GlobalWafers Co., Ltd.

2021 Sustainability Report

CONTENTS

About This Report

Report Axis

GlobalWafers Co., Ltd. (hereinafter referred to as GlobalWafers) is a professional silicon 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 its 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 regarding the four aspects of corporate governance, economy, environment, and society, 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

Principal members of the sustainability 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 members of the Corporate Sustainable Development Committee have collected all relevant information and written the report and have the data in the report verified by the heads of all departments, it is then submitted to the Chairperson (Chairperson of the Corporate Sustainable Development Committee) for review, then finalized for publishing.

Reporting Standards

The content structure of this report primarily refers to the “Sustainability Reporting Standards” issued by the Global Reporting Initiative (GRI) and the core indicator item disclosures for semiconductor industry in the “Sustainability Accounting Standards” issued by the Sustainability Accounting Standards Board (SASB), as well as the “Taipei Exchange Rules Governing the Preparation and Filing of Sustainability Reports by TPEx Listed Companies” and the “Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies” to prepare the sustainability report. In addition, this report is also formulated pursuant to the Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies as well as the implementing 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

This report is the 5th Sustainability Report issued by GlobalWafers, which covers the period and scope as follows:

Publication time: June 2022

Coverage time: January 1, 2021 to December 31, 2021

Previous publication date: June 2021

Report revision: This report followed the standards to add sustainable accounting standards for semiconductor industry category indicators & adopts GRI306-2020

Reporting Scope

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

Economic performance

Covers all operations and production locations of GlobalWafers including GlobalWafers Headquarters, GlobalWafers Zhunan Plant, Taisil Branch, GlobalWafers Japan Co., Ltd., MEMC Japan Ltd., MEMC Korea Company, Kunshan Sino Silicon Technology Co., Ltd., MEMC Electronic Materials Sdn. Bhd., GlobiTech Incorporated., MEMC LLC, MEMC Electronic Materials S.p.A., Topsil GlobalWafers A/S, GlobalWafers Singapore Pte. Ltd., Financial data is verified by KPMG in accordance with International Financial Reporting Standards (IFRS), and the calculation unit is New Taiwan Dollar (NTD).

Environmental performance

All production bases except the Singapore office are included in the scope of environmental performance disclosure, and the statistics are collected by the responsible departments.

Social performance

Except for the staff statistical analysis covering the Singapore office, all other performance coverage is consistent with environmental performance, which is compiled by the respective responsibility departments. However, the scope of disclosure will be noted in the internal statistics since the data of some overseas bases are not yet complete. The contents of chapters 5.1.2 and 5.2 of regarding social aspects are mainly for the description of Taiwan, while the relevant statistics include overseas factories.

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

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' core 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:

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Sustainability Performance Overview

Aspects	Material topics	United Nations Sustainable Development Goals (SDGs)	2022 Target goals	2021 Target goals	2021's targets Achieve status		Short-term goals (1~3 years)	Medium-term goals (3~5 years)	Long-term goals (5~10 years)
Economic Aspect	Corporate governance	 	Maintain and reach the top 5% ranking in the OTC category for the corporate governance appraisal	Maintained the top 5% ranking in the OTC category for the corporate governance appraisal	Once again ranked the top 5% among all listed OTC companies in terms of corporate governance appraisal according to the 8th Taiwan Stock Exchange corporate governance evaluation results	Achieved	Continue to maintain ranking in the top 5% of all listed OTC companies for corporate governance appraisal	—	—
	Integrity and Ethics / Anti-corruption		No unethical or dishonest incident has occurred	No unethical or dishonest incident has occurred	No unethical or dishonest incident has occurred throughout the year	Achieved	Continue to maintain zero occurrence of unethical or dishonest incident	—	—
	Operational performance		Continuous profit	Continuous profit	Annual revenue EPS reached NT$27.27	Achieved	Continue to make profits & maintain a good financial structure (for sustainable growth)	—	—
			Maintain a good financial structure (maintain twAA- / twA-1+ in Taiwan Ratings)	Maintain a good financial structure	The Company's excellent operating capacity has also been awarded the long-term issuer's credit rating of "twAA-", short-term issuer's credit rating of "twA-1+", and the rating outlook of "stable" by Taiwan Ratings	Achieved	Continue to maintain the Company's long-term issuer's credit rating of "twAA-" and short-term issuer's credit rating of "twA-1+" by Taiwan Ratings	—	—
	Legal Compliance		Inspect and revise relevant internal regulations on labor, environmental safety, anti-bribery and anti-corruption, anti-monopoly, whistleblower protection mechanism, export control (US Export Administration Regulations), etc., of overseas subsidiaries	Complete inventory and improvement of internal regulations compliance for all departments in Taiwan	Complete inventory and improvement of internal regulations compliance for all departments in Taiwan	Achieved	Inspect and revise relevant internal regulations on labor, environmental safety, anti-bribery and anti-corruption, anti-monopoly, whistleblower protection mechanism, export control (US Export Administration Regulations), etc., of overseas subsidiaries	—	—
Environmental Aspect	Energy resource consumption and greenhouse gas emissions reduction	 	Electricity unit energy consumption reduction ≧ 2%	Electricity unit energy consumption reduction ≧ 1%	7.1 % reduction in energy consumption per unit of electricity from plants worldwide	Achieved	Compared to 2019: 2023 energy unit consumption reduction ≧ 3%	Compared to 2019: 2025 energy unit consumption reduction ≧ 5%	Compared to 2019: 2030 energy unit consumption reduction ≧ 10%
			Greenhouse gas unit emission reduction ≧ 2%	Greenhouse gas unit emission reduction ≧ 1%	8.2% reduction in greenhouse gas emissions per unit from plants worldwide	Achieved	Compared to 2019: 2023 greenhouse gas unit emission reduction ≧ 3% (Only indirect carbon emissions caused by electricity purchase was calculate)	Compared to 2019: 2025 greenhouse gas unit emission reduction ≧ 5 % (Only indirect carbon emissions caused by electricity purchase was calculate)	Compared to 2019: 2030 greenhouse gas unit emission reduction ≧ 10 % (Only indirect carbon emissions caused by electricity purchase was calculate)
			Water unit consumption reduction ≧ 2%	Water unit consumption reduction ≧ 1%	Water unit consumption for plants worldwide reduced by 16.1%	Achieved	Compared to 2019: 2023 water unit consumption reduction ≧ 3%	Compared to 2019: 2025 water unit consumption reduction ≧ 5 %	Compared to 2019: 2030 water unit consumption reduction ≧ 10 %
	Pollution prevention		0 abnormal incident was reported to the competent authority	Notification of abnormal incidents to the competent authority ≦ 1 incident	No pollution prevention related abnormal incident	Achieved	Continue to maintain zero pollution prevention related abnormal incident for the Company		

Aspects	Material topics	United Nations Sustainable Development Goals (SDGs)	2022 Target goals	2021 Target goals	2021's targets Achieve status		Short-term goals (1~3 years)	Medium-term goals (3~5 years)	Long-term goals (5~10 years)
	Waste Management	11, 12	Waste management (recycling and reuse treatment ratio for the total waste volume) cumulatively increased to 82%	Waste management (recycling and reuse treatment ratio for the total waste volume) cumulatively increased to 81%	Waste management (recycling and reuse treatment ratio for the total waste volume) cumulatively increased to 82.3%	Achieved	Compared to 2019: 2023 waste management (recycling and reuse treatment ratio for the total waste volume) cumulatively increased to 83%	Compared to 2019: 2025 waste management (recycling and reuse treatment ratio for the total waste volume) cumulatively increased to 85 %	Compared to 2019: 2030 waste management (recycling and reuse treatment ratio for the total waste volume) cumulatively increased to 90 %
Social Aspect	Employee education & training		The average education and training hours for the Group's employees was 16 hours	The number of trainees in annual training courses has grown by ≧ 3%	The number of trainees in annual training courses has grown by ≧ 3%	Achieved	The average education and training hours for the Group's employees was 16 hours	—	—
			100% of new recruits have received orientation education and training	100% of new recruits complete the workplace bullying and sexual harassment prevention education and training within 30 days of employment	New recruits failed to complete the specified education and training within 30 days due to COVID-19	Not achieved	100% of new recruits have received orientation education and training	—	—
	Friendly workplace (including issues like occupational safety and hygiene, occupational health)	4	100% of new recruits have completed workplace violence education and training within 30 days of arrival	—	—	—	100% of new recruits have completed workplace violence education and training within 30 days of arrival	—	—
			Environmental safety, emergency rescue, disaster prevention drills, and other education and training courses are held at least once every six months	—	—	—	Environmental safety, emergency rescue, disaster prevention drills, and other education and training courses are held at least once every six months	—	—
			All employees receive CSR-related education and training at least once a year	—	—	—	All employees receive CSR-related education and training at least once a year	—	—
		8	0 work-related ill health	0 work-related ill health	No work-related ill health case occurred	Achieved	Maintain zero work-related ill health for the Company	—	—
			0 major occupational disaster	0 major occupational disaster	No major occupational disaster occurred throughout the year	Achieved	Maintain zero major occupational disaster for the Company	—	—
		5	—	0 human rights related dispute	No human rights related dispute occurred throughout the year	Achieved	—	—	—
			—	Reduce labor salary dispute	Zero labor salary dispute occurred throughout the year	Achieved	—	—	—
	Product quality and customer satisfaction	9, 17	Continuously improve quality and focus on product development to enhance customer satisfaction	Continuously improve quality and focus on product development to enhance customer satisfaction	Customer satisfaction with quality and product development for the year is > 80 points	Achieved	Continue to improve quality and focus on product development for the Company in order to enhance customer satisfaction	—	—

Note: In the table, "—" means there is no target set for the year

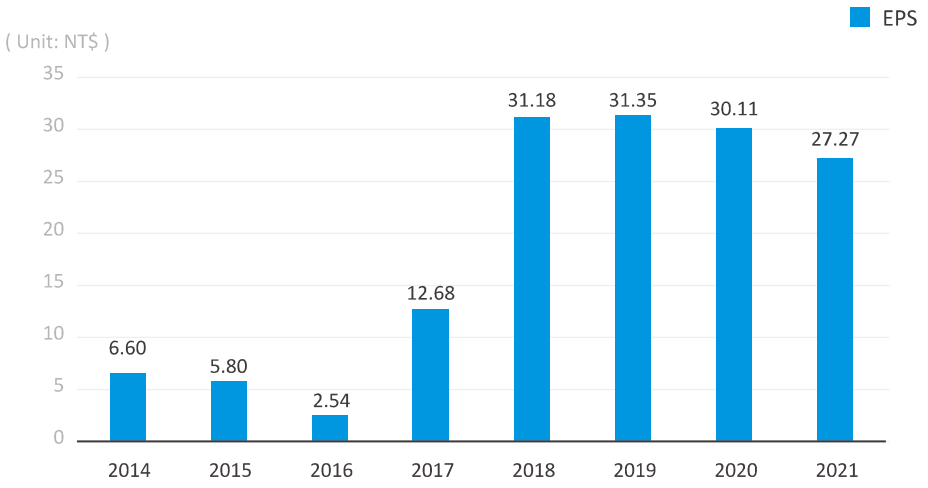
Economic Aspect

Corporate Governance KPI

Information disclosure and corporate governance appraisal and rating of TWSE listed companies

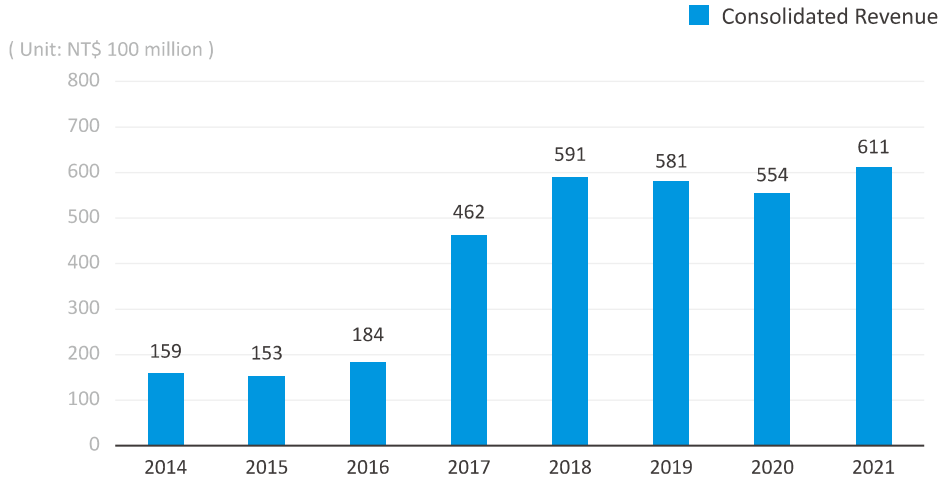
- 2016: Ranking in the top 20% of all listed OTC companies in the 3th corporate governance appraisal
- 2017: Ranking in the top 20% of all listed OTC companies in the 4th corporate governance appraisal
- 2018: Ranking in the top 5% of all listed OTC companies in the 5th corporate governance appraisal
- 2019: Ranking in the top 5% of all listed OTC companies in the 6th corporate governance appraisal
- 2020: Ranking in the top 5% of all listed OTC companies in the 7th corporate governance appraisal
- 2021: Ranking in the top 5% of all listed OTC companies in the 8th corporate governance appraisal

