant physical and health exams are also provided to operators of different ethnic groups. All of the implementation items and frequency have exceeded the regulation requirements. In collaboration with medical institutions, we offer free cancer screenings for employees, including colorectal cancer, cervical cancer, mammography, and oral cancer, to ensure comprehensive health management for all employees. Upon completion of health check operations, professional on-site medical personnel will conduct follow-up tracking regarding abnormal results. This data serves as a key reference for health improvement activities and health promotion initiatives.



Our health care centers perform statistical analysis based on the annual health exam results, plan the health promotion activity and lecture topics for the year, arrange consultations with the clinic service physicians, and collaborate with the medical and healthcare services provided by the Hsinchu Science Park employee clinic to promote preventive medicine and disease prevention while strengthening health awareness for colleagues.

In 2023, GlobalWafers launched a number of health promotion activities, with the participation of 7,173 people in the Taiwan plants, including cancer screenings, health talks (Kick Away Workplace Stress and Reclaim Your Energy, EYE Spoiling - Eye Care Knowledge Lecture, A Healthy Day for People Who Eat Out Often, and Stay Away from Osteoporosis: Embrace Health Seminar, etc.), Say Goodbye to Big Belly Fat Loss Competition, fitness courses, aromatherapy stress relief courses, horticultural stress relief workshops, bone density testing activities, community running events, and first aid courses. These initiatives helped employees establish correct health knowledge and enhance health awareness. Additionally, employees receive free influenza vaccinations annually to boost immunity and reduce the risk of workplace outbreaks. Regular blood donation activities are organized, where participants receive additional gifts and vouchers from the Company, encouraging employees to donate blood and engage in community service.

Moreover, overseas plants also develop a variety of health promotion activities and facilities tailored to local cultures and environments. In 2023, these activities saw participation totaling 11,957 instances, including health lectures, emergency rescue courses, cancer screenings, flu vaccinations, sponsoring and encouraging employee participation in community sports activities, free bicycle rentals, carbon reduction bicycle competitions, family fitness walks, smoking cessation activities, fall prevention exercises, healthy fruit and vegetable boxes, healthy employee meals, weekly fruit days, nutritionist video apps, healthy food vending machines, provision of winter survival kits for employees, partnerships with nutritionists, physical therapists, and massage therapists, fitness facilities, and sports centers. GlobalWafers continues to refine our health promotion system through internal information exchange within the Group, ensuring the health of our organization members is well-protected.



To ensure workplace safety, the Company has established the emergency response staff in addition to the emergency personnel for each shift as required by the law. The Company's plants contain 24-hour automatic external defibrillator (AED), AED managers, and emergency rescue kits to give first-line rescue personnel to have sufficient and complete rescue equipment when performing rescue work. The Company also holds annual CPR+AED practical operation skills courses, "In-plant Emergency Rescue Response Measures and Chemical Splash Cleanup Course," and arranges for emergency rescue personnel and staff to participate in such courses. The goal is to enable the plants to effectively and immediately take appropriate emergency rescue measures in case of an accident, establish a safe workplace environment, and win the certificate of safe workplace from the Ministry of Health and Welfare.



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2021~2023 Health Promotion / Emergency Rescue Events

Unit: Participants

Year		2021	2022	2023
GlobalWafers	Taiwan	4,589	7,223	7,173
	Overseas	-	-	11,957

Say Goodbye to Big Belly Fat Loss Competition, Fitness Courses, Aromatherapy Stress Relief Courses, Horticultural Stress Relief Workshops



CPR and AED Training Courses, Cancer Screening Activities, Bone Density Testing Activities, Influenza Vaccination Activities, Charity Blood Donation Activities, Community Running Events



Special Ethnic Group Tracking and Health Care

GlobalWafers' health centers provide comprehensive health care, healthy nutrition consulting services, and consultation to high-risk groups, maternal health protection groups, and new recruits whose physical and health exams showed abnormal results. The Company also arranges physician consultation and care as well as psychological support according to individual needs.

In addition, the Company will provide care to colleagues who have suffered a public injury or traffic accident by offering psychological support, insurance claims service instructions, and on-site physician consultation to help colleagues return to work as soon as possible.

Number of Services for Special Ethnic Groups<sup>Note 1</sup> and Number of People Tracked from 2021 to 2023

No. of service sessions	2021	2022	2023
GlobalWafers - Taiwan sites <sup>Note 2</sup>	1,247	1,690	1,193

No. of people being tracked	2021	2022	2023
GlobalWafers - Taiwan sites <sup>Note 2</sup>	915	1,069	1,565

Note 1: Definition of special ethnic group:  
 (1) Irregular workload prevention (GWC: Follow the current year to track B2 level or higher based on the management method for abnormal workloads prevention / TEM: doctor suggested interviews, Framingham Risk Score 10% or more + overload in the overload scale), (2) Maternity (tracking the case received in the current year), (3) Disability (track the current year, once every 2 years), (4) Newcomers (GWC: those who have received an abnormal physical examination guide leaflet / TEM: those with level 3 or higher physical examination classification), (5) Special grade 2, (6) Annual health checkup (GWC: those with grade 4 or higher / TEM: those with grade 3 or higher according to the scale of physical exam), (7) Work injury (statistics based on the day of occurrence), (8) Psychology (GWC: Mental Health Scale score of 19 or higher or suicidal intent / TEM above the medium load) Note 2: "GlobalWafers - Taiwan" includes GlobalWafers headquarters, the Zhunan Plant, the Taisil Branch, and the newly incorporated subsidiary Crystalwise Technology Inc. in 2023.