EPS

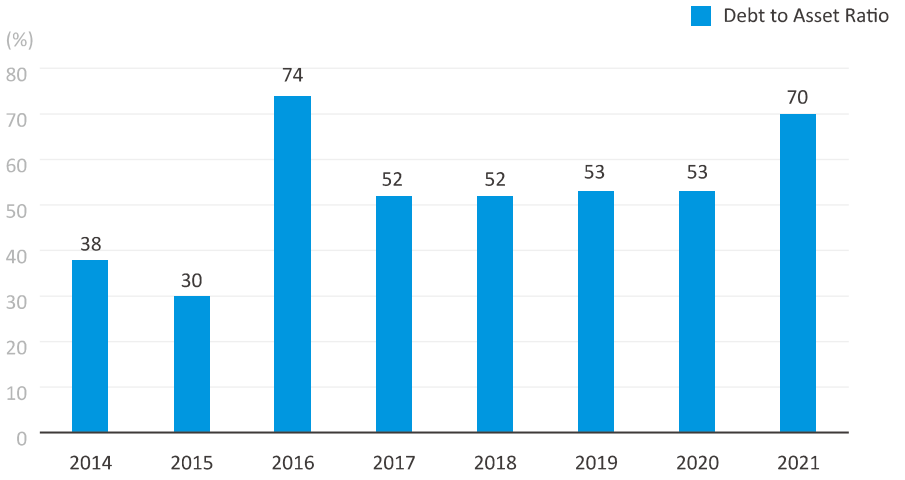


Key Economic Indicators

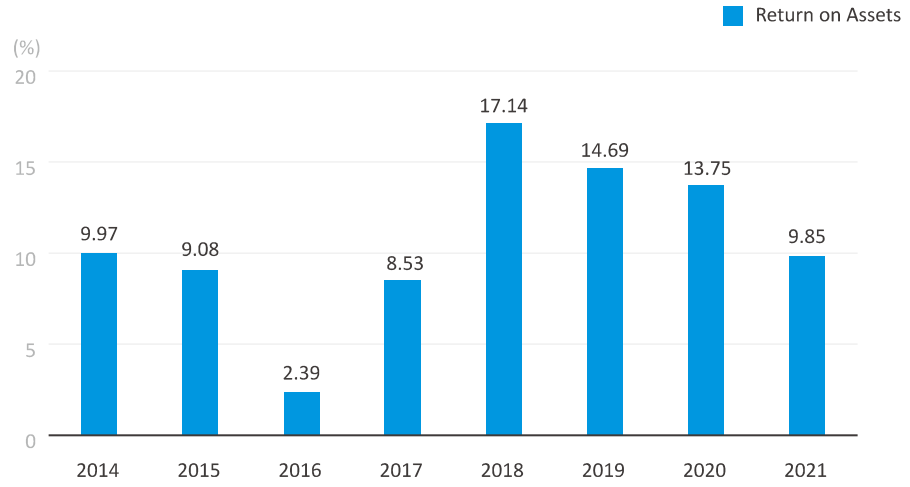
Revenue



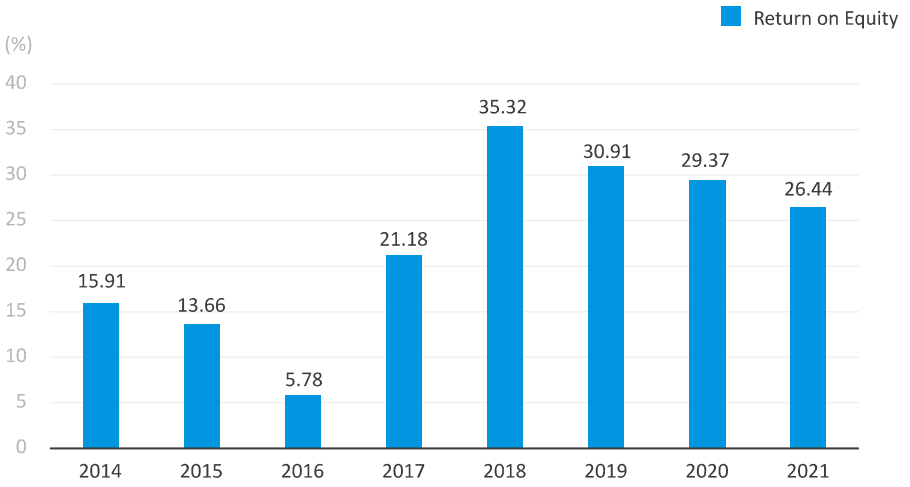
Debt to Asset Ratio



Return on assets



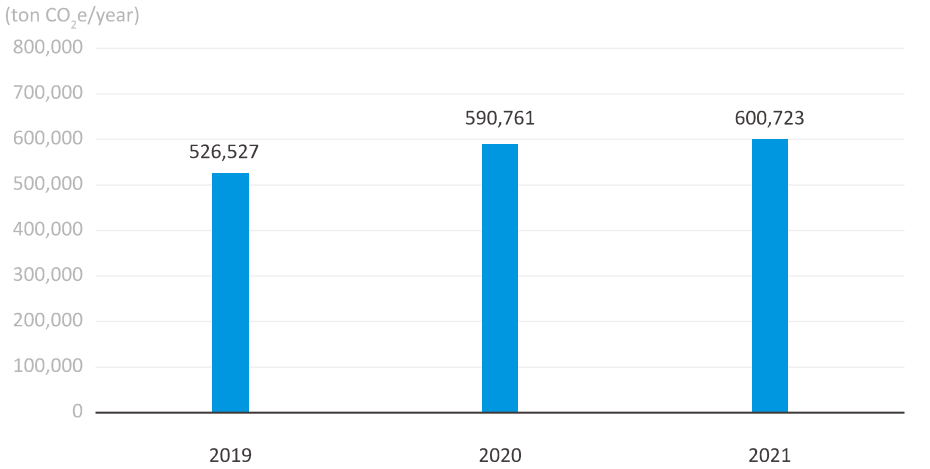
Return on Equity



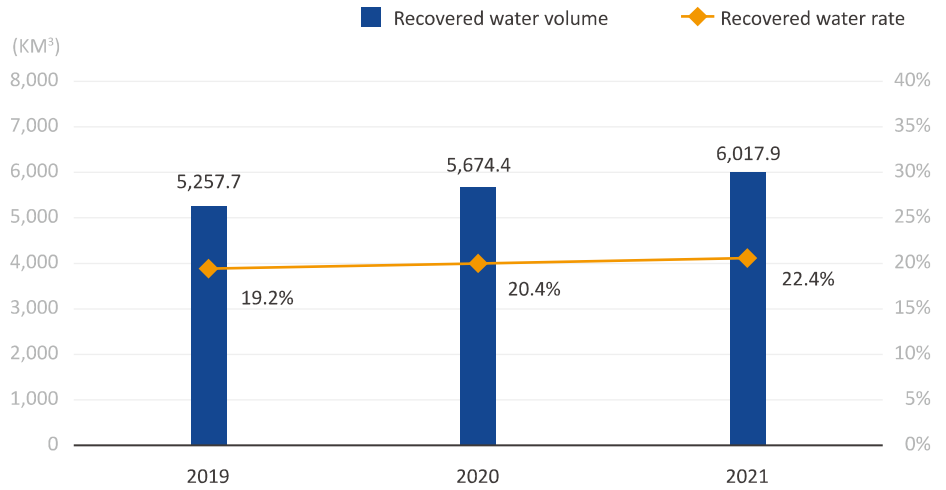
Environmental Aspect

Environment Performance KPI

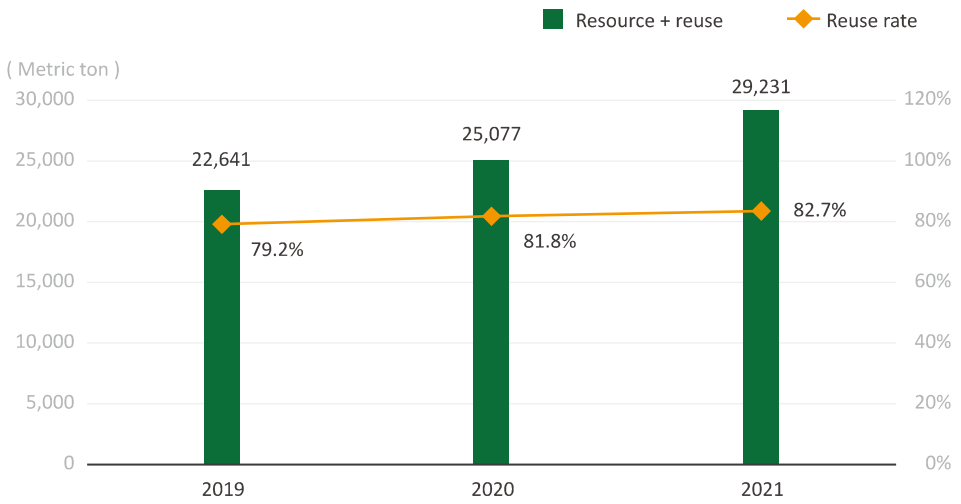
Carbon dioxide equivalent emissions (category 1~2)



Water Recovery



Reused Recycled Waste

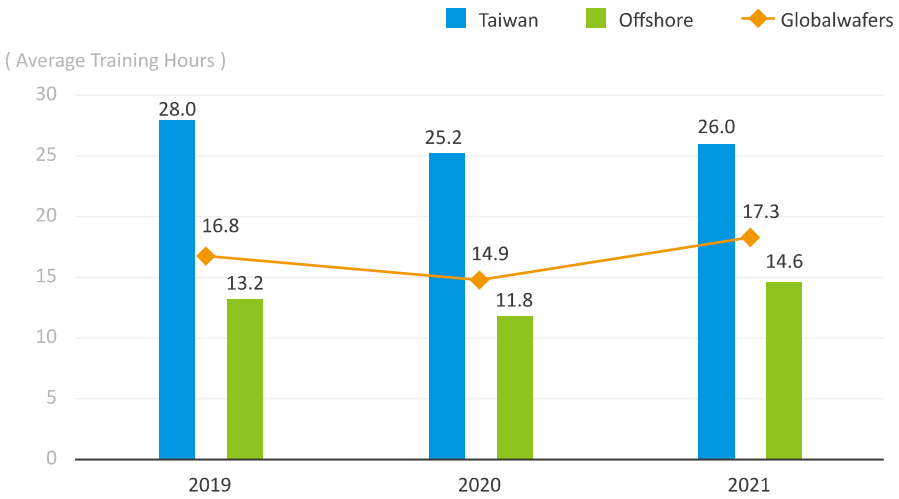


0 Human Rights Complaints

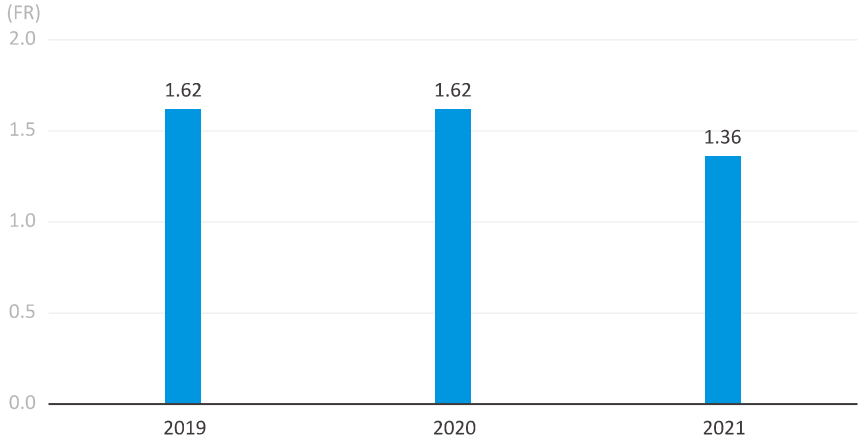
Social Aspect

Social KPI

Average Training Hours per Employee



Disabling Frequency Rate



2021

SDGs In GlobalWafers

Economic growth

- Maintain top 5% ranking in the OTC category for corporate governance appraisal
- Received long-term credit issuer rating of twAA-/twA-1+ from Taiwan Ratings
- Top 10 Constituents of "Taiwan OTC Sustainability (ESG) Index"
- Ranks among the top 100 companies in the Asian supply chain by market capitalization by DIGITIMES

Environmental protection

- Commitment to 100% renewable energy usage by 2050
- Water consumption per unit in the global region decreased by 16.1% compared with 2020
- Electricity consumption per unit in the global region decreased by 7.1% compared with 2020
- The recycling rate of business waste resources in the global region reached 82.3%

Social welfare

- Social welfare investment amount in Taiwan NT$1,817,800
- The Korean factory established a women's leadership committee
- The Japanese factory won the highest three star Eruboshi label honor
- Donate NTD 1 mn scholarship program for Ukrainian students to the office of International Affairs in National Yang Ming Chiao Tung University

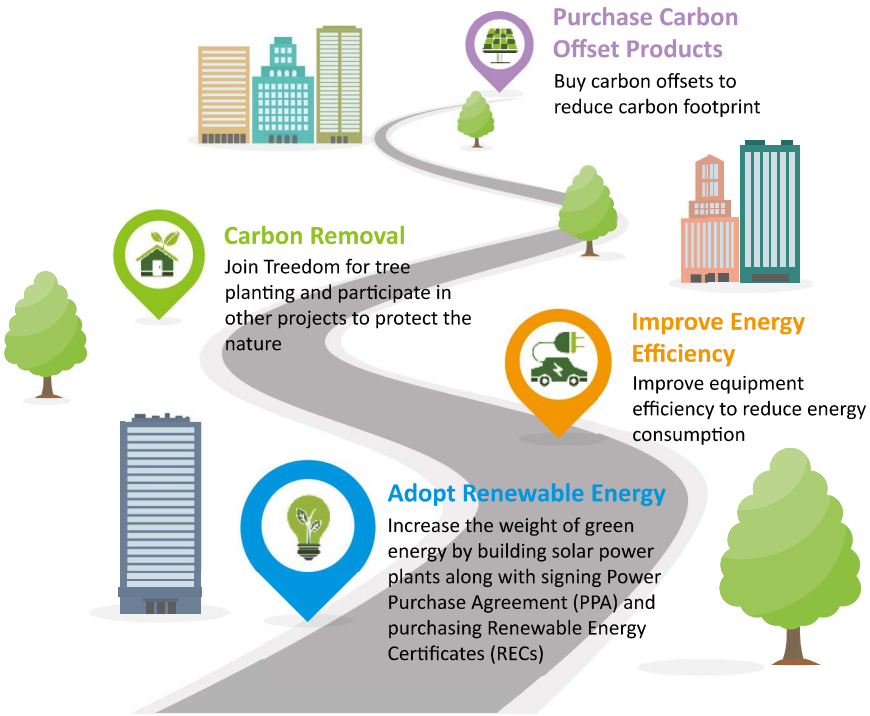
Message from the Chairperson

A review of 2021 shows that the frequency of extreme weather is increasing, Taiwan is facing the worst drought in half a century, the increase in electricity consumption in hot weather also brings power shortage concerns, the supply chain disruptions caused by COVID-19, and the global transportation upheavals have posed major challenges. To achieve carbon neutrality, many countries have proposed a carbon tariff mechanism to force companies to take responsibility for the carbon footprint of their products. These actions highlight the importance of Environmental, Social, and Governance (ESG) importance and have become the key to sustainable business operations.

※ Sustainability Commitment - 100% renewable energy by 2050

GlobalWafers dedicates in supporting Taiwan net-zero transition with practical actions, pledging all subsidiaries of the group to use 100% renewable energy by 2050. Semiconductor wafer manufacturing consumes power heavily, GlobalWafers devotes to increasing the weight of green energy by implementing the profound experiences of Sino-American Silicon Products Inc., the parent Company, in building solar power plants along with signing Power Purchase Agreement (PPA) and purchasing Renewable Energy Certificates (RECs), supplemented by the climate blueprint: 20% by 2030, 35% by 2035, and 50% by 2040 usage ratio of renewable energy, gradually achieves the long-term goal of 100% renewable energy usage by 2050 to reduce the carbon emissions from electricity consumption and contributes to the sustainable environment.

Detailed measures include the following:



※ Actively address climate change challenges

GlobalWafers deeply understands the impact and constraints of climate change on the operating environment and has taken the risk factors into account when making operational decisions.

◎ Water shortage response

The seasonal typhoon that brought abundant rainfall to Taiwan in the past did not make landfall last year, and it has plunged Taiwan into its worst drought in half a century. In response to the high water consumption required by the semiconductor process, GlobalWafers has swiftly implemented emergency plans to combat water scarcity. Through active water conservation measures and management, GlobalWafers has successfully addressed the water shortage crisis, avoided production interruption, and supplied global customers stably.

◎ Green electricity

Semiconductor manufacturing relies on a stable power supply. GlobalWafers has several solar power plants and is committed to increasing the green power weight. As of 2021, the accumulated solar energy capacity reached 19.8 MW, generating 24.04 million kWh of electricity and reducing carbon emissions by 12,000 tons per year (equivalent to the carbon absorption of 31 Daan Forest Parks).

※ Building resilient supply chains

Geopolitical conflicts and the spread of COVID-19 have disrupted international supply chains. The border closures and terminal shutdowns have also interrupted production and commercial activities. The semiconductor industry is one of the most complex international supply chains. Suppliers of different levels are located in different countries, subject to different epidemic prevention policies and climate change impacts.

GlobalWafers has actively constructed a resilient supply chain to reduce external shocks and adapts to changes as follows:

◎ Localized production and establishing regional ecosystems

GlobalWafers has 17 operating and production bases in 9 countries worldwide, spanning across Asia, Europe, and the United States. Local supply effectively reduces the environmental cost of long-distance transportation, lowers geopolitical impact and macroeconomic volatility, and provides excellent production flexibility to serve the customer.

◎ Build multiple suppliers to diversify supply risks

To avoid the supply chain interruption caused by over-reliance on single supplier, GlobalWafers has established multiple key raw material suppliers and invited the suppliers to join the sustainability alliance for producing low-carbon green products to avoid material shortages and production interruptions. GlobalWafers has also monitored the global transportation system to actively deploy air and ocean freight to prevent import and export blockades or port congestion crisis.

◎ Automated production and improved chain interruption immunity

GlobalWafers has introduced automated production via Big Data, AI, and robotic arm to reduce the proportion of manual operations, monitors the manufacturing process in digital mode, flexibly mobilizes the workforce, quickly initiates WFH (work from home) during epidemic crises, and swiftly responds to quarantine and shutdowns caused by COVID-19.

※ Sincere care for employees to protect physical and mental health

◎ Health care

Employees are the most cherished assets of the Company. During the epidemic, GlobalWafers has actively kept abreast of the latest information to strengthen the health awareness of colleagues, conducted risk assessments, formulated countermeasures, strengthened epidemic prevention measures, implemented employee health monitoring, strengthened health promotion, provided real-time world epidemic information, arranged for employees to work in shifts, and reduced the number of people in confined spaces to establish comprehensive epidemic prevention and health network for each employee. GlobalWafers has shared vaccine appointment information in real-time in collaboration with the government's epidemic prevention plan and established incentive to encourage employees to get vaccinated, actively monitored the progress and coverage rate of vaccine administration, and arranged for medical staff to come to the factory to give employees collective influenza vaccine injections to reduce complications. We also commissioned occupational medicine specialists to visit the factory monthly to help prevent occupational diseases.

Moreover, GlobalWafers also partners with the Hsinchu Lifeline Association to provide free professional consultations for colleagues. The Multi-faceted professional services offered include career, psychological, management, health, legal, and financial consultation to protect the health of colleagues comprehensively.

◎ Employee welfare program

GlobalWafers has motivated employees to improve productivity through sincere care for the employees' well-being and enabled employees to work together with the Company to move forward.

GlobalWafers has formulated 4 employee well-being plans through resource integration and organization, including workplace environment, physical and mental health, living resources, and welfare measures. The goal is to strengthen team cohesion and team spirit.

Workplace environment
Create a flexible and positive work environment.

Physical and mental health
Maintain the physical and mental health of employees.

Life resources
Legal advice, group insurance, and allowances are provided.

Welfare measures
Ample welfare measures, increase the economic security of employees, and enhance the motivation of work and life.

※ Give Back to Society

◎ Volunteering– Kindness Matters

GlobalWafers has formed a common goal of mutual assistance and sharing through irregular volunteer services to help create a better tomorrow.

Our activities include “Fundraising for Disabled Elders to Bathe at Home,” “Classes for Rural Areas,” and “Breakfast Donation.” We can specifically respond to those in need and provide assistance to pursue a better society through charity activities.

◎ Sharing - Make a Difference

GlobalWafers encourages employees to pass on the love by giving back to society and caring for disadvantaged groups to help create a better world.

Our community services include giving Christmas gifts to disadvantaged children, fundraising for seniors living alone, and assisting with remote school renovations, beach cleanups, and eco-tours. The goal is to encourage employees and their families and friends to implement environmental conservation and raise their environmental awareness through these activities.

The following is a list of GlobalWafers’ efforts in 2021

Our environmental sustainability achievements include:

In 2021,7.1 % reduction in energy consumption per unit of electricity from sites worldwide

In 2021,8.2% reduction in greenhouse gas emissions per unit from sites worldwide

In 2021, Water unit consumption from worldwide sites reduced by 16.1%

The waste management (recycling and reuse treatment ratio for the total waste volume) cumulatively increased to 82.3% in 2021

In 2021, No reporting for abnormal pollution incident

Japan subsidiary, MEMC Japan Ltd., (MJL) was awarded the “Eruboshi” label for active female staff participation and career advancement

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

Won Gold Tower Award for the “2021 Taiwan Continuous Improvement Competition” held by the Corporate Synergy Development Center

Installed solar panels in cooperation with parent company SAS. As of 2021, the accumulated solar energy capacity reached 19.8 MW, which can generate 24.04 million kWh of electricity and reduce carbon emissions by 12,000 tons per year (equivalent to the carbon absorption of 31 Daan Forest Parks)

The Company has also participated in the Treedom social innovation platform to plant forests in Africa and Central and South America to absorb CO2 and fund local communities

Friendly workplace
- 0 work-related ill health
- 0 major occupational disaster
- 0 human rights related dispute
- Reduce labor salary dispute

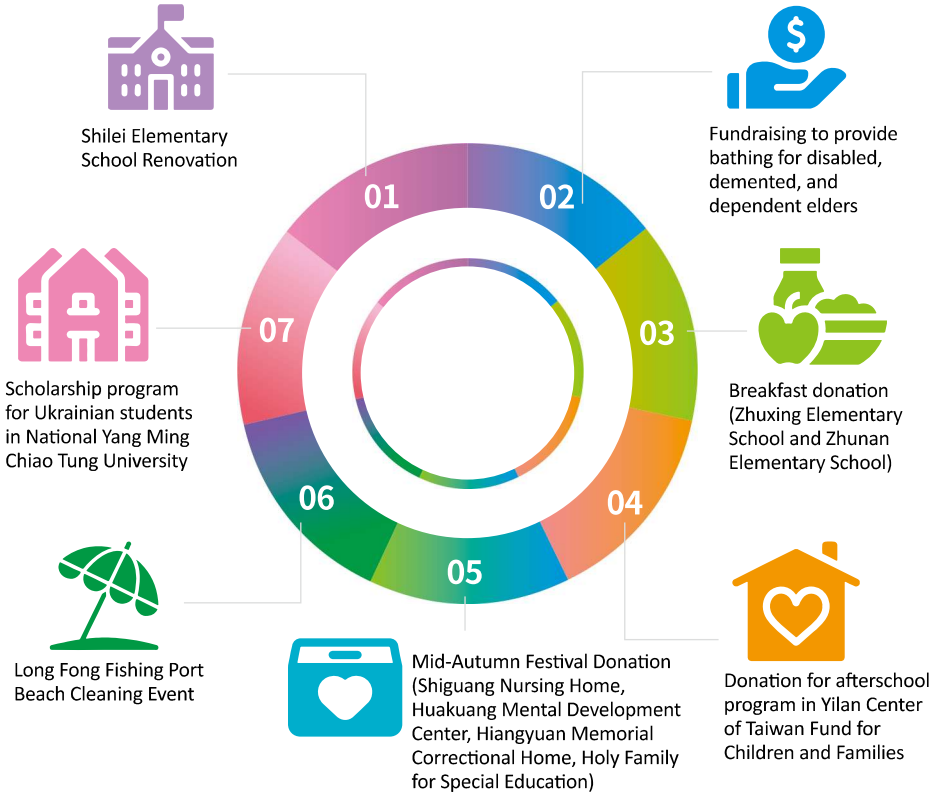
In terms of corporate governance, our actions include:

01 Won the top 5% OTC company ranking in the 8th Corporate Governance Evaluation

02 No unethical or dishonest incident occurred in 2021

03 Completed the inventory and improvement of internal regulations for all departments in Taiwan to ensure legal compliance

Our actions in caring for society include:



Responsible growth is the operating principle of GlobalWafers. We are committed to becoming a global benchmark in three aspects: environmental protection, health and safety, and corporate governance. GlobalWafers will remind itself not to forget the social responsibility while increasing profitability, and maintain the cycle of altruism while expanding its operating scale. Each person is a starting point of something wonderful, and the power of the enterprise can magnify care and warmth to build a sustainable and harmonious society.

Chairperson and CEO of GlobalWafers

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 have extended through 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) span off was from SAS and became an independent company 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 has successfully advanced from CZ to FZ wafer, product portfolio includes large-size epiwafers, polished silicon wafers, silicon-on-insulator wafers, annealed silicon wafers, and SOI wafers... With its unparallel operating model, market advantages, diversified product supply, as well as the global bases and R&D capabilities, GlolbalWafers establishes a comprehensive product line along with global presence in 17 operation and production bases that are strategically distributed throughout 9 countries in Asia, Europe, and the United States. GlobalWafers has comprehensive product combination 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 members.

Product Portfolio	WaferDiameter (Inches) <6”	6”	8”	12”	End-applications			
Annealed Wafer			✔	✔	Memory	LCD Driver	Analog/Logic IC	
EPI Wafer (Epitaxial)	✔	✔	✔	✔	Power Device	Automobile	MPU/MCU	CMOS Image Sensor
PolishedWafer	✔	✔	✔	✔	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
SOIWafer (Silicon on Insulator)	✔	✔	✔	✔	High Voltage Power	MEMS SensorCMOS	CMOS	RF Device Photonics
SiCWafer (Silicon Carbide)	✔	✔			Automobile	High Voltage Power	High Speed Rail	Wind Turbine
GaN/Si, GaN/SiC (Gallium Nitride)	✔	✔	✔		Solar Inverter	Power Supplies	RF Power	

GlobalWafers has improved its operating performance by strengthening its resource integration benefits via strategic industry alliances and 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 that focuses on maximizing shareholder benefits. GlobalWafers will continue to cultivate its existing core technologies, further implement product and enterprise diversification, and actively increase its global market share in order to advance its global leading position in the wafer manufacturing field.

Basic Info of GlobalWafers

Basic Info of GlobalWafers

Company Name
GlobalWafers Co., Ltd.

Main Product and Technology
3-inch to 12-inch Silicon Wafer

President
Mark Lynn England

Date of Establishment
October 18, 2011

No. of Employees*
Taiwan: 1,674 employees;
overseas: 5,421 employees

Headquarters
Hsinchu Science Park, No. 8, Industry East 2nd Road, East District, Hsinchu City, 300

Capital
NT$4.373 billion

Chairperson & CEO
Doris Hsu / Hsiu-lan Hsu

Countries of Operation
Taiwan, China, Japan, South Korea, Malaysia, United States, Italy, Denmark, Singapore

*The number of employees is based on the December 31, 2021 statistical data

Operation & manufacturing bases

GlobalWafers is headquartered in Hsinchu with production and operational bases 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.

01 Taiwan
(GlobalWafers eadquarters)
GlobalWafers Chunan Plant
GlobalWafers Taisil Branch

02 China
Kunshan Zhongchen Silicon Co., Ltd.

03 Japan
GlobalWafers Japan Co., Ltd.
MEMC Japan Ltd.

04 South Korea
MEMC Korea Company

05 Malaysia
MEMC Electronic, Materials Sdn. Bhd.

06 US
GlobiTech Incorporated.
MEMC LLC

07 Italy
MEMC Electronic Materials, S.p.A.

08 Denmark
Topsil GlobalWafers A/S

09. Singapore
GlobalWafers Singapore, Pte. Ltd.

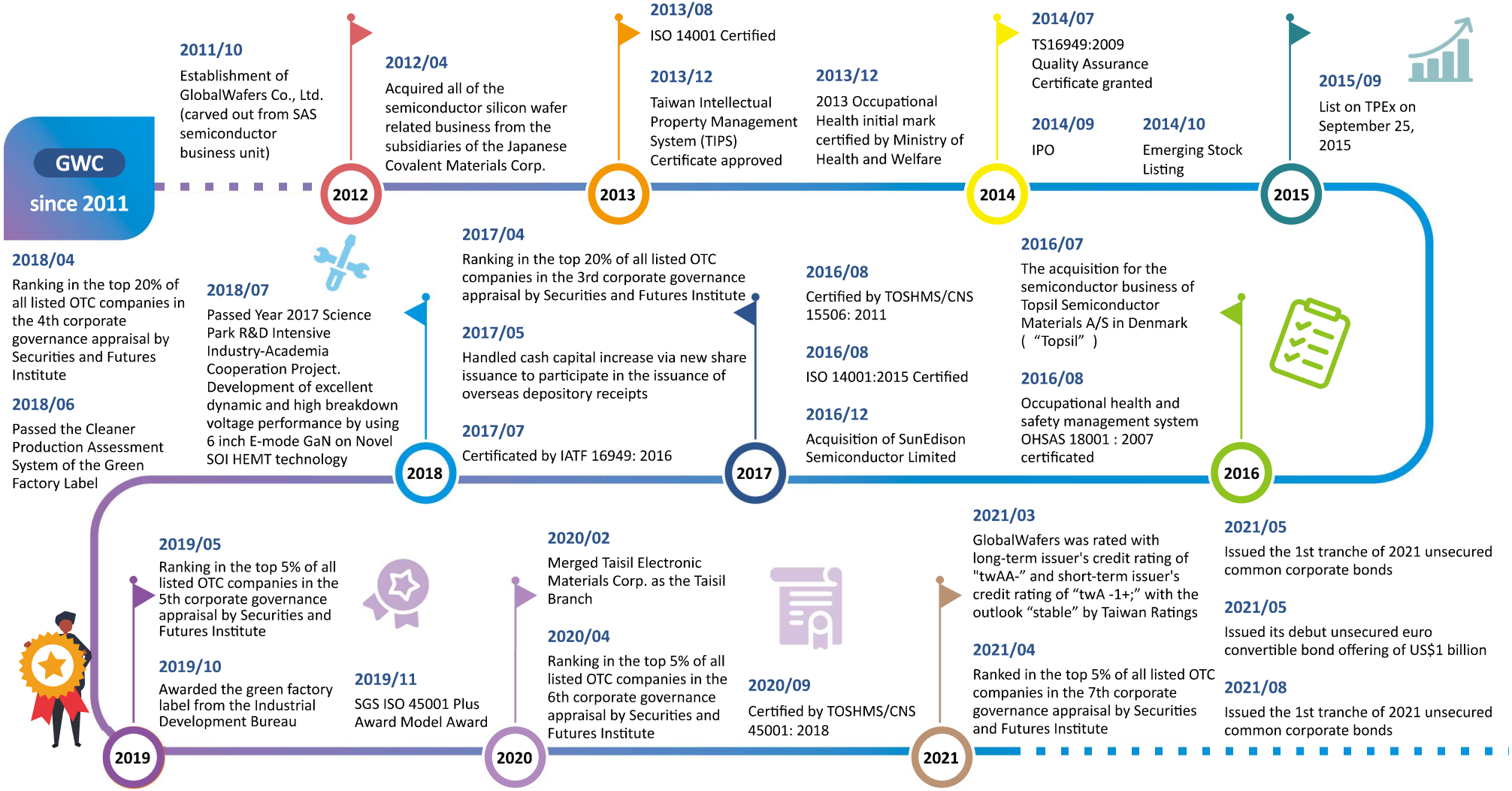
Participation in external associations

Association/organization	Participant	Member	Member
Taiwan Semiconductor Industry Association (TSIA)		●	
SEMI	●	●	Vice Chairman
SEMI SMG		●	
High Power Device application and Research Allianc		●	
Allied Association for Science Park Industries		●	
Institute of Internal Auditors (IIA)-Taiwan Chapter		●	
Computer Audit Association		●	
Taiwan Business Council for Sustainable Development		●	
Taiwan Compound Semiconductor and Equipment Industry-Academia Alliance	●	●	Chairman
Spring Foundation of National Chiao Tung University		●	Director
Japan Society of Newer Metals	●	●	
Malaysian Employers Federation (MEF)		●	Chairman
Federation of Malaysian Manufacturers (FMM)		●	
National Institute of Occupational Safety & Health (NIOSH)		●	
The Korea Chamber of Commerce & Industry		●	

Association/organization	Participant	Member	Member
Korea Envrionmental Preservation Association		●	
Korea Industrial Safety Association		●	
Korean Nurses Association		●	Director of the Chungnam Province
Korea Fire Safety Association		●	
Local Industrial Association		●	
Local Industrial Park Association	●	●	Director
Industrial Environmental Management Association		●	
Occupational Safety and Health Association		●	
Industrial Water Management Association		●	
Industrial Wastewater Management Association		●	
Fire Safety Association		●	
LEPC - Local Emergency Planning Commissioin		●	
Sherman Safety Leaders Forum		●	
Sherman HR Networking Team		●	

Company chronology

Milestone



Award Record

2011/12
Granted Taiwanese Entrepreneur President Excellence Award from 29th Chinese Professional Management Association

2013/12
Certified Healthy Work Environment

2016/08
TOSHMS/CNS 15506：2011 Certified

2016/08
OHSAS 18001: 2007 Certified

2017/05
The Outstanding Cooperation Supplier Award ' From HHGrace

2017/07
IATF 16949 : 2016 Quality Management System Certified

2017/12
Acquisition of SunEdison Semiconductor Limited won the Most Representative Award by MAPECT Taiwan as well as the Best Cross-border M&A Award

2018/06
Passed the Cleaner Production Assessment System of the Green Factory Label

2018/12
Granted Excellent President Award from 36th Chinese Professional Management Association

2011 | 2012 | 2013 | 2016 | 2017 | 2018

2012/09
2012 Parent company Sino-American Silicon’ s Covalent acquisition is granted 2012 Most Representative Award by MAPECT Taiwan

2016/06
Recognized for excellent performance in energy conservation by Bureau of Energy, MOEA

2016/08
ISO 14001: 2015 Certified

2017/06
The Front End Direct Materials Supplier of the Year Award from ON Semiconductor

2017/12
VP C.W. Lee awarded certificate of appreciation from SEMI SMG

2018/01
GlobalWafers Awarded Triple A Country Award Taiwan 2017– Best GDR by The Asset

2018/11
Awarded 1 Gold Tower, 2 Silver Towers & 1 Copper Tower from Corporate Synergy Development Center on the 31th OCC competition

2019/01
GlobalWafers passed the green building certification and won the gold medal

2019/10
Awarded the green factory label from the Industrial Development Bureau

2019/12
Won the Gold Tower Award for the “2019 Taiwan Continuous Improvement Competition” held by the Corporate Synergy Development Center

2020/04
Finalist for the top 5% listed companies in the 6th Corporate Governance Evaluation

2020/09
Certified by CNS 45001: 2018

2020/09
Taisil Branch won the SGS ISO 45001 Plus Award Model Award

2021/03
The Utsunomiya Factory (MJL) was awarded the “Eruboshi” label for the business promoting female participation and career advancement in the workplace

2021/04
Finalist for the top 5% listed companies in the 7th Corporate Governance Evaluation

2021/12
Mr. Ming-huei Chien, CFO, was awarded the “Excellent Manager Award - CFO” from the 39th Chinese Professional Management Association

2019 | 2020 | 2021

2019/05
Won the 2019 Technology Industry Happy Enterprise Award

2019/05
Ranking in the top 5% of all listed OTC companies in the 5th corporate governance appraisal by Securities and Futures Institute

2019/07
Won the Best Quality Award from HHGrace

2019/11
SGS ISO 45001 Plus Award Model Award

2019/12
GlobalWafers’ subsidiary Taisil Electronic Materials won the Gold Tower Award for the “2019 Taiwan Continuous Improvement Competition” held by the Corporate Synergy Development Center

2020/09
Enthusiastically assisted in the 2020 Hsinchu Science Park Industrial Safety and Environmental Protection Month Event

2020/09
GlobalWafers’ Hsinchu and Zhunan plants both won the 2020 Annual Waste Reduction and Circular Economy Outstanding Enterprise Award

2020/12
Won the Gold Tower Award and the Silver Tower Award for the “2020 Taiwan Continuous Improvement Competition” held by the Corporate

2021/05
Ranked among the top 100 companies by Commonwealth Magazine in 2020

2021/11
Awarded the Copper Award of the "Third Term of National Enterprise Environmental Protection Award" from the Environmental Protection Administration, Executive Yuan

2021/11
Awarded the Best Trading Contribution in the 2021 “Awards for Excellent Trading Businesses,” from the Bureau of Foreign Trade, MOEA

2021/12
Won the Gold Tower Award for the “2021 Taiwan Continuous Improvement Competition” held by the Corporate Synergy Development Center

01

Stakeholder Engagement & Analysis 19

1.1 Stakeholders identification

Identifying and communicating with stakeholders is at the core of corporate social responsibility. Based on operational characteristics and cross-departmental discussions, GlobalWafers has identified its stakeholders that include staff members, customers, shareholders (investors) and suppliers (contractors), governmental departments, and the media.

1.2 Stakeholder engagement and response

GlobalWafers has established all kinds of communication channels in its daily operations to maintain inter-communication with stakeholders. A mailbox and a customer service hotline for external communication have also been set up on the Company website to collect opinions of our primary stakeholders related to our management & activities, i.e. investors, customers, media, and so on.

Primary stakeholders	Significance to GlobalWafers	Communication channel	Communication frequency	Issues of concern	Our Responses
 Customers	Company's main source of revenue	Operation meetings	Non-scheduled	◆ Service ◆ Quality & price ◆ Hazardous substances management ◆ Business continuity planning	※ Adhere to the spirit of "customer satisfaction." The quality assurance unit must conduct interviews and propose the corresponding improvement plan for customer survey items with lower satisfaction. ※ Actively understand customer voices. When customers make various demands, the organization must evaluate and discuss feasible solutions to "meet the requirements."
		Annual customer satisfaction survey	Once a year		
		Customer audit	Non-scheduled		
		Appeal/complaints telephone or email	Non-scheduled		
 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	Non-scheduled	◆ Occupational safety ◆ Human rights ◆ Emergency & Contingency ◆ Job opportunities ◆ Equal pay between men and women	※ 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 internal website, complaint mailbox, labor conference, and face-to-face talks to ensure the employees' voices are valued. ※ To attract and retain outstanding talents, the Company offers competitive salaries and sets the salary adjustment standards yearly according to the relevant data. ※ The Company sets up a staff restaurant to provide free meals for employees during work. In addition to the statutory labor and health insurance, the Company also provides group insurance superior to those 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: provide 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. ※ 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.
		Company bulletin board	Non-scheduled		
		Labor Conference (Taiwan)	Four meetings per year		
		Complaint boxes or hotlines	Non-scheduled		
		Performance appraisal interviews	Once a year		
		All organizational meetings	Non-scheduled		
		Union member meeting	Non-scheduled		
 Shareholder/ Investor	All shareholders are investors of the Company, and the information that should be disclosed shall be handled in a fair manner	Shareholders meeting, institutional investors conference, domestic investment institute seminars, and face-to-face communication meetings	2021: a total of 4 earnings call	◆ Sound finance ◆ Integrity & Ethics ◆ Risks & Crisis Management ◆ Financial performance ◆ Management strategies & financial goals ◆ Legal Compliance ◆ Business continuity planning	※ Continue using our stable financial structure and rich management experience to practice performance management and operational improvement, improving overall operational performance. ※ Establish and strengthen close interaction and communication channels with investors, domestic and foreign media, cooperation, and major shareholders. ※ Continue improving corporate governance performance and realize the commitment to sustainable operation. ※ "Integrity management is achieved by compliance with laws and regulations." So, the Company has actively organized education and training and integrity management policy advocation, promoting the integrity policy and its importance to directors and employees.
		Company annual report	Once a year		
		News announcement on company websites and the Market Observation Post System	Non-scheduled		
		Collecting and replying to messages via telephone or emails	Non-scheduled		

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	Non-scheduled	◆ Integrity & Ethics ◆ Management strategies & financial goals ◆ Reduction at the source	※ Reduce costs by implementing supplier localization ※ Establish a supplier evaluation management process ※ Formulate contractor management procedures and establish a contractor construction management system to manage all contractors who have entered the plants systematically
		On-site audit	Non-scheduled		
		Collecting and replying to messages via telephone or emails	Non-scheduled		
Governmental institutes	Maintain a smooth and good communication relationship, and express the company's determination to comply with legal requirements	Correspondence of official documents, meetings (public hearings or conferences)	Non-scheduled	◆ Water resource management ◆ Waste Management ◆ Reduction at the source ◆ Legal Compliance ◆ Risks and Opportunities of Climate Change	※ Regularly review the regulation contents, and keep abreast of the latest trends in regulations ※ Participate in competent authority regulatory meetings and understand the requirements ※ Communicate with competent authorities through association or union channels ※ Cooperate with the competent authority for plant visits or unscheduled plant audits
		By communicating and meeting with associations or unions	Non-scheduled		
The media	We establish a contact channel with the media and provide non-scheduled, correct, fair and objective industry and corporate news	Releasing news We sporadically receive interviews by the media and provide industry news	We release an average of 2 to 3 pieces of news for each quarter.	◆ Risks and Opportunities of Climate Change ◆ Financial performance ◆ Legal Compliance	※ Contact the media irregularly to let media professionals understand the Company's industry and operating performances through interviews ※ Issue a press release on revenue and earnings call ※ Provide transparent information disclosure to comply with the completeness, real-time, and fairness principles

1.3 Identification and analysis of material issues

GlobalWafers accepts diverse opinions and references the Global Reporting Initiative (GRI) sustainability reporting guidelines as the principle to define its report contents. Stakeholder inclusiveness: GlobalWafers has identified the stakeholders and explained how to respond to their reasonable expectations and interests. Sustainability context: Reveals how GlobalWafers can improve or reduce damage in terms of local, regional, and global economic, environmental, and social conditions, developments, and trends. Significance: Reflects the significant economic, environmental, and social impacts of GlobalWafers and how they will materially affect the evaluation and decision-making of stakeholders. Comprehensiveness: The report covers the major themes and their boundaries; which is sufficient to reflect the significant economic, environmental, and social impacts of GlobalWafers; and enable stakeholders to evaluate GlobalWafers' performance during the reporting period.

Report quality distinction principles - Accuracy: The information in the report is sufficiently accurate and detailed for stakeholders to evaluate the performance of GlobalWafers. Balance: The information in the report reflects the positive and negative performance of GlobalWafers, and enables everyone to make a reasonable assessment of the overall performance of GlobalWafers. Clarity: GlobalWafers presents information in a manner that is easy for stakeholders who need the information to understand and obtain. Comparability: GlobalWafers uses consistent standards to screen, sort, and report information. The information expression method allows stakeholders to analyze the long-term performance of GlobalWafers, and compare and analyze its profitability with that of other organizations. Reliability: The processes adopted by GlobalWafers to prepare the report involve information collection, recording, aggregation, analysis, and disclosure in a manner that can be reviewed as well as establish the quality and significance of the information. Timeliness: GlobalWafers' regular reports provide timely information for stakeholders to make decisions.