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### Health Information & Health Promotion Platform

To enable employees to gain the correct health care knowledge, the health center has provided employee disease information and consulting services, established a health management website and electronic bulletin board within the Company, and delivered or posted various health information on an irregular basis for reference by the colleagues. For health promotion / healthcare activities and health knowledge, employees can learn the latest information and activities through the website and grasp the latest health related information in real time.

#### E-bulletin updates health information sporadically



#### Health news column and marquee provide health and epidemic prevention propaganda



### Physical and Mental Balance and a Blissful Workplace

GlobalWafers believes that employees are the Company's most important asset. Only with healthy employees can we raise corporate productivity. Therefore, we are committed to creating a safe, healthy, and friendly workplace.

Since 2021, GlobalWafers has implemented the "Life Mind Guide" Employee Assistance Program (EAP), providing comprehensive care for employees. The services offered include consultations in various areas such as emotional management, interpersonal relationships, legal issues, career development, family and parenting, and financial advice. Employees have unlimited access to the hotline, where they can receive immediate assistance through phone, email, Line, or Skype. Case management psychologists provide services in both Chinese and English, offering emotional support and initial assessment. For further consultation, each employee is entitled to two free one-on-one counseling sessions per year. Nurses will also proactively refer high scorers from the Mood Thermometer Questionnaire to the EAP for regular follow-ups and care. In addition, in conjunction with the new employee training courses, we promote service plans, send contact cards, and regularly distribute psychological health education articles. Through professional counseling services, employees can relieve stress and address underlying issues, ensuring they can work with peace of mind.

Employee Assistance Program (EAP)		2022	2023
Live chat E-mail consultation service	All regions*	38 people	69 people
One-to-one expert consultation	GlobalWafers - Taiwan	7 people	10 people
Total number of consultations		45 people	79 people
Overall satisfaction of colleagues with on-site psychological counseling using professional consultation services		97%	96.7%



\*The scheme covers the parent company Sino-American Silicon Products Inc. To protect user privacy, EAPC does not provide differentiated statistics.



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## GRI Guideline Index

<b>Statement of Use</b>	GlobalWafers Co., Ltd. has compiled this report in accordance with GRI Standards. The information disclosed in this report covers the period of 2023 (from January 1, 2023, to December 31, 2023).
<b>GRI 1 used</b>	GRI 1: Foundation 2021
<b>Applicable GRI Sector Standards</b>	No applicable GRI Sector Standards

GRI Standards	Disclosure Item	Corresponding Chapters	Page No.	Note / Reasons for non-disclosure	External Assurance
<b>The organization and its reporting practices</b>					
2-1	Organizational details	About GlobalWafers - Company Profile	12		◎
2-2	Entities included in the organization's sustainability reporting	About GlobalWafers - Company Profile	12		◎
2-3	Reporting period, frequency, and contact point	About This Report	3		◎
2-4	Restatements of information	4.1 Human Resources	102	New recruits and resignations were originally calculated as a percentage of the total number of employees in the previous year. They have been changed to the percentage of the total number of employees at the end of the current year as required by the Section 401-1 requirement. Therefore, the data on new recruits and resignations for 2021-2022 has been revised.	◎
2-5	External Assurance	External Verification Disclaimer	146		◎
<b>Activities and workers</b>					
2-6	Activities, value chain and other business relationships	2.3 Customer Service	80		◎
		2.4 Sustainable Supply Chain Management	80		
2-7	Employees	4.1 Human Resources	102		◎
2-8	Workers who are not employees	5.4 Occupational Disaster Management	129		◎
<b>Governance</b>					
2-9	Governance structure and composition	1.1 Corporate Governance	51		◎
2-10	Nomination and selection of the highest governance body	1.1.1 Governance structure	51		◎