GlobalWafers' major issues are identified based on the interactive experience and communication records of the President's office, marketing office, procurement office, administrative office, and other relevant external units as well as stakeholders. Issues of concern from employees, customers, shareholders (investors), suppliers (contractors), government agencies, media, etc., are collected. The importance of each issue of concern is considered by the Corporate Sustainable Development Committee during internal meetings whereby the committee members determine the "stakeholders' interest level" and "impact on GlobalWafers," and then divide the issues into economic, environmental, or social aspects to plot a materiality matrix. Finally, topics with high interest and high impact in all aspects are listed as major issues. We will disclose the management guideline for the material issues in this report. Other issues that do not have a major impact will be disclosed as a summery or may not disclosed in this report.

01 Stakeholders engagement
Has identified six major groups of stakeholders

02 Collects sustainable developement issues of concern to stakeholders
Collects 19 sustainable developemnet issues

03 The impact of sustainable development issues on GlobalWafers
The Corporate Sustainability Committee has identified 12 major issues

Economic Aspect

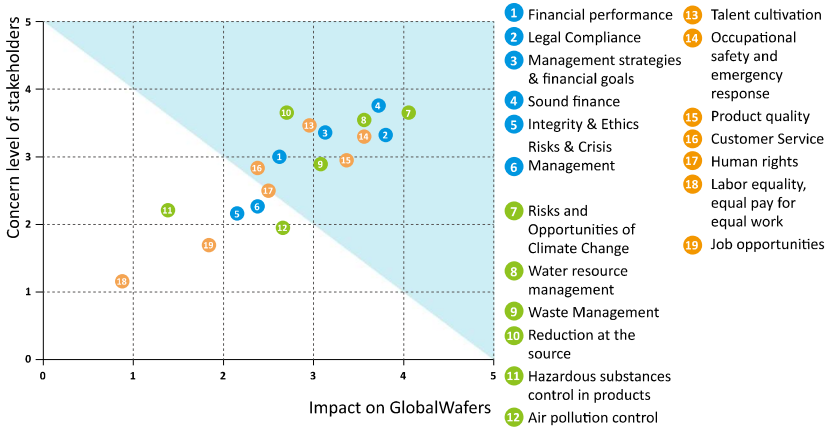
Serial no.	Issues	Material
1	Legal Compliance	✓
2	Sound finance	✓
3	Management strategies & financial goals	✓
4	Financial performance	✓
5	Integrity & Ethics	
6	Risks & Crisis Management	

Environmental Aspect

Serial no.	Issues	Material
1	Risks and Opportunities of Climate Change	✓
2	Water resource management	✓
3	Waste Management	✓
4	Reduction at the source	✓
5	Prevention of hazardous substances in products	
6	Air pollution control	

Social Aspect

Serial no.	Issues	Material
1	Occupational safety and emergency response	✓
2	Product quality	✓
3	Talent cultivation	✓
4	Customer Service	✓
5	Human rights	
6	Job opportunities	
7	Labor equality, equal pay for equal work	



The boundary and scope of material issues

Material topics		Company's internal boundary			Company's external boundary	Corresponding GRI standards	Corresponding chapters
		GlobalWafers	Taisil Branch	Offshore branch companies	Suppliers		
Economic Aspect	Legal Compliance	o	o	o		GRI307 GRI419	2.2.4 Regulation compliance
	Management strategies & financial goals	o	o	o		GRI201	2.3 Operation performance
	Financial performance and sound finance	o	o	o		GRI201	2.3 Operation performance
Environmental Aspect	Reduction at the source	o	o			GRI301 GRI302 GRI303	4.3 Reduction at source
	Water resource management	o	o	o		GRI303	4.3.3 Water resource management
	Waste Management	o	o	o		GRI306	4.2 Waste management
	Risks and Opportunities of Climate Change	o	o	o		GRI305	4.1 Climate Change Risks and Opportunities
Social Aspect	Occupational safety and emergency response	o	o	o	o	GRI403	5.2 Occupational health and safety
	Customer service and product quality	o	o	o		GRI102-43	3.1 Innovation management 3.2 Product quality 3.3 Customer service
	Talent cultivation	o	o	o		GRI404	5.2.2 Safety advocacy and education & training

Note:

1. Internal border: Social Aspect

Taiwan: GlobalWafers Headquarters, GlobalWafers Zhunan Plant, Taisil Branch
China: Kunshan Sino Silicon Technology Co., Ltd.
Japan: GlobalWafers Japan Co., Ltd. 、MEMC Japan Ltd.
South Korea: MEMC Korea Company
Malaysia: MEMC Electronic Materials Sdn. Bhd.
United States: GlobiTech Incorporated., MEMC LLC
Italy: MEMC Electronic Materials S.p.A
Denmark: Topsil GlobalWafers A/S
Singapore: GlobalWafers Singapore Pte. Ltd.

02

Material issues

Significance to GlobalWafers

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 horizons will also bring an endless source of creativity, which will eventually transform into innovative technologies that will change the future. Meanwhile, 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.

Management mechanism

Policies

- Sustainable growth
- Integrate and enhance the operational performance of all business entities, optimize production, minimize costs, and maximize profits in the most efficient manner.
- Flexibly respond to the challenges of COVID-19 and trade disputes, allocate overseas production capacity prudently, and stabilize shipments.
- Based on the current stable outstanding management performance, securely expand the company’s operation scale via strategic alliance or acquisitions.

Commitment

- The Group's high-end leading technology is utilized to develop chips matching next generation product utilization. Development shall move towards large size advanced manufacturing process, heavily-doped crystal growth and power semiconductor epitaxy technology, as well as becoming the world's largest silicon wafer supplier with diversified product.

Goals

Short-term goals

- Combine technologies, 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 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.

Mid-term goals

- Strengthen the operating performance of each business entity; and continue to integrate production technology, procurement, production capacity, and marketing across 17 operating production sites in 9 countries worldwide in order to minimizing costs.
- Proactively deploy our advanced manufacturing process for niche applications, accelerate the development energy for new technologies and new products, and strengthen patents deployment.
- Develop high-efficiency niche products with core technology capabilities to enhance added value.
- Actively sign long-term agreement with key partners to consolidate the foundation of cooperation.

Long-term Goals

- The Group's high-end leading technology is utilized to develop chips matching next-generation product utilization. Development shall move towards large size advanced manufacturing process, heavily-doped crystal growth and power semiconductor epitaxy technology, as well as becoming the world's largest silicon wafer supplier with diversified product.
- Accelerate the development of next-generation application products, including GaN and SiC, and actively expand the new blue ocean.
- Have a firm grasp of market trends and industry pulse and adjust business strategies in a timely manner, continue developing potential products in various application areas, and carrying out patent protection measures to strengthen our own competitiveness.
- 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.
- Consolidate the design and raw material requirements for new products and materials by seeking a strategic alliance between technology and marketing.
- To establish an excellent company governance mechanism to achieve the goal of sustainable growth.

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

- Internal regulations and procedures include: 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 Derivative Transactions; Corporate Governance Procedures, Sustainable Development Best Practices Principles; Ethical Corporate Management Best Practice Principles; Risk Management Policy and Procedure; Code of Ethical Conduct; Measures for the Report on Illegal, Immoral and Dishonest Acts; Major Internal Information Processing Procedures; Insider Trading Prevention Operating Procedures; Rules Governing Public Information Reporting; Liability Commitment and Contingency Management Measures; Corporate Group Sector Specific Company and Affiliate Transaction Procedures; Financial Business Supervision and Management Practices between Affiliates; as well as Long-term and short-term Investment Management Measures.
- Resources invested NT$2,069,507 thousand for R&D in 2021, which accounted for 3.39% of operating costs.
- The strong R&D teams compose of 121 R&D engineers in Taiwan and 149 overseas.

Concrete action

- Initiating Annual Operation Plans and formulation of KPIs for each department to strengthen internal operational management and control.
- Regular convening of business and production & marketing meetings to review goal achievement status and propose improvement & response strategies
- Establishing an incentive system for improvement proposals to boost process research and product quality betterment.
- Formulating appropriate measuring methods by each department (including risk analysis and assessment) and set action items.
- Implementing a legal affairs mechanism and internal audits to facilitate our determination for sustainable development.

2021 Key Results

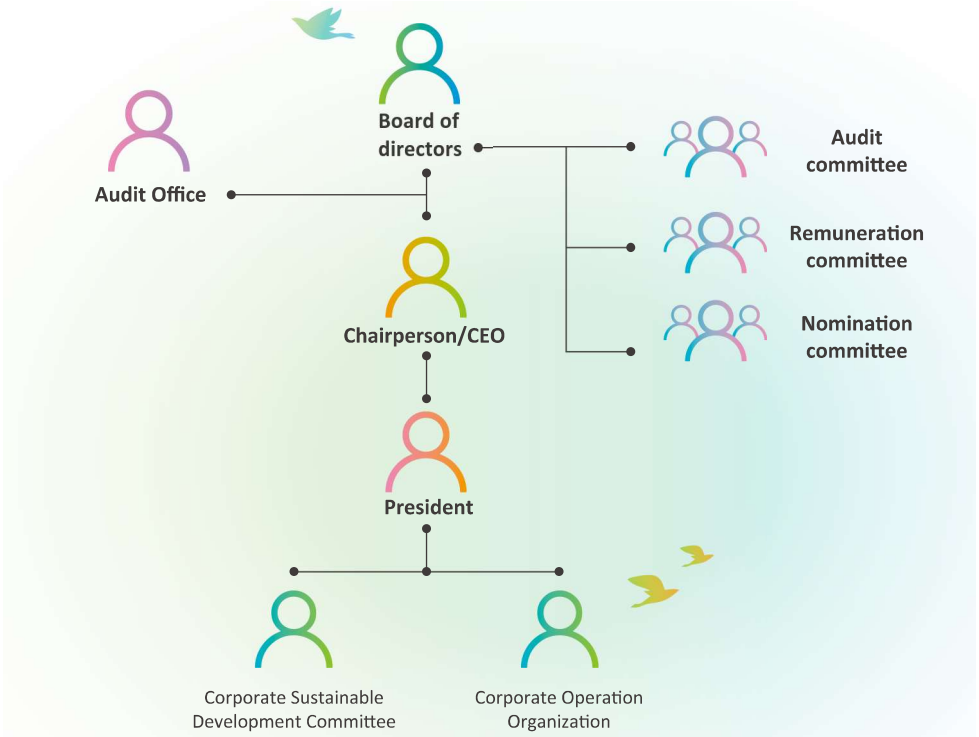
- Total consolidated revenue reached *NT$61.13* billion with an annual growth rate of *10.43%*, and we have achieved 9 consecutive quarters of growth
- The gross profit margin was *38.09%*, the second-highest in history
- The operating income margin was *28.94%*, the third-highest in history
- As of 2021, the cumulative number of valid patents obtained by GlobalWafers Group over the years has reached *1,706*
- The Utsunomiya Factory (MJL) was awarded the “Eruboshi” label for the business promoting female participation and career advancement in the workplace.
- Won the “*top 5% of all listed OTC* companies in the 8th corporate governance appraisal by Securities and Futures Institute” honor
- Awarded the *Copper Award* of the "Third Term of National Enterprise Environmental Protection Award" from the Environmental Protection Administration, Executive Yuan
- Ranked in the *top 100 of the Big 2000 by Commonwealth Magazine*
- Awarded the *Best Trading Contribution* in the 2021 "Awards for Excellent Trading Businesses" from the Bureau of Foreign Trade, MOEA
- CFO Ming-Huei Chien was awarded the “*Excellent Manager Award - CFO*” from the 39th Chinese Professional Management Association
- Won *Gold Tower Award* for the "2021 Taiwan Continuous Improvement Competition" held by the Corporate Synergy Development Center
- GlobalWafers was selected as *one of the top 10 exponential weight constituents* of the "Taiwan Semiconductor 30 Index" in September, 2021
- GlobalWafers was selected as *one of the top 10 constituents* of the "Taiwan OTC Sustainability (ESG) Index" in June, 2021
- GlobalWafers ranked among the 5 Taiwanese semiconductor companies in the "Asian Supply Chain Top 100 Market Value Survey Report" published by the DIGITIMES Asia in 2021

2.1 Sustainable organization

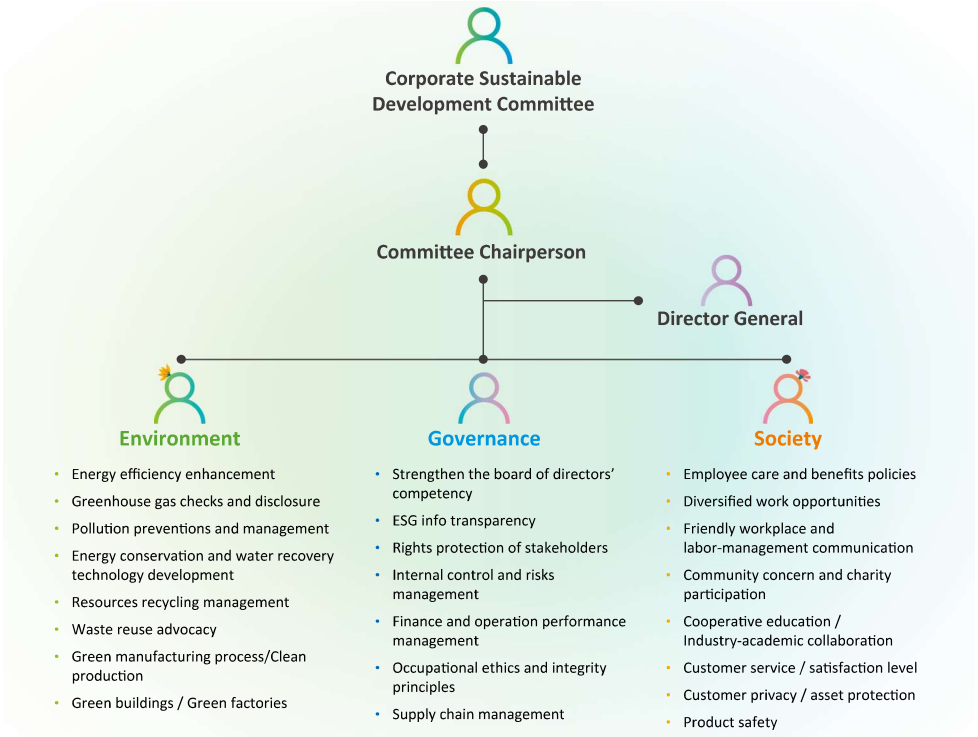
To strengthen and implement sustainable governance, GlobalWafers established a Sustainable Development Committee in 2017 as the Company's highest-level sustainable development decision-making center. The Chairperson serves as the Committee Chairperson and leads the company's operational organizations, the direction of sustainable development, and goal formulation. There is also a director-general taking charge of the relevant administration of the CSR Committee. The supervision responsibility of the Audit Office has been set, and the Company has also established the audit committee, remuneration committee, and nomination committee to enhance the functions of the board of directors and enhance corporate governance.

GlobalWafers' board of directors has passed the "Sustainable Development Best Practice Principles" as a gesture to declare to stakeholders the formidable determination of our highest management body in the implementation of sustainable corporate development. We hope to impact the industry using our extended participation, awareness, and concerted efforts toward a sustainable society. To implement the ESG activities in three aspects of environment, society, and governance, the Committee is further divided into the environmental, governance, and social subcommittees. These subcommittees consist of specialized committee members and department executives in charge of formulating strategies and management directions, as well as issue-based cross-department integration and execution & implementation while conducting reviews and continuous improvements on implementation effectiveness. 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. Decisions would be made based on the Sustainable Development Committee discussions. The Sustainable Development Committee is supervised by the board of directors. In addition to the annual report by the chair to the board of directors on the implementation status and performance, it also reports performance indicators and related data on environmental issues to the board of directors every quarter.

GlobalWafers Co., Ltd.



Corporate Sustainable Development Committee

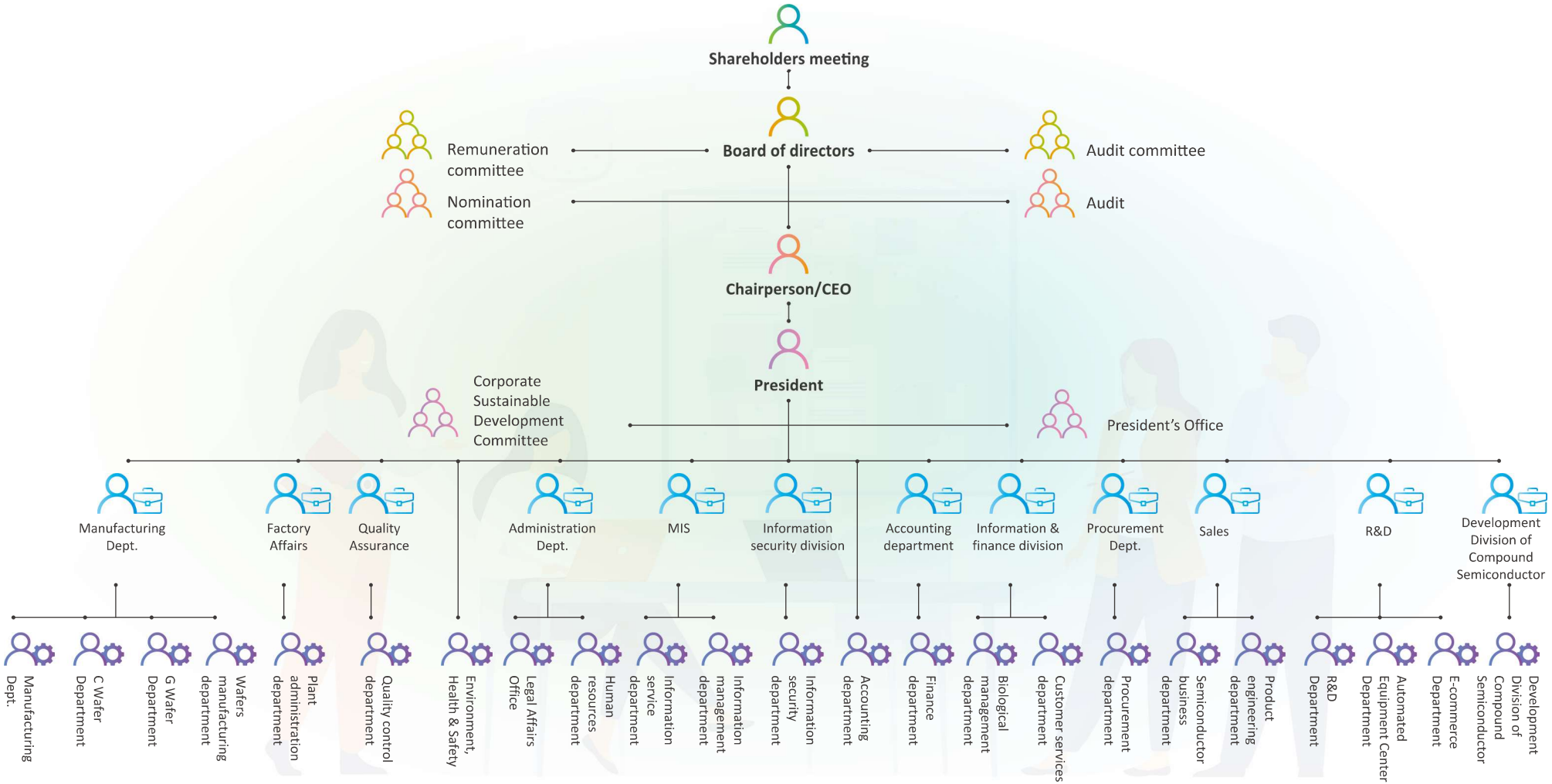


2.2 Corporate governance

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.