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2-11	Chair of the highest governance body	1.1 Corporate Governance	51		⊙
2-12	Role of the highest governance body in overseeing the management of impacts	Sustainability Management - Sustainable Organization 1.3 Risk Management	19 65		⊙
2-13	Delegation of responsibility for managing impacts	Sustainability Management - Sustainable Organization 1.3 Risk Management	19 65		⊙
2-14	Role of the highest governance body in sustainability reporting	Sustainability Management - Sustainable Organization	19		⊙
2-15	Conflicts of interest	1.1.1 Governance structure 1.1.2 Integrity & Ethics	51 56		⊙
2-16	Communication of critical concerns	1.1.1 Governance structure	51		⊙
2-17	Collective knowledge of the highest governance body	1.1.1 Governance structure	51		⊙
2-18	Evaluation of the performance of the highest governance body	1.1.1 Governance structure	51		⊙
2-19	Remuneration policies	1.1.1 Governance structure	51		⊙
2-20	Process to determine remuneration	1.1.1 Governance structure	51		⊙
2-21	Annual total compensation ratio	Omitted disclosure	-	The highest annual total compensation is confidential information.	⊙
<b>Strategies, policies and practices</b>					
2-22	Statement on sustainable development strategy	Message from the Chairperson Sustainable Management - Corporate Sustainable Development Policy	9 19		⊙
2-23	Policy commitments	Message from the Chairperson 4.4 Human Rights	9 111		⊙
2-24	Embedding policy commitments	4.4 Human Rights	111		⊙
2-25	Processes to remediate negative impacts	Sustainable Management - GlobalWafers Stakeholders' Engagement 1.1.2 Integrity & Ethics 4.4 Human Rights	21 56 111		⊙
2-26	Mechanisms for seeking advice and raising concerns	1.1.2 Integrity & Ethics 4.4 Human Rights	56 111		⊙
2-27	Compliance with laws and regulations	1.1.4 Legal Compliance	60		



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GRI Standards	Disclosure Item	Corresponding Chapters	Page No.	Note / Reasons for non-disclosure	External Assurance
2-28	Membership associations	About GlobalWafers - Company Profile	12		⊙
<b>Stakeholder engagement</b>					
2-29	Approach to stakeholder engagement	Sustainable Management - Material Issues and Stakeholder Engagement	21		⊙
2-30	Collective bargaining agreements	4.4 Human Rights	111		⊙
<b>GRI 3</b>					
3-1	Process to determine material topics	Sustainable Management - Material Issues and Stakeholder Engagement	21		⊙
3-2	List of material topics	Sustainable Management - Material Issues and Stakeholder Engagement	21		⊙
3-3	Management of material topics	Sustainable Management - GlobalWafers Material Issue Management Policy	26		⊙
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<b>Economic Performance</b>					
201-1	Direct economic value generated and distributed	1.2 Operation Performance	62		⊙
201-2	Financial implications and other risks and opportunities due to climate change.	Climate Strategy and Actions	36		⊙
<b>Procurement Practices</b>					
204-1	Proportion of spending on local suppliers	2.4 Sustainable Supply Chain & Management	80		⊙
<b>Anti-Corruption</b>					
205-2	Communication and training about anti-corruption policies and procedures	1.1.2 Integrity & Ethics	56		⊙
205-3	Confirmed incidents of corruption and actions taken	1.1.2 Integrity & Ethics	56	No occurrence of corruption incidents	⊙
<b>Category: Environment</b>					
<b>Materials</b>					
301-2	Recycled input materials used	3.3.1 Raw Material Re-Utilization	98		⊙
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302-1	Energy consumption within the organization	3.1 Energy Management	86		◎
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<b>Water and Effluents</b>					
303-1	Interactions with water as a shared resource	3.2 Water Resource Management	92		◎
303-2	Management of water discharge-related impacts	3.2 Water Resource Management	92		◎
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<b>Emissions</b>					
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305-5	Reduction of GHG emissions	Climate Strategy and Actions - Greenhouse Gas Inventory	43		◎
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	3.4 Air Pollutant Emissions	99		◎
<b>Waste</b>					
306-1	Waste generation and significant waste-related impacts	3.3 Waste Management	95		◎
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<b>Environmental Compliance</b>					
307-1	Non-compliance with environmental laws and regulations	1.1.4 Legal Compliance	60		◎
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401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	4.2 Talent Attraction and Retention	106		◎
401-3	Parental leave	4.2 Talent Attraction and Retention	106		◎
<b>Occupational Health and Safety</b>					
403-1	Occupational health and safety management system	5.1 Safe Environment	125		◎
403-2	Hazard identification, risk assessment, and incident investigation	5.1 Safe Environment	125		◎
403-3	Occupational health services	5.5 Health Promotion and Care	131		◎
403-4	Worker participation, consultation, and communication on occupational health and safety	5.1 Safe Environment	125		◎
403-5	Worker training on occupational health and safety	5.2 Occupational Health and Safety Worker Training	127		◎
403-6	Promotion of worker health	5.5 Health Promotion and Care	131		◎
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	5.1 Safe Environment 5.2 Occupational Health and Safety Worker Training	125 127		◎
403-8	Workers covered by an occupational health and safety management system	5.1 Safe Environment	125		◎
403-9	Work-related injuries	5.4 Occupational Disaster Management	129		◎
403-10	Work-related ill health	5.4 Occupational Disaster Management	129		◎
<b>Training and Education</b>					
404-1	Average hours of training per year per employee	4.3 Talent Cultivation and Development	109		◎
<b>Diversity and Equal Opportunity</b>					
405-1	Diversity of governance bodies and employees	1.1.1 Governance structure 4.1 Human Resources	51 102		◎
<b>Non-discrimination</b>					
406-1	Incidents of discrimination and corrective actions taken	4.4 Human Rights	111	No occurrence of discrimination incidents	◎
<b>Customer Privacy</b>					
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	2.1 Innovation Management	74	No complaints regarding customer privacy violation or customer data loss	◎
<b>Socioeconomic Compliance</b>					
419-1	Non-compliance with laws and regulations in the social and economic area	1.1.4 Legal Compliance	60		◎

# Sustainable Accounting Standards Board SASB Establishment Standards (Semiconductor Industry Category Indicators) Index

Disclosure Topics	Index No.	Metrics	Category	Corresponding chapters/description	Page No.
GHG Emissions	TC-SC-110a.1	(1) Gross global Scope 1 emissions (2) Amount of total emissions from perfluorinated compounds	Quantitative	Climate Strategy and Actions/Greenhouse Gas Inventory ※Non-semiconductor process, no utilization or emission of perfluorinated compounds	43
	TC-SC-110a.2	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Qualitative	Climate Strategy and Actions/Greenhouse Gas Inventory ※The proportion of emissions in Scope 1 is lower than that in Scope 2. Therefore, the Company has set a reduction target for Scope 2, which has a higher proportion of emissions.	36
Energy Management in Manufacturing	TC-SC-130a.1	(1) Total energy consumed, (2) percentage grid electricity and (3) percentage renewable	Quantitative	3.1 Energy Management	86
Water Resource Management	TC-SC-140a.1	(1) Total water withdrawn (2) Total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	3.2 Water Resource Management	92
Waste Management	TC-SC-150a.1	Amount of hazardous waste from manufacturing, percentage recycled	Quantitative	3.3 Waste Management	95
Employee Health and Safety	TC-SC-320a.1	Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards	Qualitative	5.1 Safe Environment	125
	TC-SC-320a.2	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations	Quantitative	1.1.4 Legal Compliance	60
Recruiting & Managing a Global & Skilled Workforce	TC-SC-330a.1	Percentage of employees that require a work visa	Quantitative	4.1 Human Resources	102
Product Lifecycle Management	TC-SC-410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	Quantitative	1. Our stakeholders are mainly concerned about the RoHS directive and REACH Substances of Very High Concern (SVHC) from the Company's products, and the test results of the products meet the standards. 2. We test products according to the stakeholders' expectations and requirements, so we do not test IEC 62474 substances for products. But most of the declared substances are the same as the RoHS directive and REACH SVHC substances.	—
	TC-SC-410a.2	Processor energy efficiency at a system-level for: (1) servers, (2) desktops and (3) laptops	Quantitative	Not terminal product manufacturer, no corresponding content	—
Materials Sourcing	TC-SC-440a.1	Description of the management of risks associated with the use of critical materials	Qualitative	2.4 Sustainable Supply Chain & Management	80
Intellectual Property Protection & Competitive Behaviour	TC-SC-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behaviour regulations	Quantitative	1.1.2 Integrity & Ethics	56
Activity Indicators	TC-SC-000.A	Total production	Quantitative	1.2 Operation performance	62
Activity Indicators	TC-SC-000.B	Percentage of production from owned facilities	Quantitative	1.2 Operation performance	62



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# Climate-related Information of TWSE/TPEX Listed Companies

Item		Implementation
1	Describe the board of directors' and management's oversight and governance of climate-related risks and opportunities.	Please refer to the Climate Strategies and Actions Chapter / 1.3 Risk Management
2	Describe how the identified climate risks and opportunities affect the business, strategy, and finances of the business (short, medium, and long term).	Please refer to the Climate Strategy and Actions chapter.
3	Describe the financial impact of extreme weather events and transformative actions.	Please refer to the Climate Strategy and Actions chapter.
4	Describe how climate risk identification, assessment, and management processes are integrated into the overall risk management system.	Please refer to the Climate Strategy and Actions chapter.
5	If scenario analysis is used to assess resilience to climate change risks, the scenarios, parameters, assumptions, analysis factors and major financial impacts used should be described.	Please refer to the Climate Strategy and Actions chapter.
6	If there is a transition plan for managing climate-related risks, describe the content of the plan, and the indicators and targets used to identify and manage physical risks and transition risks.	Please refer to the Climate Strategy and Actions chapter.
7	If internal carbon pricing is used as a planning tool, the basis for setting the price should be stated.	Please refer to the Climate Strategy and Actions chapter.
8	If climate-related targets have been set, the activities covered, the scope of greenhouse gas emissions, the planning horizon, and the progress achieved each year should be specified. If carbon credits or renewable energy certificates (RECs) are used to achieve relevant targets, the source and quantity of carbon credits or RECs to be offset should be specified.	Please refer to the Climate Strategy and Actions chapter.
9	Greenhouse gas inventory and assurance status (separately fill out in point 1-1 below).	The status of greenhouse gas inventory and assurance is shown below in Table 1-1. Table 1-2 below shows the greenhouse gas reduction goals, strategies, and specific action plans.