2.2.1 Governance structure

GlobalWafers' organizational chart



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 organizational charter of all committees have been approved by the board of directors, and the committees report regularly to the board of directors regarding their activities and decisions. GlobalWafers' audit and remuneration committees are entirely composed of independent directors, and over half of the nomination committee members are independent directors.

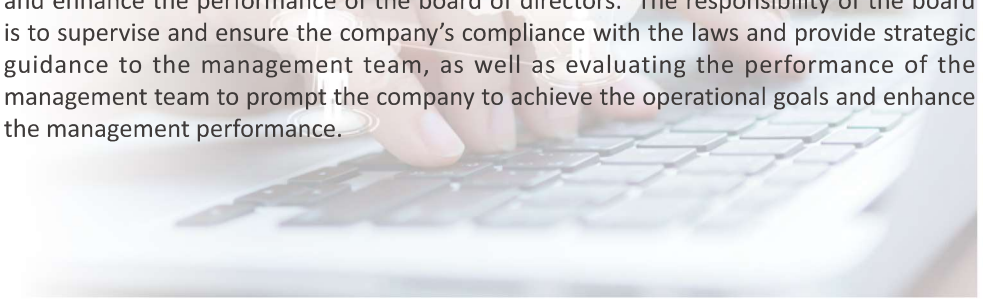
GlobalWafers has established a sound corporate governance structure to achieve continuous improvements and excelsior via its internal audit and control so as to thoroughly fulfill corporate governance. Looking to the future, GlobalWafers will still adhere to principles of integrity and continue with 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

- The GlobalWafers board of directors consists of 7 directors of whom 3 are independent directors
- Both the audit and remuneration committee members are composed of independent directors, and over half of the nomination committee members are independent directors
- A head of corporate governance was appointed to increase support for directors and enhance the effectiveness of the board of directors
- The organizational charter of all committees is publicly disclosed on the Company website
- The board of directors and the committees have conduct annual self-performance evaluations and disclose the evaluation results on the Company website

Board of Directors

The board of directors is composed of 7 knowledgeable and experienced directors who are professionals in technology, operation management, finance, and strategic management fields in order to fully implement good corporate governance system, improve supervisory functions, and strengthen management. The term of office for the board members is 3 years, and they are eligible for re-election. At least one meeting must be held every quarter. Moreover, to improve the professional knowledge and legal literacy of company directors, the directors must take at least 6 hours of training courses each year (new directors must take at least 12 hours of training courses). The Company has also established a corporate governance director to increase support for directors and enhance the performance of the board of directors. The responsibility of the board is to supervise and ensure the company's compliance with the laws and provide strategic guidance to the management team, as well as evaluating the performance of the management team to prompt the company to achieve the operational goals and enhance the management performance.



Main academic (experience) background and attendance status of board members in 2021

Title	Name	Gender	Primary professional (educational) background	Actual no. of presence (in attendance)	No. of presence by proxy	Actual presence (attendance) rate (%)	Notes
Chairperson	Doris Hsu / Hsiu-Lan Hsu	Female	MA in Computer Science from University of Illinois / Executive Vice President of Sino-American Silicon Products Inc.	11	0	100%	5th Term (Elected on August 24, 2021)
Director	Sino-American Silicon Products Inc. representative: Ming-Kuang Lu	Male	Honorary Doctor of Engineering from National Chiao Tung University / President of Lite-On Semiconductor Corp. / President of Syu-Sin Technology Co., Ltd. / Vice President of Silitek Co, Ltd.	11	0	100%	
Director	Sino-American Silicon Products Inc. representative: Tang-Liang Yao	Male	MA Degree from the Graduate Institute of Management at Tamkang University / Assistant Vice President of the Manufacturing Division of Lite-On Power Semi / President of Sino-American Silicon Products Inc.	11	0	100%	
Director	Kuo-Chow, Chen	Male	Tainan Nan Ying Senior Commercial & Industrial Vocational School / Chairperson of Nan Hai Corp. / Board Director of COTA Bank.	11	0	100%	
Independent Director	Jeng-Ywan Jeng	Male	PhD from Institute of Mechanical Engineering, University of Liverpool / Distinguished Professor for the Department of Mechanical Engineering, NTUST.	11	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.	3	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.	3	0	100%	
Independent Director	Chi-Hsiung Cheng	Male	Master, Accounting and Information Technology, National Chung Cheng University / Deputy division chief of Yulon Motor / Yue Audit Director of Sheng Industrial Co., Ltd. / Cost Director of Yueki Industrial Co., Ltd. / Administration Manager of Rica Auto Parts Co., Ltd / Finance Division Director of Wafer Works Corp.	8	0	100%	(Resigned on August 24, 2021)
Independent Director	Hsien-Chin Chiu	Male	PhD from Institute of Electrical Engineering, National Central University / Professor at Department of Electronic Engineering, Chang Gung University / Senior Engineer of WIN Semiconductors Corp.	8	0	100%	

Please refer to GlobalWafers 2021 Annual Report for information on directors' remuneration, concurrent positions in GlobalWafers, and other company positions and board resolutions.

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 2 meetings were held in 2021, 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 organizational charter of the Remuneration Committee, the Committee is entitled to hire lawyers, accountants or other consultants to assist the duty execution.

For the organizational charter of the Remuneration Committee, please refer to the Committees tab at the Corporate Governance section of GlobalWafers website.

For details on Remuneration Committee resolutions, please refer to GlobalWafers 2021 Annual Report.

Remuneration Committee independent director attendance status for 2021

Title	Name	Actual attendance no.	No. of presence by proxy	Actual attendance rate	Notes
Convener	Jeng-Ywan Jeng	2	0	100%	4th term (Appointed on August 24, 2021)
Board member	Chung-Yu Wang	0	0	-	
Board member	Ming-Ren Yu	0	0	-	
Board member	Chi-Hsiung Cheng	2	0	100%	(Resigned on August 24, 2021)
Board member	Hsien-Chin Chiu	2	0	100%	

Audit Committee

GlobalWafers established an Audit Committee on March 19, 2015, to strengthen the internal supervision mechanism of corporate governance. The committee consists of 3 independent directors and holds at least one quarterly meeting. A total of 10 meetings were held in 2021, 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, independence and performance
- Effective implementation of internal control
- Compliance with laws and regulations
- Control and management of the Company's potential or existing risks

In accordance with regulations as outlined in the audit 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 organizational charter of the Audit Committee, please refer to the Committees tab at the Corporate Governance section of GlobalWafers website.

For details on Audit Committee resolutions, please refer to GlobalWafers 2021 Annual Report.

Audit Committee independent director attendance status for 2021

Title	Name	Actual attendance no.	No. of presence by proxy	Actual attendance rate	Notes
Independent Director	Jeng-Ywan Jeng	10	0	100%	The third session (Elected on August 24, 2021)
Independent Director	Chung-Yu Wang	2	0	100%	
Independent Director	Ming-Ren Yu	2	0	100%	
Independent Director	Chi-Hsiung Cheng	8	0	100%	(Resigned on August 24, 2021)
Independent Director	Hsien-Chin Chiu	8	0	100%	

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 one meeting in 2021 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 organizational charter of the Nomination Committee, the Committee is entitled to hire attorneys, accountants, or other consultants to assist the duty execution.

For the organizational charter of the Nomination Committee, please refer to the Committees tab at the Corporate Governance section of GlobalWafers website.

For details on Nomination Committee resolutions, please refer to GlobalWafers 2021 Annual Report.

Nomination Committee independent director attendance status for 2021

Title	Name	Actual attendance no.	No. of presence by proxy	Actual attendance rate	Notes
Convener	Doris Hsu / Hsiu-lan Hsu	1	0	100%	2nd term (Appointed on December 7, 2021)
Board member	Jeng-Ywan Jeng	1	0	100%	
Board member	Ming-Ren Yu	0	0	-	
Board member	Hsien-Chin, Chiu	1	0	100%	(Resigned on August 24, 2021)

2.2.2 Ethics and integrity

• Core Values

GlobalWafers' most important core value is "Honesty and Integrity." GlobalWafers has formulated the relevant specifications and communication mechanisms for all directors, managers, as well as colleagues to follow and to establish an honest business environment. Rigorous management mechanisms and effective control are executed to minimize the dishonest risks, create value for customers, and achieve benefits for the shareholders and stakeholders.

• Internal Regulation System

To implement integrity management, GloberWafers has established important internal regulations such as "Ethical Corporate Management Best Practice Principles," "Code 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-competition behaviors, and conflict of interests. These documents are published on the Company website and internal website for colleagues to review at any time to improve law compliance and professional ethics awareness for all colleagues.

GlobalWafers revised the "Code of Ethical Conduct" on November 2, 2021, to meet the practical operation and management needs. The revisions included adding the provisions regarding reporting the destruction of public assets and the handling thereof, company asset protection, and increasing the attention of employees when using the Company's assets to ensure the Company's assets may be effectively and legally used for the Company's business and the operating expenses are not increased due to negligence.

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 procurement 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.

• 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 2021, GlobalWafers conveyed the correct concept to all new employees, directors, and supervisors above the departmental level via "Integrity Management" education and training courses to 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 the Company 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 have urged all suppliers and customers to adopt the highest corruption prevention standards and signed written "Supplier Code of Conduct" or "Customer Code of Conduct" documents to declare the "anti-bribery and anti-corruption" concepts to all of the Company's transaction partners. The Company requires suppliers and customers not to pay or accept bribes to the Company or its representatives in order to prevent improperly influencing transaction decisions under any circumstances.

• Conflict of Interest

The “Procedures for Ethical Management and Guidelines for Conduct” 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.

• 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 advocation, 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 2021 related to ethics and integrity are as follows: One hour of education and training was conducted for all directors, management at a department level or higher, president office, and new employees on the "Insider Education and Training.” The contents include insider trading law analysis (constitutive elements, major news disclosure method and time frame, judicial opinions) and insider equity transfer law analysis (The obligation to declare before/after the event and maintain the number of shares held by directors and supervisors).

Conducted a two-hour “Ethical Corporate Management Training” for all directors, managers at a department level or above, and recruits was conducted; the content includes trade secret protection, issues of competition law, anti-bribery and corruption, conflict of interest prevention, and KYC/export control, among other major compliance issues closely related to the technology industries.

Conducted a 20-minute “education and training on trade secret infringement cases by other enterprises" for the managers in the semiconductor business system; the content included an introduction to the Trade Secrets Act, an analysis of the violations in the case, and the enlightenments (Dos and Don’ts).

• 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.

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 also required to sign a written confidentiality statement. 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 manager	1. Company insiders, 2. Customers, 3. Suppliers, 4. Contractors
Legal Affairs	Accepted parties are same as spokesperson and human resources manager

2. Processing Unit and Procedure

The Accused	Processing Procedure		Processing Unit
General Employees	Money Case	Report to the Chairperson	Human Resources (legal affairs must 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 Submission Independent Director or Audit Committee		Human Resources + Legal Affairs

3. Handling Method

Steps	Responsible Unit	Content
1. Investigate the Facts	Human Resources, Legal Affairs	Investigate the relevant facts immediately; if it is believed that there is indeed a risk of unethical behavior, submit the case to the Chairperson for case delegation. 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. Written records of report acceptance and investigation shall be kept for 5 years.
2. If verified to be true	Human Resources, Legal Affairs	The perpetrator is required to stop the relevant behaviors, and shall be properly disciplined via the Company’s internal procedures or legal procedures. 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. (the same shall apply to those receiving immunity from the board of directors) If necessary, report to the competent authority or transfer the case to the judicial authority for investigation. The relevant unit of the perpetrator shall review the internal control system and operating procedures, and propose improvement measures. The investigation results shall be recorded in writing and be kept for 5 years.
3. Relief	Human Resources	Give the perpetrator the opportunity to appeal, and convene a Personnel Appraisal Committee hearing if necessary.
4. Report to the board of directors	Legal Affairs	Submit the case reported, the handling method, and the subsequent review and improvement measures to the board of directors.

• Integrity Inspection

The Legal Affairs Office shall be responsible for formulating, supervising, and implementing the integrity management policy and prevention plan. Currently, we use the mail system management, access control, reporting system, legal compliance inventory, and interview human resources & intellectual property team (non-competition violation, unlawful infringement of business secret, bribe, and intellectual property infringement risks). The individual case investigation method for special cases to conduct inspections and ensure that the Company's operations comply with the Ethical Corporate Management Best Practice Principle. 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 2021. GlobalWafers will continue to review and optimize each work item details, and strive to eliminate any unethical and dishonest behaviors.

2.2.3 Implementing internal audits

• Primarily goal for the set-up

Check and assess the soundness, rationality, and effectiveness of the company's internal control system; assist in the advocation of the internal control system; and perform audits and present reports to appropriate management.

• Key Areas for Execution

- Internal control system: Assist managers in designing appropriate internal control mechanisms and conduct "Internal Control System Self-assessment." Each department shall evaluate the internal control status for its own responsible area. The goal is to achieve the self-examination effect and strengthen the internal control concept for evaluation department.
- Annual audit plan: formulate the annual audit plan via risk assessments, perform audit for the various operating procedures based on the Company's business activities, identify process defects, and make recommendations during operations to ensure the internal control proficiency.
- Audit project review: Perform project inspections in response to potential risks (including fraud and corruption) identified by senior executives, and make recommendations in order to improve internal control integrity.
- Discussion of audit findings: Discuss improvement measures with the inspected unit based on the audit findings, and continue to track the follow-up improvement status to realize internal control implementation.
- Report the audit operation: Report the auditing results to the Audit Committee and board of directors, convey the weakness of the internal control and obtain instruction to improve the supervision effectiveness for enhanced corporate governance.
- Subsidiary audit operation: Formulate the annual key audit items for the subsidiary's audit unit, review the audit reports of each subsidiary, and track the results of the audit.
- Audit experience Sharing: Share the audit experience or cases in each area to the Group's audit team, and review or update the local internal control system accordingly in order to achieve the risk prevention effect.

Since becoming listed on the OTC market on September 25, 2015, GlobalWafers has been audited by securities firms and accountants, and supervised by the competent authority. The risk assessment conducted by the Company's risk management unit and the audit performed by the audit office did not discover any major abnormalities or corruption incidents.

Please refer to the internal audit organization and operation in the Company network for details.

http://www.sas-globalwafers.com/en/investor/corporate-governance_en/

2.2.4 Regulation 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 strictly requires all employees to comply with and understand the relevant laws and regulations via continuous education and training, promotion, and the regular inventory & self-evaluation system.

The penalty cases for GlobalWafers and its subsidiaries in 2021 are as follows:

Year	No. of penalty	Penalty of fines	Penalty plant	Matter of violation	Corrective measures
2021	1	NT$60,000	Taisil Branch	Violated Article 21 of the Regulations for the Occupational Safety and Health Equipments and Measures and Paragraph 1, Article 6 of the Occupational Safety and Health Act caused an employee to sustain a fall injury.	Corrective measures: Audit the office environment and require immediate removal of items obstructing the moving line. Preventive measures: 1. Use electronic billboards in the factory to publicize relevant precautions and ensure walking safety. 2. Require on-site operators to conduct inspections according to the 5S inspection reference items. 3. Conduct on-site industrial safety inspections. If any abnormality is found, immediately issue a defect correct work order and ask the improvement unit to correct it.
2021	1	US$476	MEMC Electronic Materials Sdn. Bhd.	The competent staff failed to oversee the industrial effluent treatment system (IETS) operations	According to the laws, the qualified staff with related qualification certificates/permits were added to operate the system.

In addition, the Legal Compliance Division has also assisted GlobalWafers to formulate the relevant internal provisions to ensure different departments abide by the applicable laws, and implement appropriate education and training.

• 2021 law compliance focus:

Securities regulations

Strict management mechanism

GlobalWafers' stocks are listed on the OTC market by the Taipei Exchange, and shall abide by the Securities and Exchange Act and other relevant laws and regulations.

◎ The president's office has established a good communication channel with the relevant competent authorities.

◎ 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.

Products, services, and import & export regulations

◎ 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.

◎ 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.

Data management

◎ Formulating employment contracts and Business Confidentialities and IPR agreements, Code of Ethical Conduct, Handling Procedures for Intellectual Property Disputes, and Confidentiality Agreements.

◎ Management mechanism: Education on the importance of intellectual property and business secrets though posters and slogans, employee training and education, and signing of confidentiality agreements with employees in charge of relevant operations.

Labor & human rights regulations

Strict compliance with labor & human rights regulations

◎ 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.

◎ Valuing employee salaries and benefits; proactively cultivate talents; implement labor laws; ensure employees' rights Regarding major policy changes, remuneration & 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.

◎ 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.

Corporate governance

◎ Formulate the "Ethical Corporate Management Best Practice Principles," the "Code of Ethical Conduct," and the "Procedures for Ethical Management and Guidelines for Conduct."

◎ 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.

Environmental / OSH laws and regulations

◎ Identification and management procedures for environmental protection, energy management, and occupational safety and health related laws and regulations.

◎ Management mechanism: Review the compliance with the latest changes in environmental protection, occupational safety and health, energy management, and other related laws and regulations or other requirements each month; and regularly assess compliance with applicable regulatory requirements.

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.

- **2021 Course Offers**

Integrity & Ethic

- Legal Overview for Inside Trading and Insider Equity Changes
- Familiarize with Integrity Management related Laws
- New employee education and training (integrity management, code of ethical conduct, and an overview of insider trading laws)

Legal Compliance

- Education and training on trade secret infringement cases by other enterprises
- Departmental regulation review, identification of stakeholders and issues of concern, and risk assessment electronic form operations

Data protection

- Information Security Awareness Education

Health Care

- Say Goodbye to liver Illness - Liver Health Lecture
- Life Heart Guidance Promotion Conference
- Don't Be Kidnapped by Negative Emotions, Connect with Your Heart to Adjust the Pressure
- Hyperlipidemia Prevention Healthy Diet Webinar
- How to Hold Down Blood Pressure Using Daily Diet

Environmental Protection, Safety, and Hygiene

- On-the-job Occupational Safety and Health Education Training
- Emergency response training
- Respiratory protective equipment wearing and selection
- Annual fire prevention training
- Fire protection system principles and operating practices
- Civil defense corps training
- Safety and health management and human negligence training for contractors entering the site
- CPR+AED Education and Training
- On-site First Aid Emergency Response and Chemical Splash Course
- Health & safety; Hazard communication of hazardous chemicals
- CSR and ESG corporate sustainability education and training
- Greenhouse gas inventory internal audit education and training

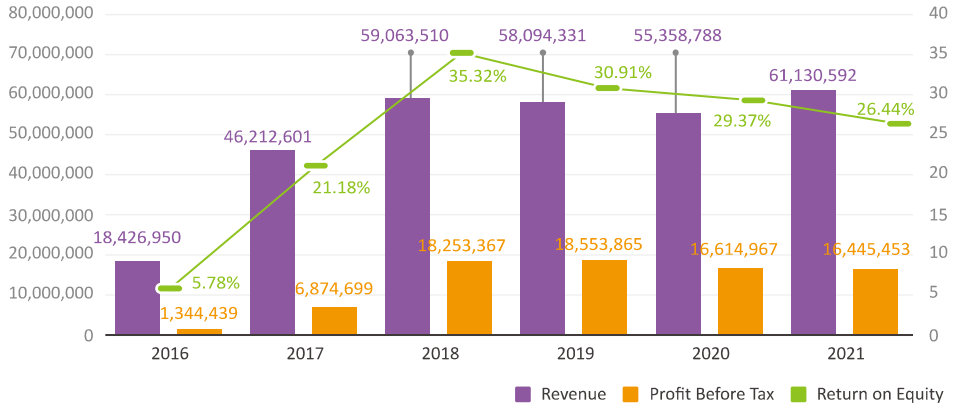
2.3 Operation performance

The global economy recovered from the COVID-19 outbreak in 2020, and demands were expected to continue to improve in the post-epidemic era to bring a fruitful 2021 semiconductor industry. GlobalWafers has maintained a consistently solid performance, with outstanding results in terms of revenue and profit. GlobalWafers' consolidated revenue for 2021 reached NT61.13 billion, which increased by 10.4% compared to 2020 and reached a historical high.

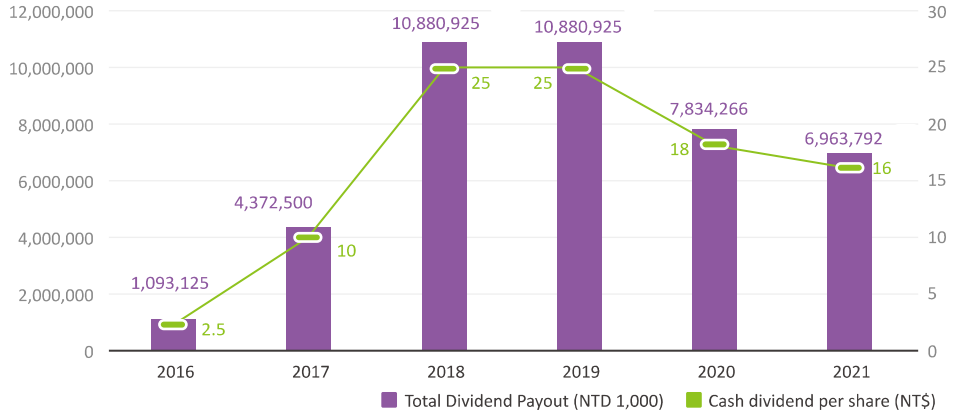
For details on the Company's operating performance and financial information, please refer to GlobalWafers' 2021 Consolidated Financial Statements.

Financial Performance (Consolidated)

Unit: NT$ Thousand



Cash Dividends



2021 Economic value Analysis

Unit: NT$ Thousand

Generated direct economic value	Annual report: Revenue	61,130,592
Distributed economic value	Operational costs	37,844,704
	Employee salaries & benefits	11,964,749
	Payment to investors	7,834,266
	Payment to the government	1,424,530
	Community resources	1,044

Note: Government payments and community information are based on data from Taiwan (GlobalWafers Headquarters, GlobalWafers Chunan Plant, and Taisil Branch)

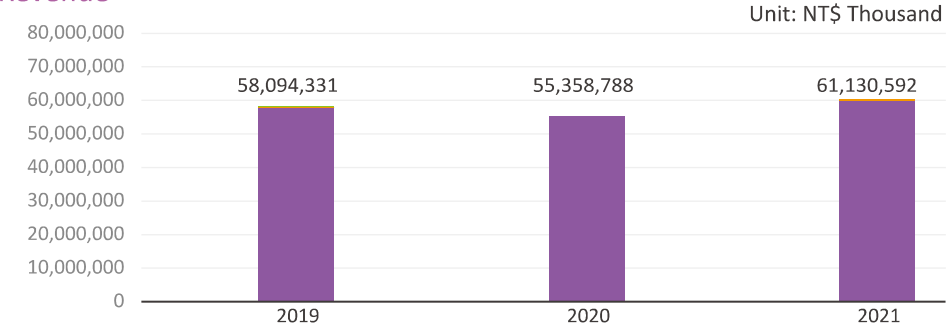
Product Sales

The COVID-19 epidemic and the geopolitical trade conflicts shrouded 2021, and many industries have suffered. Fortunately, the semiconductor market is relatively undisturbed by the downfall of the world economy. COVID-19 has also driven new business practices and lifestyles, and stimulated basic Netcom facility development such as the Cloud and servers, and boosted GlobalWafers' quarterly revenue and shipment growth. Our consolidated revenue in 2021 has reached NT$61.13 billion. The annual revenue increased by 10.4% compared to 2020 due to the strong NTD appreciation. Several outstanding performances were achieved in 2021, including annual income, gross profit, operating income, profit before tax, net income and EPS. These feats fully demonstrated the excellent management and operational capabilities of GlobalWafers.

In 2021, GlobalWafers' total global wafer production capacities were 2,903,161 (KSIE Wafer) & 4,779,420 (Kg Crystal), all of which came from its own factories.

Revenue

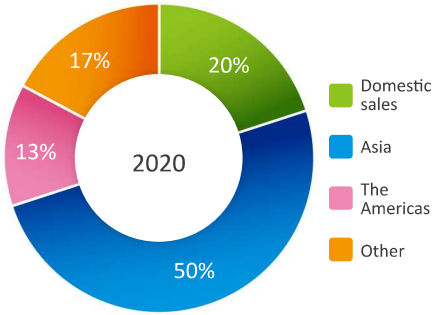
Unit: NT$ Thousand

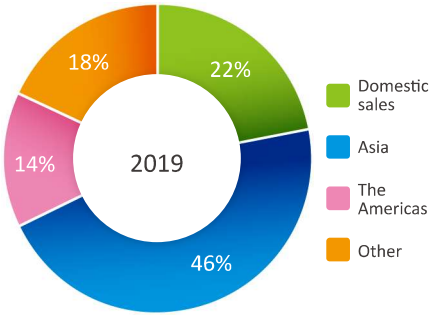


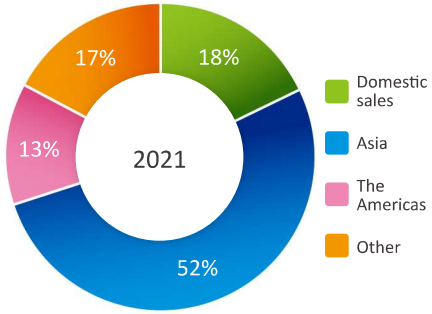
	2019	2020	2021
Other	97,537	102,068	118,729
Electricity fee Revenue	-	4,239	27,439
Semiconductor - Ingot	275,284	113,541	361,301
Semiconductor - Wafer	57,721,510	55,138,940	60,623,123

Sales Area Ratios

Since GlobalWafers acquired Topsil and SunEdison Semiconductor in 2016, it has successfully gained the existing customer orders and a global sales network. In recent years, the sales revenue ratio of sales regions has tended to be balanced and stable. Asia is the largest sales region whereby domestic sales accounted for 70%, followed by the Americas.







Overall economic environment and industry trends

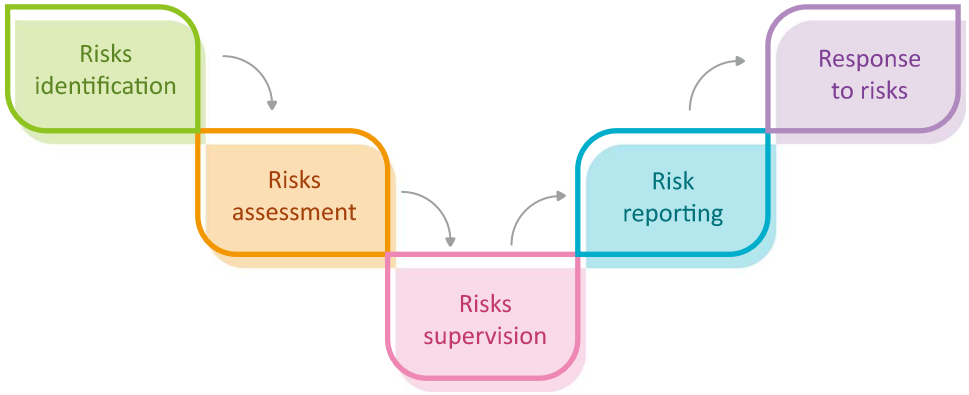
The global economy has recovered from the COVID-19 outbreak in 2020, and the post-epidemic era brought a fruitful 2021 to the semiconductor industry. COVID-19 has accelerated digital transformation and further supported the vigorous development progress for Cloud services, servers, and high-efficiency computing. The demands will continue to be strong in the post-epidemic era. Huge financial incentives and the gradual tightening of fuel economy to achieve carbon neutrality have further increased the penetration of electric vehicles, and the scale of the electric vehicle industry has expanded. The rapid growth of capital expenditures by downstream suppliers in the semiconductor industry and the rapid 5G development in various regions have consolidated the strong demand for the key material (semiconductor wafer). Although the outlook is promising, the challenges from omicron virus variants, geopolitical tensions, raw materials price hikes, and the clogged transportation system still exist. With the diversification of the global trade, GlobalWafers actively enhances the local supplies, establishes multiple suppliers, and diversifies the productions for better resilience to respond to the rapidly changing with severe competition; meanwhile, GlobalWafers will flexibly respond to the drastically fluctuating macroeconomics, and seek to innovate to lead the technology trends, for continuously driving the growth momentum in this ever-evolving world.

2.4 Risks management

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 Policy 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.

The board of directors is the highest risk management unit under GlobalWafers' risk management organizational structure. Base on the overall operating strategies and operating environment, the board of directors aims to comply with laws and regulations, promote and implement the Company's holistic risk management, and bear the ultimate responsibility for risk management; the senior management is responsible for planning, commanding, and deploying the implementation of risk management decisions by the board of directors, and coordinating interaction and communication for the cross-departmental risk management; each functional unit is responsible for analyzing, managing and monitoring related risks within their respective units. An internal audit is an independent unit that assists the board of directors in monitoring the implementation of the risk management mechanism to ensure the effective implementation of the risk control mechanism and procedures.

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



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.

GlobalWafers' Operation Risk Management System operates according to the level-3 division of labor risk management structure

Tier-1 liability

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

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 amend the relevant internal provisions when necessary.

Tier-3 liability

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 board of directors regularly.

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 opportunities that we have identified are illustrated below.

Corporate Governance Aspect	
Identified risks	Strategies of turning risks into opportunities
All risks involving management and investment	✻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. ✻Establish an automatic feedback production analysis system to improve process stability, optimize quality, and reduce costs. ✻Continue to cultivate in the advanced technology R&D, commit to enhanced performance of key materials for power components so as to widen the gap from the competitors. ✻Invest in the development of key technologies for GaN RF components as a response to the market demand for IoT and G5 mobile telecommunication. ✻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.
Challenges for relationship maintenance and communication with internal & external stakeholders	✻Strengthen the stakeholder area on the Company's website, hold legal seminars regularly, and build a communication channel with our stakeholders to understand and respond to issues of concern for all stakeholders.
Strengthen the Board of Directors' Competency	✻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.
Regulation Compliance Risks	✻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.

Environmental Aspect	
Identified risks	Strategies of turning risks into opportunities
Climate change risks	The management is conducted in two major aspects: mitigation and adaption. Mitigation ✻Promulgate the ISO50001 energy management system to supervise the equipment for major energy use and plan energy action improvement plan. ✻Promote green products and green production to reduce energy consumption. ✻Implement water-conservation measures and increase the use of reclaimed water. Adaption ✻Strengthen the company's withholding capacity for extreme climate conditions (drought, floods, snow storms). ✻Conduct energy management and enhance energy consumption efficiency as a response to increased energy costs (e.g. rising electricity bills, carbon tax, energy tax).
Risks for environmental protection	✻Install the pollutant emission supervision system; devote to pollutant reduction. ✻Strength the risk control for turning waste into resources and reuse; use regenerated raw materials as much as possible.

Social Aspect	
Identified risks	Strategies of turning risks into opportunities
Risks for occupational health and safety	✻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. ✻The Company has conducted regular health and safety education and training to prevent occupational hazards and protect labor safety and hygiene.
Labor Health Risks	✻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. ✻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. ✻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.
Risks for labor-management relationships	✻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. ✻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. ✻Employee complaints channel: Install designated personnel for handling employee opinions, handle problems raised by employees in a timely manner, reduce labor-management conflicts.

In addition, GlobalWafers has identified 3 major emerging risks: climate change, information security, and epidemic infectious diseases. The Company has formulated corresponding risk strategies and implementation mechanisms for all aspects of its corporate operations based on their possible impacts to ensure that the risks can be effectively controlled.

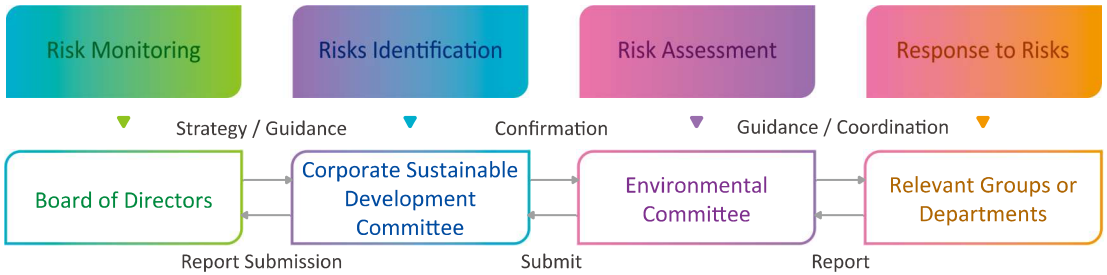
Climate change risks and opportunities

Climate change is one of the key environmental issues that the United Nations, governments, societies, and enterprises worldwide are most concerned about. GlobalWafers has complied with the framework of the Task Force on Climate-Related Financial Disclosures Recommendation (TCFD) promulgated by the Financial Stability Board to disclose climate change-related information, assess the risks and opportunities of climate change for the Company. Disclose climate change-related information based on 4 core elements: governance, strategy, risk management, and indicators and targets.

Climate Change Governance

The GlobalWafers' Sustainable Development Committee is the Company's highest climate change management organization. This committee is chaired by the chairperson and has 3 subcommittees: Environmental, Governance, and Social. The Environmental Committee is fully supported by the board of directors. The chairperson is responsible for overseeing the Environmental Committee's operations; reviewing the Company's climate change vision, policies, and goals; managing climate change risks and opportunities; reviewing the implementation status; and discussing future plans. The chairperson shall be responsible for reporting the Company's climate-related affairs to the board of directors. The report shall serve as a key reference to formulate the Company's policies on sustainability.

The Environmental Committee shall be responsible for the following:



01 Assess and categorize company-wide strategies and goals for environmental sustainability and climate change management

02 Identify risks and opportunities related to corporate environmental sustainability and manage climate change issues

03 Oversee the planning and implementation of company-wide environmental sustainability and climate change management strategies

04 Oversee company-wide environmental sustainability and climate change management performances.

Climate Change Strategy

The United Nations Framework Convention on Climate Change (UNFCCC) proposed 2 main strategies to face global warming and climate change during the convention meeting: Mitigation is greenhouse gas emission reduction or increased greenhouse gas storage through human intervention to slow the speed or scale of climate change problems. Adaptation is to seek strategies that can effectively reduce the effects of climate change by assessing its impacts and taking preventive measures to minimize damage or exploit beneficial opportunities.

To effectively implement energy conservation and carbon reduction, GlobalWafers has set 2019 as the benchmark 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 substantial 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 occurs, immediately propose the most appropriate response and recovery plan to minimize the uncertainty and 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 in high costs 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.

Climate Change Risk Management

After referencing the TCFD framework, the Environmental Committee shall review domestic and foreign research reports, documents, and integrate the evaluation data of various departments and subsidiaries; and then rank the importance of risk topics by screening climate risk issues via multiplying the intensity of financial or strategic impacts by the probability of occurrence to determine the risk value. The goal is to formulate risk management policies for effective identification, measurement, assessment, monitoring, and control; take specific action plans to reduce the impact of related risks; and adopt specific action plans to mitigate the effects of associated risks.

Climate Change Indicators and Targets

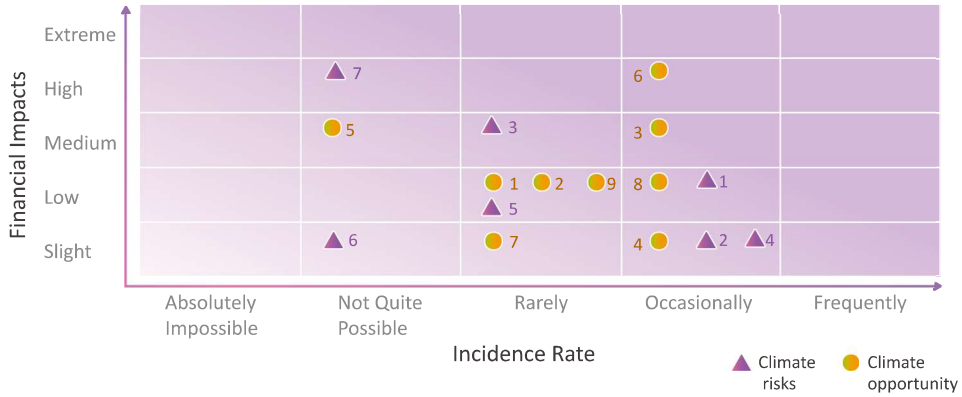
To effectively manage the impact of climate change-related risks and opportunities on GlobalWafers, GlobalWafers has taken practical actions to support the net-zero transformation and pledged that all subsidiaries under the Group will use 100% renewable energy by 2050. Our global production bases have stipulated the schedule to fully incorporate ISO 14064 greenhouse gas inventory and third-party verification; ISO 50001 energy management system and third-party verification by 2024; and set short-, medium-, and long-term greenhouse gas reduction targets. In addition to striving to improve energy efficiency, signing a Power Purchase Agreement (PPA), and purchase of 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.

Climate Change Identification and Assessment

GlobalWafers has adopted the Nationally Determined Contributions (NDC), the Well-Below 2°C of Science-Based Targets (SBT), and used 1.5°C as the foundation for scenario analysis to conduct a financial impact assessment and continue to improve management for some climate change risks. GlobalWafers has completed the latest climate risk assessment by the end of 2021, which highlighted the following 8 major climate risk items and explained the impacts and countermeasures for each risk opportunity: increased costs of greenhouse gas emissions, renewable energy regulations, market uncertainty, increased investment costs in new technologies, increased raw material 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.