## 1-1 The Company's GHG Inventory and Assurance in the Last Two Years

### 1-1-1 Greenhouse Gas Inventory Information

Specify the greenhouse gas emissions volume (tCO <sub>2</sub> e), intensity (tCO <sub>2</sub> e/NT\$ million), and data coverage for the last two years.			
Scope 1 (Coverage range)	Year	Total emissions (tCO <sub>2</sub> e)	Intensity (tCO <sub>2</sub> e/NT\$ million)
GlobalWafers Co., Ltd (parent company)	2022 (verification)	1,896.7908	0.0626
	2023 (verification)	2,043.7293	0.0661
Scope 2 (Coverage range)	Year	Total emissions (tCO <sub>2</sub> e)	Intensity (tCO <sub>2</sub> e/NT\$ million)
GlobalWafers Co., Ltd (parent company)	2022 (verification)	163,237.8148	5.3887
	2023 (verification)	147,918.5493	4.7822

Note:

- The data of GlobalWafers Co., Ltd (the parent company) includes the Hsinchu Factory and Zhunan Factory, and GlobalWafers Taisil Branch.
- The operating revenue of GlobalWafers' parent company in 2022 and 2023 was NT\$30,292.412 million and NT\$30,931.369 million.
- Intensity is GHGs generated per million dollars in revenue (in metric ton).



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1-1-2 Greenhouse Gas Assurance Information

Describe the assurance situation for the last two years as of the publication date of the annual report, including assurance scope, assurance organization, assurance criteria, and assurance opinions.

Year	Scope of Assurance	Assurance agency	Assurance Criteria	Assurance opinion
2022	GlobalWafers Co., Ltd (parent company) - Head office Hsinchu Plant and Zhunan Plant	DNV Business Assurance Co., Ltd. (DNV)	ISO 14064-3:2019	Assurance status: The opinion is decided based on the following approaches, -For the Direct (Category 1) and Indirect GHG emissions from imported energy (Category 2), the reliability of the information within the Inventory Report (2022) were verified with reasonable level of assurance. -For the other indirect GHG emissions (Category 3 & Category 4), the involved information was tested using agreed-upon procedures, AUP, defined in Inventory Report. It is DNV's opinion that 100% GHG emissions and removals identified within the Reporting Boundary has been included in the Inventory Report as claimed in accordance with the verification criteria identified as stated above, and results in quantification of GHG emissions that are real, transparent and measurable. Assurance opinion: Unmodified.
	GlobalWafers Co., Ltd (parent company) - Taisil Branch	Lloyd's Register Quality Assurance (LRQA)	ISO 14064-3:2019	Assurance status: The assurance was conducted at a reasonable level of assurance at a materiality of 5% for Categories 1 & Categories 2 and at a limited level of assurance at a materiality of 5% for Category 3 & Category 4. Based on LRQA's approach, - The GHG emissions for Category 1 and Category 2 disclosed in the Report as summarized in Table 1 below are materially correct. - Nothing has come to our attention that would cause us to believe that the GHG emissions for Category 3 and Category 4 disclosed in the Report as summarized in Table 1 below are not materially correct and that the Report has been prepared in conformance with ISO 14064-1:2018. Assurance opinion: Unmodified.
2023	GlobalWafers Co., Ltd. (parent company) - Head office Hsinchu Plant and Zhunan Plant	DNV Business Assurance Co., Ltd. (DNV)	ISO 14064-3:2019	Assurance status: -The opinion is decided based on the following approaches, -For the Direct (Category 1) and Indirect GHG emissions from imported energy (Category 2), the reliability of the information within the Inventory Report (2023) were verified with reasonable level of assurance. -For the other indirect GHG emissions (Category 3 & Category 4), the involved information was tested using agreed-upon procedures, AUP, defined in Inventory Report. It is DNV's opinion that GHG emissions and removals identified within the Reporting Boundary has been included in the Inventory Report as claimed in accordance with the verification criteria identified as stated above, and results in quantification of GHG emissions that are real, transparent and measurable. Assurance opinion: Unmodified.
	GlobalWafers Co., Ltd (parent company) - Taisil Branch	Lloyd's Register Quality Assurance (LRQA)	ISO 14064-3:2019	Assurance status: LRQA's verification has been conducted in accordance with ISO 14064-3:2019, 'Specification with guidance for verification and validation of greenhouse gas statements' to provide reasonable assurance for Category 1 and Category 2 and limited assurance for Category 3, and Category 4 that GHG data as presented in the Report have been prepared in conformance with ISO 14064-1:2018, 'Specification with guidance at the organizational level for quantification and reporting of greenhouse gas emissions and removals'. Based on LRQA's approach, - The GHG emissions for Category 1 and Category 2 disclosed in the Report as summarized in Table 1 below are materially correct. - Nothing has come to our attention that would cause us to believe that the GHG emissions for Category 3 and Category 4 disclosed in the Report as summarized in Table 1 below are not materially correct; and that the Report has been prepared in conformance with ISO 14064-1:2018. Assurance opinion: Unmodified.