Serial no.	Climate risks	Serial no.	Climate opportunity
1	Average temperature rise	1	Promote cleaner production
2	Extreme climate events with increased severity - water shortage	2	Water resource management
3	Extreme climate events with increased severity - electricity consumption increase	3	Adopt new/low carbon technologies
4	Increased raw material/transportation costs	4	Policy reward
5	Impact the Company's image	5	Carbon information disclosure
6	Renewable energy regulations	6	Production process
7	Market uncertainty	7	Develop new products or services via R&D and innovation
8	Increased new technologies investment costs		
9	Increased greenhouse gas emission costs		



Note: The financial impact index is divided into 5 grades, and the economic impact score is 1-5 points.

Note: The probability of risk occurrence is divided into 5 grades: 5 = certain occurrences, 4 = many occurrences in 10 years, 3 = more than one occurrence in 10 years, 2 = never occurred in 10 years, and 1 = never occurred.

Climate Change Risks and Opportunities with Major Financial or Strategic Impacts

Type		Climate risks	Description of potential financial impacts	Impact level	Coping Strategies/Cases
Physical risks	Immediacy	Average temperature rise	Operating costs increased due to power consumption increase by the factories, and carbon emission costs also increased	Low	The factories worldwide are scheduled to fully introduce the greenhouse gas inventory and energy management system by 2023, and senior executives will execute greenhouse gas emission reduction
		Extreme climate events with increased severity	Impacts of drought caused by climate anomalies	Low	Timely deploy the water configuration systems and promote water-conservation measures in each plant
			Increased use of production electricity leads to increased greenhouse gas emissions	Medium	Introduce energy management systems in all factories and implement various energy-conservation measures
	Long-term	Increased raw material/transportation costs	Increased operating costs	Slight	Supplier for alternate materials required
Transformation risks	Goodwill	Impact the Company's image	Failure to meet stakeholder expectations, resulting in company reputation damage and market sales loss	Low	Promote clean production and recycling, and regularly publish sustainability reports to let stakeholders understand the Company's energy conservation and carbon reduction efforts
	Policy and regulations	Renewable energy regulations/carbon fee shock	Policies that lead to increased operating costs	High	Sign electricity procurement agreements and purchase renewable energy certificates supplemented by Climate Blueprint target achievement in phases
		Increased greenhouse gas emission costs		Low	
	Technology	Increased new technologies investment costs	Cost investment in transitioning to a low carbon economy Various equipment and increased operating costs due to government tax	Medium	Actively promote various energy saving and carbon reduction programs
	Market	Market uncertainty	Products and services are replaced by low-carbon technologies to satisfy customers and markets, and new technology developments have led to increased costs	Low	Develop more energy-efficient and environmentally friendly products

Type	Climate opportunity	Description of potential financial impacts	Impact level	Coping Strategies/Cases
Resource efficiency	Promote cleaner production	Reduce water/power consumption and lower operating costs	Medium	Continue to promote various water/power conservation measures
	Water resource management	Increase water utilization rate and reduce water consumption	Low	Improve factory process wastewater recovery rate
Energy	Adopt new/low carbon technologies	Reduce operating costs	Medium	Accelerate the design and development of crystal growth thermal field
Market	Policy reward	Receive government grants, reduce capital expenditures	Low	Evaluation policy grant programs
	Carbon information disclosure	International Organization Initiatives	Low	Transparent carbon information disclosure to enhance the Company's image
Resilience	Production process	Strengthen basic measures, build sustainable operation capabilities and take advantage of high-efficiency materials to reduce costs	Slight	Evaluate the use of high-efficiency raw materials and reduce resource usage
Products and services	Develop new products or services via R&D and innovation	Research and develop low power and energy consumption products to meet customer demands	Medium	Continue to invest in R&D resources to develop energy-conservation products

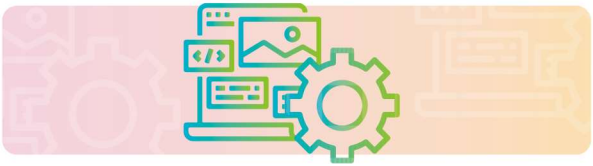
Information Security

Many well-known companies worldwide and in Taiwan have experienced virus extortion incidents that resulted in significant losses in recent years. Therefore, companies have strengthened their information security operations without delay. GlobalWafers has continued to optimize its information security management system and enhance its information security defense capabilities in order to ensure effective information security practices as well as reduce the risk of ever-changing and novel information security attacks. The Company as 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.

The information security management and control mechanisms are implemented in 3 major aspects (as follows) to ensure effective information security protection and reduce risks.

Information System Security Management

- Install endpoint protection software on servers and personal computers or laptops, and automatically update virus definitions or signatures.
- Construct email security gateway equipped with information security modules such as spam filtering, malicious file detection, and phishing email detection in order to enhance email attack protection.
- Important systems and databases are regularly backed up and stored off-site to ensure data availability.
- The information system vulnerability scanning is conducted periodically, and the holes in the loop of the system are fixed.
- The computer operating systems or servers are updated for securities based on the cyber risks.
- Established a firewall in the internal network and set up firewall rules to protect important information systems.
- Performed annual disaster recovery exercise drill for important application systems.



Information System Access Control

- Strictly control the application system and file access setting permissions to ensure information confidentiality.
- Formulate and implement account/password complexity principles, and update passwords regularly to ensure the validity of identity authentication.
- For employees who have resigned and changed departments, the information department shall adjust the permissions according to documents to ensure real-time and correct data permission & authorization.
- The Company has established the management procedures for non-employees (suppliers and contractors) to apply for accounts and access the systems. Once the application is approved, access will be granted for them to enter the system, and the handling status is recorded.
- No personal terminal device is permitted to be connected with any external storage medium.
- Personal computers are prohibited from connecting to the Company's network and resources, and the device authentication management mechanism is established.

Network Security Management

- Established a firewall to protect the network's external connections, and analyzed the firewall's anomaly records to strengthen protection.
- A multi-loop mechanism is adopted to connection to the Internet and the Company's internal network interface in order to prevent disconnection.
- An information service monitoring platform has been set up to monitor network traffic and connection status, which can resolve any network related problems in real time.
- The information department delivers security reminders to all colleagues irregularly to remind colleagues to remain alert for the emails received in order to prevent the increasingly serious phishing and malicious fraud letter problems.
- The internal staff's computers all must have anti-virus software installed. Once the anti-virus control platform finds a virus, it will send a notification letter to the IT personnel for computer virus removal.
- The remote connection to the internal network when the employees are out of the office is limited to these compliant with the cyber security controls. Only these employees who are required to perform the necessary tasks may connect to the Company via remote connection via an authorization, and the VPN security connection with multi-factor authentication must be applied.

Pandemic Infectious Disease

2021 was still ravaged by COVID-19. GlobalWafers has strengthened the epidemic prevention measures in the factory area at the first instance to ensure the health and safety of all employees and stabilize the normal wafer production chain operations. The various departments have joined forces to formulate epidemic prevention strategies for the factory area, executed comprehensive epidemic prevention actions, complied with the government's prevention measures, inventories epidemic prevention resources, and regularly adjusted anti-epidemic actions according to the global epidemic status to ensure health and safety of the workplace.

We took a multi-pronged approach regarding epidemic prevention and employee care for the factory. In addition to executing the high-standard corporate epidemic prevention mechanism to ensure uninterrupted production line operations, we have continued to practice multiple care measures to ensure the safety of all employees, exert a positive influence on the enterprise, and join forces with everyone to fight the epidemic.

- Employee care:When the local epidemic broke out in May 2021, GlobalWafers immediately took epidemic prevention as its top priority and purchased the "statutory infectious disease health insurance" for its employees. The scope of protection includes statutory infectious disease coverage, statutory infectious disease inpatient medical coverage, and statutory infectious disease intensive care unit hospitalization medical coverage to maintain the safety and health of every colleague.
- Epidemic prevention information: To enable employees to grasp the real-time epidemic prevention information correctly, the Health Management Center has collected the latest epidemic information at home and abroad periodically and made rolling epidemic prevention measure adjustments in the factory to make real-time announcements according to the COVID-19 status so employees can quickly receive the correct epidemic prevention information.
- Health monitoring: To reduce employee exposure risks, GlobalWafers has set up infrared thermometers at the entrance of each factory area and implemented entry control for risk groups such as people with fever symptoms and suspected exposure history. The goal is to implement employee epidemic prevention and entry control fully.
- Visitor management: Use electronic bulletins to educate supply chain manufacturers about COVID-19 prevention measures when entering the plants, fully require visitors and contractors to apply for entry into the plants, adjust the scope of activities in the factory to a limited extent depending on the epidemic prevention level, and require everyone to wearing masks throughout the process to protect the safety of employees.
- Epidemic prevention in the plants: To prevent the infection risks due to crowd gathering, office workers have taken several contingency measures such as: crisscross seating, cabin separation, traffic flow diversion, and working from home to minimize crowd gathering and reduce the frequency of employee contact. (Note: cabin separation, home office, etc., use remote systems to maintain smooth work.)
- Safe dining environment: The Company has planned epidemic prevention dining lines, table plastic partitions, disposable lunch boxes, and divided the dining area by units to ensure worry-free meal dining safety in the plants.
- Disinfection in the plants: The Company has formulated public area disinfection and cleaning measures, adjusted the frequency of environmental disinfection and supplied alcohol disinfectant in public spaces, increased internal ventilation, encouraged staff to open windows in confined spaces, affixed adhesive films on top of frequently used buttons, added partitions in restaurants, posted correct hand washing instructions in each restroom, and conducted a regular inventory to ensure that the Company has sufficient anti-epidemic materials.
- Physical and mental care: COVID-19 has created an atmosphere of anxiety and tension in society. In 2021, GlobalWafers introduced the Employee Assistance Program Consortium (EAPC) to provide each employee with 2 free one-to-one consultation services every year. GlobalWafers has also regularly passed out psychological growth promotion materials to help employees resolve negative emotions and stress.





03

Major aspects for consideration

Product quality

customer service

Significance to GlobalWafers

GlobalWafers adheres to ideals of sustainable business operations and continuously work for customer satisfaction and customer information security, in addition to maintaining operational performance with stable growth. We start with customer demand and hope to develop innovative services in line with GlobalWafers' corporate ethics. Similar to GlobalWafers' quality policy, we are also committed to continual improvement and excellence in order to provide the best quality, technology, and comprehensive services to enhance product quality and competitiveness. The Company aims to grow together with its customers, pursue excellence with employees, create value for shareholders, and pursue sustainable operations with our customers. The ultimate objective is to provide customers with zero-defect products and services with outstanding product quality, production technology, and manufacturing.

Management mechanism

Continue to promote the quality management system, uphold the spirit of IATF 16949, actively participate in quality management efforts, and pursue a full range of continuous improvement and precise process technology to enhance product quality.

- Each plant has established a Quality Improvement Team (QIT) composed of members from various functional departments to ensure process research and product quality improvement. Performance reports are submitted every 6 months to the QIT results publication appraisal conference, and the review subjects include innovative creativity; cost-effectiveness; lean production; product competitiveness; customer satisfaction; customer complaint cause analysis, review, and improvement; and quality index process capability.
- To combine and inspire the knowledge and experience of Company employees at all levels, GlobalWafers has established the "Proposal Improvement Committee" to enable all employees to propose improvement opinions, inventions, ideas, or plans that may benefit the Company. The goal is to help the Company to reach a state of perfection through continuous improvement, and enhance the image and competitiveness of Company products.

The Company has obtained the Taiwan Intellectual Property Management System (TIPS) AA certification by strengthening information security standards, preventing Company secret leakage, protecting the rights and interests of the Company and its customers, controlling product quality via a comprehensive customer-oriented process, and providing product manufacturing services that meet customer quality needs. Meanwhile, we think from customers' perspectives, emphasize customer-oriented services backed by professional technology, hoping to provide services that meet or exceed customers' expectations.

2021 Key Results

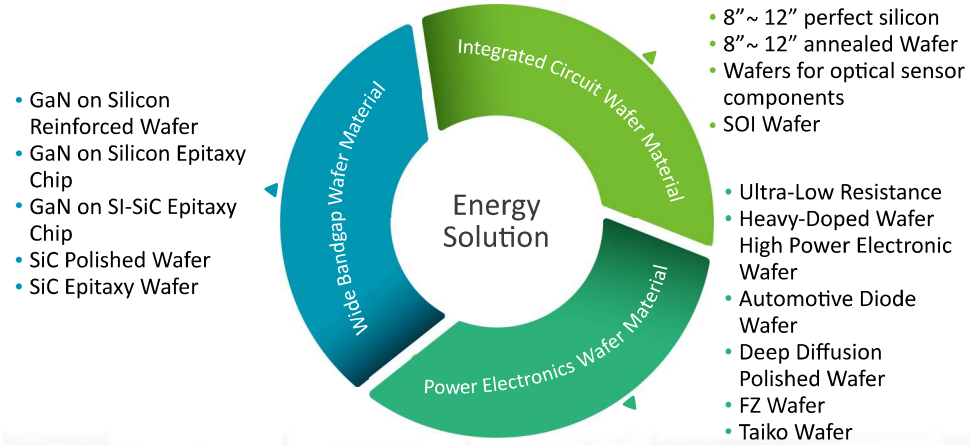
- GlobalWafers has actively promoted patent layout planning in various important technical fields and accumulated 1,706 valid patents over the years.
- In 2021, GlobalWafers has continued to pass the basic verification and obtain AA verification from the Taiwan Intellectual Property Management System (TIPS).
- GlobalWafers has participated in the 2021 "Taiwan Continuous Improvement Competition" held by the Corporate Synergy Development Center and won the Gold Tower Award for the Self-improvement Category. We will continue to improve and refine our engineering technologies.

3.1 Innovation management

GlobalWafers has implemented several expansions in response to increasing Si content and driven by technology advancement and accelerated digital transformation in the post-pandemic era. The expansion locations include Asia, Europe, and the United States. The production capacity expansion covers 12” wafers and Epitaxial wafers (EPI), 8” and 12” Silicon on Insulator wafers (SOI), 8” Float-Zone wafers (FZ), Silicon carbide (SiC) wafers (including SiC Epi), Gallium Nitride on Silicon wafers (GaN on Si) and other large-size next-generation products. GlobalWafers is currently replacing equipment for the second phase of the Hsinchu Science Park plant to invest in 12” silicon wafers for advanced processes and expand R&D centers into developing advanced compound semiconductor materials, including silicon carbide (SiC). The application areas of silicon carbide with good heat dissipation include 5G, high-power components, high-frequency and high-voltage, and automotive electronics. In the future, the proportion of automotive semiconductors will rise significantly. These products have gradually matured and become the new growth momentum for GlobalWafers.

In terms of Product R&D, GlobalWafers aims to significantly enhance the production capacity and technology of high-end semiconductor wafers dedicated to advanced processes as well as accelerate the development of SiC wafers and semi-insulating SiC required for new technologies such as 5G, power electronics, and electric vehicles. The Company also intends to expand the establishment and R&D capacity for Taiwan’s wafer R&D center, invest in domestic green energy development, and increase the green energy utilization ratio for semiconductor wafer processes. 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



Integrated Circuit Wafer Materials

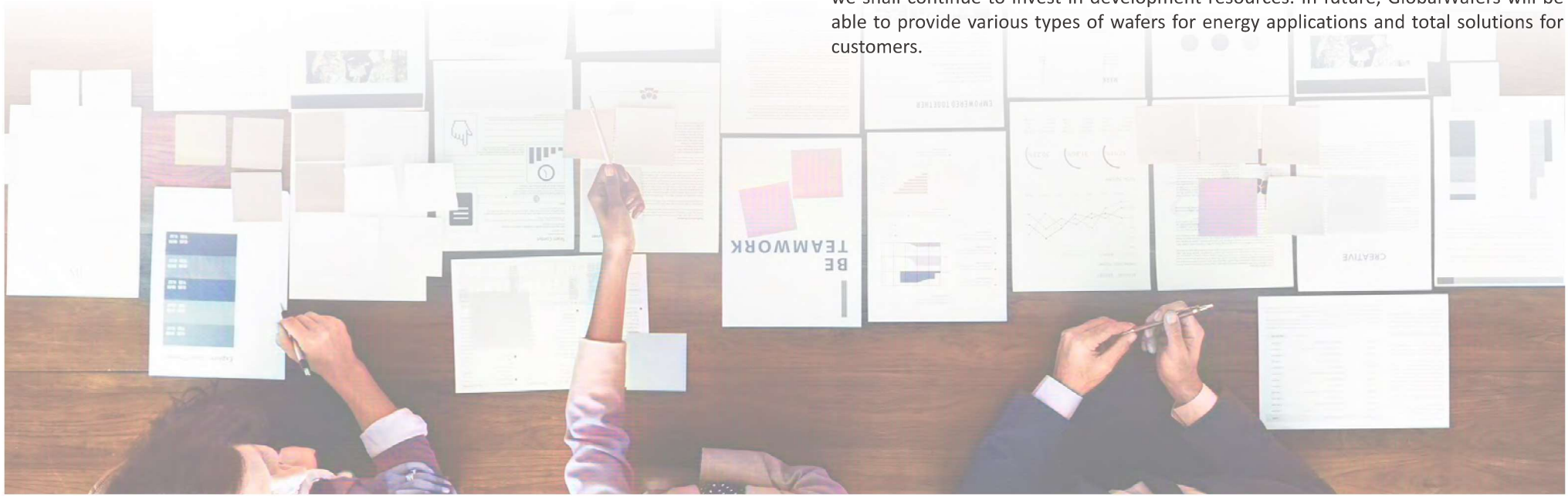
Main products are 8”~12” perfect silicon, 8”~12” annealed wafers, optical sensor device wafers and SOI wafers. Large-size wafers are mainly utilized for integrated circuit device manufacturing. This includes 5 major categories of devices of Bipolar Digital, Memory, Micro, Logic and Analog. When manufacturing process continues to micronize and requirements on silicon wafer defects and surface cleanliness and flatness have become more stringent, crystal pulling technology (for example, amount of oxygen density and micro-defects) enhancement and wafer processing technology breakthrough during the silicon wafer manufacturing process have therefore become more important. When wire width for integrated circuit manufacturing process is becoming smaller each day, quality requirement on silicon wafers is also becoming more stringent. In the field of integrated circuit wafer material, GlobalWafers shall continue to develop wafers compliant with advanced integrated circuit manufacturing process requirements while providing customers with the best services and options.

- Power Electronic Wafer Material:

Wafers for power electronic devices include low-resistance heavily-doped wafers, high power electronic wafers, automotive diode wafers and deep diffusion polished wafers. Such products are used in the field of silicon-based power semiconductors. Global sales of optoelectronics, sensors/actuators, and discrete semiconductor components (OSD) all hit record high levels in 2021 despite the COVID-19 virus crisis and the national lockdowns to slow the spread of the COVID-19 pandemic. According to IC Insights' January 2022 Semiconductor Industry Report, the total OSD revenue in 2021 exceeded US$100 billion for the first time, which increased by 18% to $104.2 billion compared to US$88.3 billion in 2020. According to IC Insights' 2022 McClean Report, total sales for discrete semiconductor components in 2021 surged by 27% to reach US$35.2 billion, driven by demand to buy power transistors, diodes, and many commodity components. This figure has increased by 5-fold in the past 30 years. The material switching revolution is continuing for discrete components, with GaN and SiC technologies replacing some silicon transistors and more diodes to improve product performance (https://www.icinsights .com/news/bulletins/SensorActuator-And-Discrete-Sales-Surge-In-2021-Not-So-For-Opto/). The global demand for power semiconductors continues to grow. GlobalWafers plays a leading role in this field and will continue to strengthen the development of related products and technologies.