1-2 The Greenhouse Gas Reduction Targets, Strategies, and Specific Action Plans.

Describe the GHG reduction baseline year and its data, reduction targets, strategies, and specific action plans, and the progress of achieving the reduction targets.

- Reduction baseline year: GlobalWafers uses 2019 as the baseline year for greenhouse gas reduction, with 529,872.21 tons CO<sub>2</sub>e of Scope 2 missions. Due to the company's industrial characteristics, the main source of the Company's greenhouse gas emissions is from Scope 2, which accounts for approximately 95~98% of the total GHG emissions of Scope 1 and Scope 2. Therefore, the unit emission of greenhouse gases (Scope 2) is used as the reduction target.
- Reduction targets: For greenhouse gas unit emissions (scope 2), the short-term (1-3 years) target is to reduce by 1-3%, the medium-term (3-10 years) target is to reduce by 4-10%, and the long-term (over 10 years) target is to reduce by more than 10% compared to the baseline year of 2019.
- Strategies:
  - Renewable energy adoption: Continuing to increase the proportion of renewable energy via self-built solar power generation systems and purchased renewable energy (e.g., PPA, RECs).
  - Improve energy efficiency: Reduce equipment energy consumption by improving equipment.
  - Purchase carbon offset products: Offset carbon emissions by purchasing carbon emission trading credits.
  - Carbon removal: Support tree planting programs and participate in other natural solutions and conservation programs.
- Specific action plan: To effectively manage the impact of climate change-related risks and opportunities on GlobalWafers and support the transition to net zero, GlobalWafers has joined the RE100 initiative and committed to achieving 100% renewable energy use by 2050. To achieve this ambitious goal, the Company is implementing a multi-pronged strategy that includes signing power purchase agreements (PPAs) and purchasing renewable energy certificates (RECs). Additionally, GlobalWafers has established a climate blueprint with phased targets for increasing renewable energy usage: 20% by 2030, 35% by 2035, and 50% by 2040, and gradually realize the long-term goal of 100% renewable energy by 2050. In parallel with these efforts, the Company is also optimizing production processes to enhance product efficiency, improving equipment energy efficiency, replacing outdated equipment, and maintaining and optimizing existing facilities. These comprehensive measures will reduce carbon emissions from the power generation process and help GlobalWafers achieve its carbon reduction targets.
- Reduction targets achievement status: For detailed information on historical progress and other data related to achieving reduction targets, please refer to the "Climate Strategy and Action" chapter of the Company's Sustainability Report.

# "Rules Governing the Preparation and Filing of Sustainability Reports by TPEX Listed Companies" Sustainable Disclosure Indicators - Semiconductor Industry

No.	Metrics	Category	Disclosure in 2023	Unit
I	Total energy consumption, percentage of purchased electricity, and utilization rate of renewable energy	Quantitative	1. Total energy consumption: 4,462,989.966 GJ 2. Percentage of purchased electricity: 90.75% 3. Renewable energy utilization rate: 2.70%	Gigajoule (GJ), percentage (%)
II	Total water withdrawn and consumption	Quantitative	1. Total water withdrawal: 18,874 thousand cubic meters 2. Total water consumption: 2,483.7 thousand cubic meters	Thousand cubic meters
III	Total hazardous waste generated and percentage recycled	Quantitative	1. Total weight of hazardous waste generated: 8,258.27 metric tons 2. Percentage of hazardous waste recycling: 96.07%	Metric ton (t), percentage (%)
IV	Types of, number of employees in and rate of occupational accidents	Quantitative	1. In 2023, a total of 27 occupational hazards occurred in GlobalWafers. The types of accidents included cutting, pinching, bumping, falls, hazardous object contact, and sprains. 2. No. of people with disabling injuries : 27 3. Disabling injury rate: 0.37% (the number of occupational disasters as a percentage of the total number of employees at the end of the year)	Percentage (%), quantity
V	Product Lifecycle Management Disclosure: including weights of scraps and electronic waste and percentage recycled	Quantitative	GlobalWafers is dedicated to sustainable resource utilization by recycling and reusing waste materials whenever possible, turning them into valuable resources. All waste is managed through certified waste disposal, treatment, or recycling agencies, ensuring proper disposal, treatment, or reuse. However, since GlobalWafers is not an end-product manufacturer, we do not have relevant statistics on scrapped products.	Metric ton (t), percentage (%)
VI	Description of the management of risks associated with the use of critical materials	Qualitative description	GlobalWafers has adopted three major management measures to mitigate the operational risks of key materials: 1. Establish safety reserves: We manage the safety reserves of key materials on a rolling basis, considering factors such as production needs, transportation, and company and domestic and foreign policies. 2. Implement supplier management: In addition to regular written reviews and on-site audits, we also implement supplier management, including but not limited to quality, delivery, environment, and emergency response plans. Suppliers are also required to comply with non-conflict minerals and ESG-related sustainability issues. 3. Supplier diversification: We maintain relationships with at least two qualified suppliers to mitigate the risk of supply disruptions.	Not applicable
VII	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	Quantitative	There was no violation of anti-competitive laws and regulations, so the monetary loss was NT\$ 0.	Reporting currency
VIII	Production by product category	Quantitative	1. Semiconductor wafer products 44,747 (thousand pieces) 2. Semiconductor ingot products 296 (metric tons) 3. Other products 142 (thousand pieces)	Varies by product category



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# Independent Assurance Statement



## Independent assurance statement

### Scope and approach

GlobalWafers Co., Ltd. ("GWC" or the "Company") commissioned **DNV Business Assurance Taiwan** ("DNV") to undertake independent assurance of the 2023 ESG Report (the "Report") for the year ended 31 December 2023.

We performed our work using DNV's assurance methodology VeriSustain™<sup>1</sup>, which is based on our professional experience, international assurance best practice including International Standard on Assurance Engagements 3000 (ISAE 3000) and the Global Reporting Initiative (GRI) Sustainability Reporting Standards.

The Report also incorporated disclosures with reference to relevant sustainability reporting guidelines, such as the Sustainability Accounting Standards Board's (SASB) Sustainability Accounting Standard for the Consumer Finance industry (version 2018-10) and the Recommendations of the Task Force on Climate-related Financial Disclosures.

We understand that the reported financial data and information are based on data from GWC's Annual Report and Accounts, which are subject to a separate independent audit process. The Green House Gases Emission of 12 manufacturing sites have been verified by third party, we tested transposition from these sources to the report. The review of financial data and GHG data is not within the scope of our work.

We planned and performed our work to obtain the evidence we considered necessary to provide a basis for our assurance opinion. We are providing the evaluation of reporting principles and selected performance information with a Moderate level of assurance, according to the DNV VeriSustain™.

### Responsibilities of the Directors of GlobalWafers Co., Ltd. and of the assurance providers

The Directors of GWC have sole responsibility for the preparation of the Report. In performing our assurance work, our responsibility is to the management of GWC; however, our statement represents our independent opinion and is intended to inform all of GWC stakeholders. DNV was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. We have no other relationship potential conflicts of interests with the Company against the current assurance engagement under the established policies and procedures, to ensure the strict adherence of independence principle.

DNV's assurance engagements are based on the assumption that the data and information provided by the client to us as part of our review have been provided in good faith. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Assurance Statement.

### Basis of our opinion

A multi-disciplinary team of ESG and assurance specialists performed work at headquarters and site level. We undertook the following activities:

- Review of the current corporate responsibility issues that could affect GWC and are of interest to stakeholders;
- Review of GWC approach to stakeholder engagement and recent outputs;
- Review of information provided to us by GWC on its reporting and management processes relating to the Principles;
- Interviews with selected Directors and senior managers responsible for management of corporate responsibility issues and review of selected evidence to support issues discussed;
- Site visits to the 2 major production sites at Hsinchu and include HQ to review process and systems for preparing site level corporate responsibility data and implementation of corporate responsibility strategy;
- Review of supporting evidence for key claims and 2023 data in the report. Past two years' data reported in the report are not within the scope of our work. Our checking processes were prioritised according to materiality and we based our prioritisation on the materiality of issues at a consolidated corporate level;
- Review of the processes for gathering and consolidating the specified performance data and, for a sample, checking the data consolidation.
- An independent assessment of GWC's reporting against the Global Reporting Initiative (GRI) Standards 2021.
- The verification was conducted based only on the Chinese version Report.

<sup>1</sup> The VeriSustain protocol is available on [dnv.com](http://dnv.com)



## Opinion

On the basis of the work undertaken, nothing came to our attention to suggest that the Report does not properly describe GWC's adherence to the Principles. In terms of reliability of the performance data, in accordance with Moderate level assurance requirements, nothing came to our attention to suggest that these data have not been properly collated from information reported at operational level, nor that the assumptions used were inappropriate.

## Observations

Without affecting our assurance opinion, we also provide the following observations.

### Stakeholder Inclusiveness

The Company has identified the expectations of stakeholders through internal mechanisms in dialogue with different groups of stakeholders. The stakeholder concerns are identified and documented. The significant ESG issues identified through this process are reflected in the Report. Process to determine material topics can be improved in external stakeholders engagement.

### Sustainability Content

ESG Report provides an accurate and fair representation of the level of implementation of related ESG policy and meets the content requirements of the GRI Standards.

### Materiality

The process developed internally has not missed out any significant, known material issues, and these issues are fairly covered in the Report. A methodology has been developed to evaluate the priority of these issues.

### Completeness

The Report covers performance data against the GRI Standards indicators that are material within the Company's reporting boundary. The information in the Report includes the company's most significant initiatives or events that occurred in the reporting period. For the Climate-related Financial Disclosures, it is recommended to further analyze the specific financial impact to determine greenhouse gas emission reduction objectives and plans.

### Accuracy and Reliability

The Company has developed the data flow for capturing and reporting its ESG performance. In accordance with Moderate level assurance requirements, we conclude that no systematic errors were detected which causes us to believe that the specified ESG data and information presented in the Report is not reliable. To improve the data accuracy, more effort should be put in the process of verifying data from the overseas subsidiaries.

### For and on behalf of DNV Taiwan

Date: 20 May, 2024



Chun-Nan Lin  
Lead Verifier  
DNV – Business Assurance Taiwan  
Statement Number: C681576-2023-AG-TWN-DNV



David Hsieh  
Sustainability Service Manager,  
Greater China

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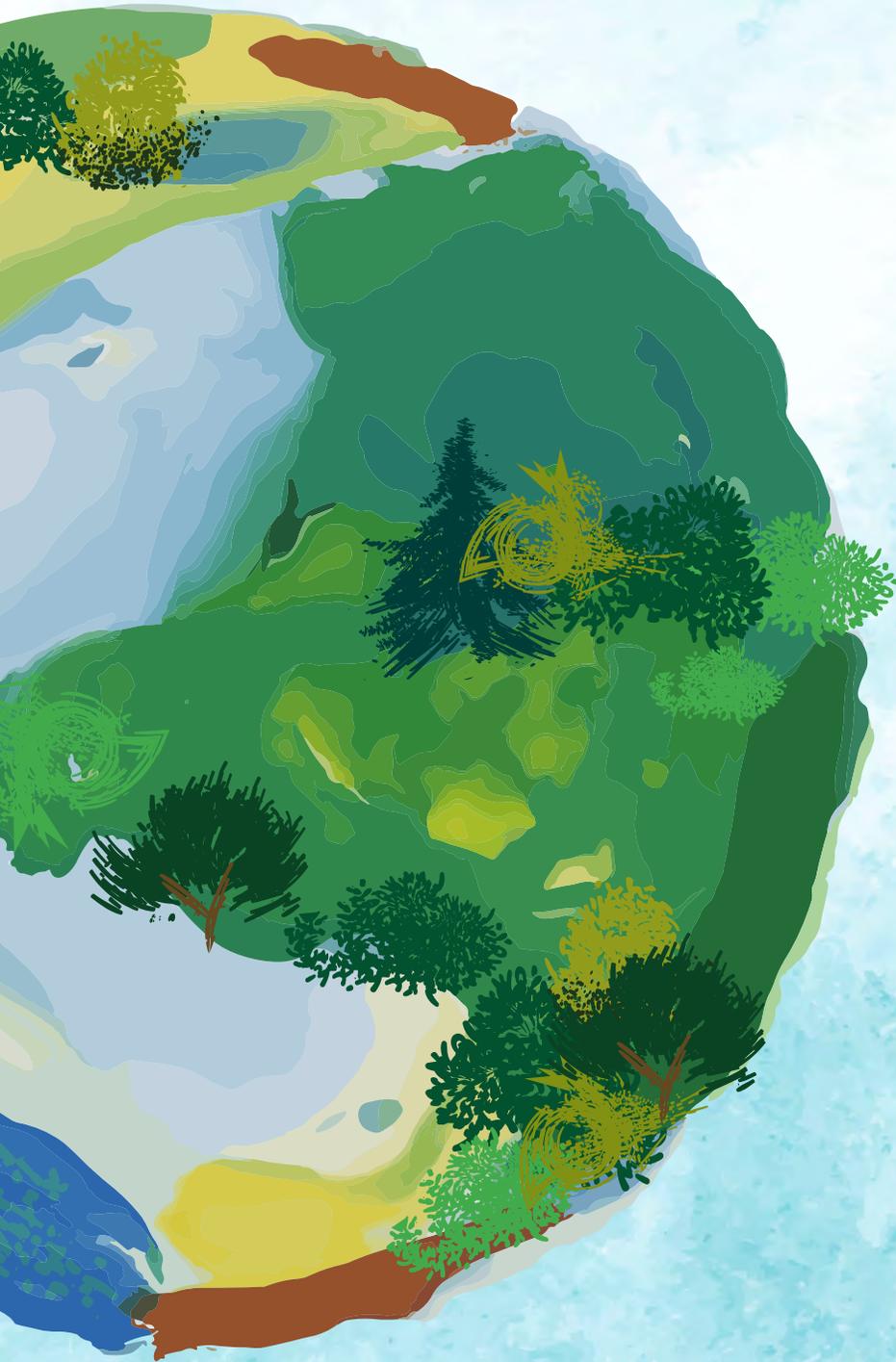
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