- 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 third-generation semiconductor output value will grow from US$980 million in 2021 to US$4.71 billion in 2025, with a compound annual growth rate (CAGR) of 48% (https://technews.tw/2022/03/10/wbg-sic-gan-cagr/). 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. In future, GlobalWafers will be able to provide various types of wafers for energy applications and total solutions for customers.

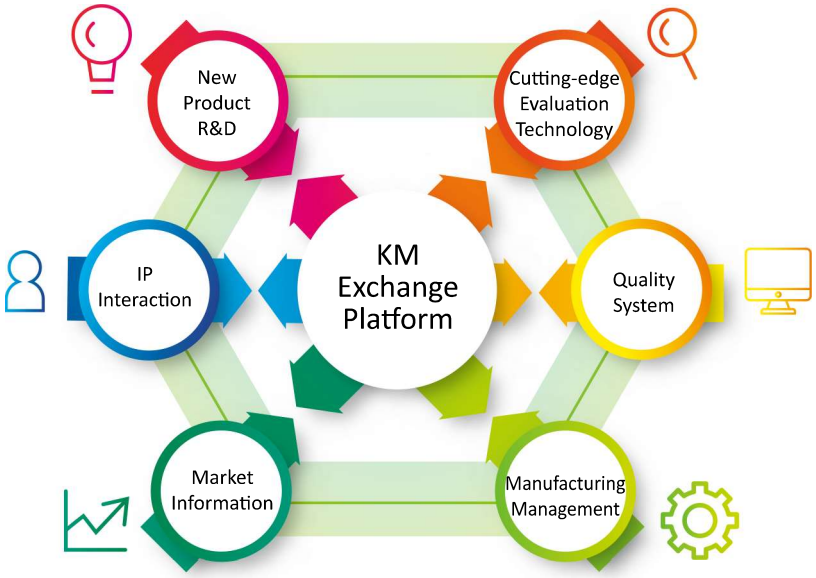


Research Resources

Product development takes time, manpower and resources. It takes resources and support from numerous parties for a product development to come to fruition. How to utilize small resources is prerequisite to creating maximum benefits when resources are limited.

Internal Resources

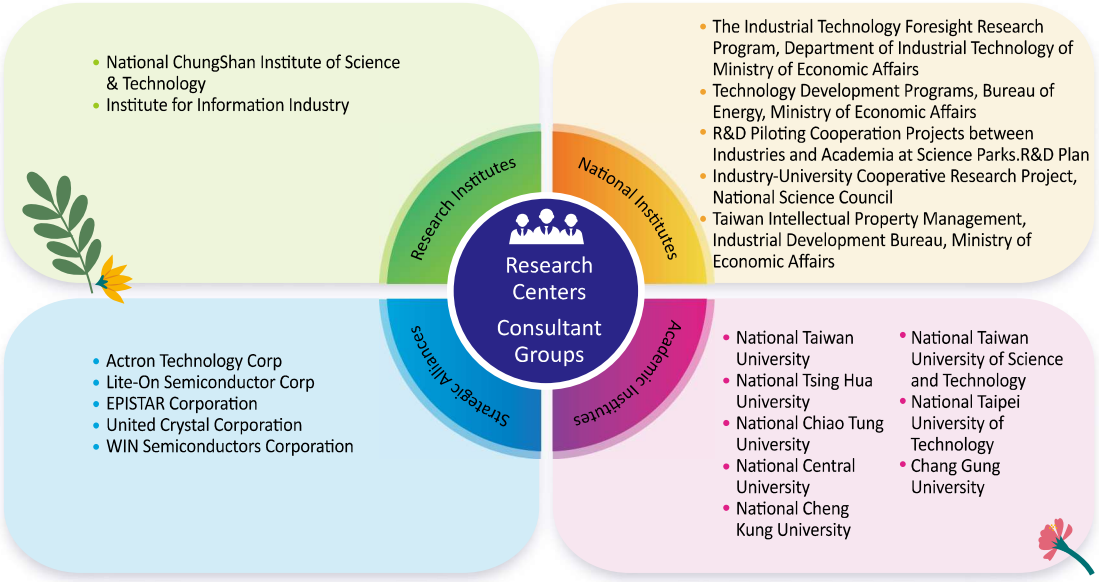
GlobalWafers has a total of 17 operating production bases distributed throughout 9 countries worldwide as well as customers in Europe, Asia, and the Americas. Faced with globalized competition, grasping information and resources sharing will be conducive to more efficient and accurate strategies. Therefore, GlobalWafers has established inter-factory Knowledge Management (KM) interaction platform which enables interaction amongst factories by communicating/sharing information and technologies. On this interaction platform, resources and supports 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' capability is facilitated accordingly through internal competition mechanism established by this interaction platform.



Internal Resources - KM Exchange Platform

External Resources

Taiwan has excellent academic resources and has accumulated large amounts of profound knowledge regarding fundamental researches and scientific applications. Infusion of academic research energy through academia-industry collaboration expediates product development and shortens the process of time to market. On the other hand, Taiwan has a complete (information and Communication Technology) ICT industry chain. Through up- and down-stream integrated operation, we are able to facilitate mass production during the product development stage. Furthermore, to facilitate industry upgrades and practical application of academic researches, governmental bodies subsidize academia-industry collaboration on new products and new technologies development. Since 2015, the Taiwanese government has started the guidance program promoting industry upgrades & innovation platform, and assists industries in undergoing structural 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 researches with research agencies, as well as implementing national projects via subsidy application to national institutes and conducting strategy alliances with industry players. External research consultant groups composed of these external resources work together to solve technological issues arising out of the product development process and conduct verification on research products.



External Resources

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

R&D Strategy and Company Operations

Intellectual Property Management Guidelines

In 2013 GlobalWafers' intellectual property management system adopts the Taiwan intellectual property management system and has passed the TIPS (Taiwan Intellectual Property Management System) basic certification, and continued to pass advanced certifications in 2014 and 2015, as well as AA-level certification in 2016. Continued to pass the AA verification in 2017, 2018, 2019, and 2021. With the promotion of TIPS, we have established intellectual property goals, provide employees with intellectual property rights education and training and enhance information security guidelines. In so doing, we strengthen our patent deployment, reduce infringement risks and prevent confidential information leakage, so as to protect the rights and interests of the Company and our customers. In the era of technology-based competition, intellectual property rights are a niche instrument in the competition of next-generation product development. GlobalWafers has aggressively promoted patent deployment and planning in the fields of various critical technologies and accelerated the development of our own core technologies. GlobalWafers currently has 338 valid patents. If its other overseas subsidiaries are counted, the total number of valid patents obtained by the entire Group has reached 1,706 (as of December 2021, including the number of patent applications in progress and received).

3.2 Product quality

GlobalWafers adheres to the spirit of never ending improvement and excellence, provides the best quality, technology, and comprehensive services to enhance the quality of products and competitiveness. The Company aims to grow together with its customers, pursue excellence with employees, create value for shareholders, and pursue sustainable operations with our customers.

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 has participated in the 2021 “Taiwan Continuous Improvement Competition” and won the Gold Tower Award for the Self-improvement Category of the Self-improvement Group. We will continue to improve and refine our engineering technologies.

Wafer-Pick-up Circle: Gold Tower Award

Improvement theme:
the decryption of the diffusion process and the challenges revenue increase

Confirmed:
The diffusion pass rate jumped 3.44%
The target yield achievement rate was 126.77%

The quarterly profit rose 12.18%, and the target
Profit achievement rate was 148.2%

3.3 Customer Services

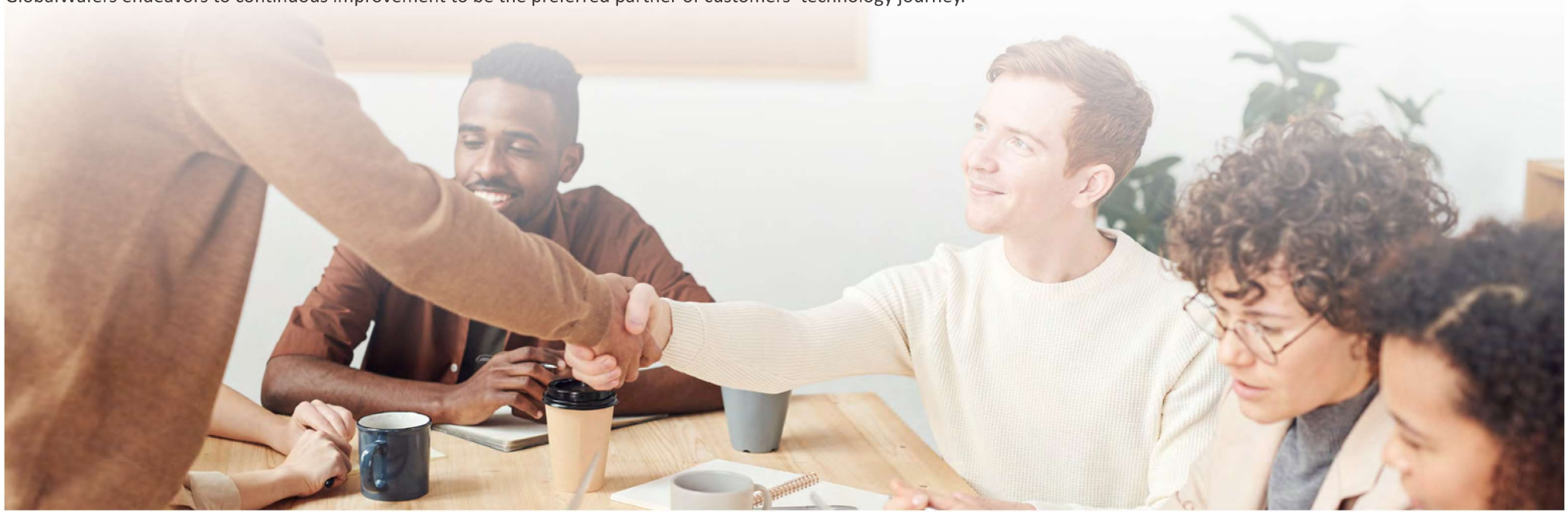
Customers are GlobalWafers' valuable assets. They are also the company's important partners along the way to growth. In addition to maintaining operation performance, enhancing the company's core value and pursuing advanced technology and stable quality, we also provide comprehensive customer service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

Customer Satisfaction

GlobalWafers has become the world's 3rd largest semiconductor wafer manufacturer. The major contribution to this achievement is customer's recognition and support. Therefore, customer service has always been central to 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. Issues that need to be improved are located through survey results, and improvements will be continued in order to achieve customer satisfaction as the ultimate goal.

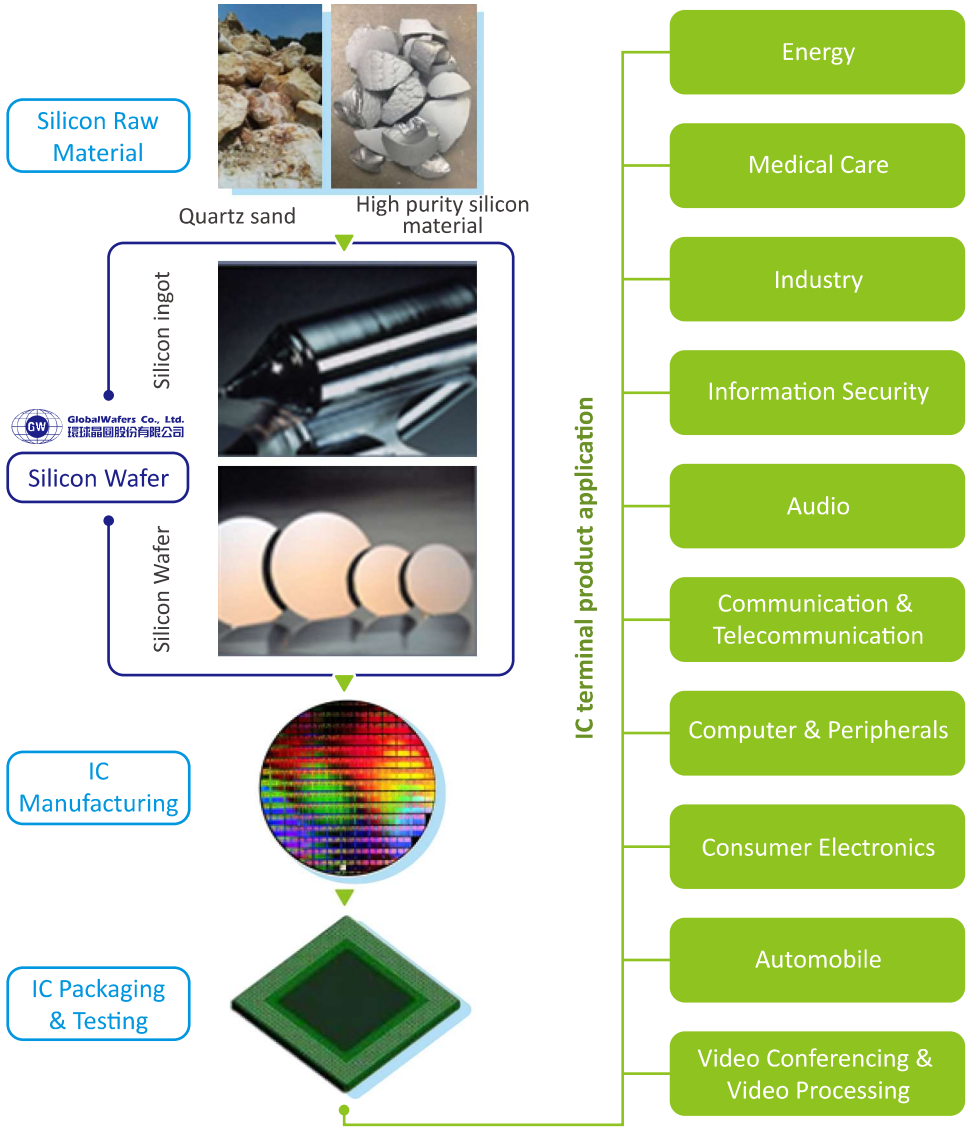
Contents for our customer satisfaction survey mainly encompass overall impression, business service, product quality and new product openness. Based on customer's feedback, GlobalWafers business team together with other colleagues will establish an improvement plan focusing on issues revealed, and further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

Through the efforts of various GlobalWafers teams in 2021, the customer satisfaction survey recovery rate reached 98%, the feedback shore we have achieved the goals we set in both product quality and new products launched. The figures show that we have won the approval of the vast majority of customers for our stable quality and pursuit of advanced technology. GlobalWafers endeavors to continuous improvement to be the preferred partner of customers' technology journey.



3.4 Industry Supply Chain & Management

Upstream and Downstream Supply Chain

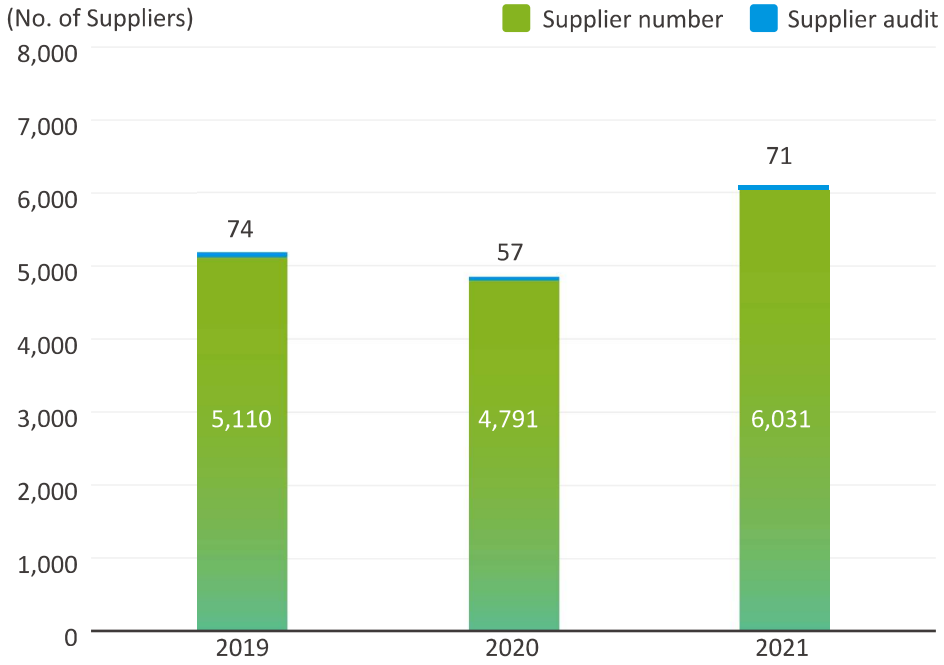


Supplier Assessment Management

GlobalWafers through appropriate supplier assessment operation, qualified suppliers are carefully defined and selected. 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 need to comply with Ethical Corporate Management Best Practice Principles, with no dishonest behavior records for our suppliers. 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.

Regarding on-site supplier audits, approximately 1.2% of the total number of suppliers received on-site audits in 2021, and a similar ratio of on-site supplier audits has been conducted with the past 3 years.

Number of On-Site Audit Suppliers for Global Factories



Legal and Regulatory Requirements and Risk Control of Key Materials

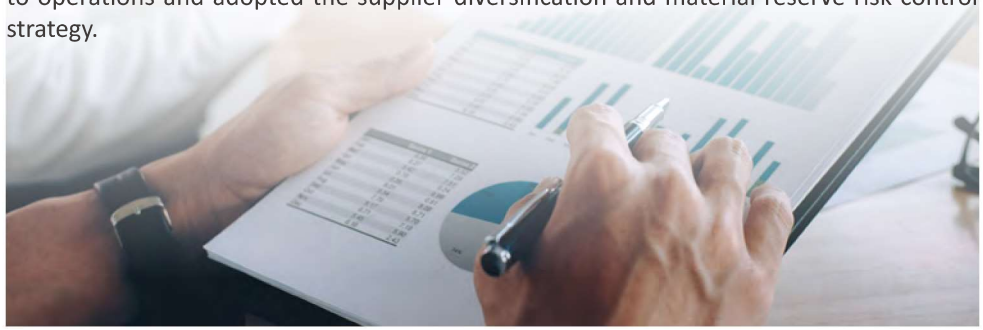
GlobalWafers regularly collects regulation requirements from countries as place of receipt, countries as place of delivery as well as countries as destinations designated by customers to ensure product purchased, procedures and services all comply with laws and regulations requirements applied by countries where subjects are located. In addition, when customers set special controls on specific products due to legal requirements, we will ensure such special controls are implemented and maintained, which include monitoring the suppliers.

In some countries or regions, the source or production of raw materials is subject to the corresponding local laws and regulations of the country or region involved such as the EU RoHS directive, the REACH regulations (restrictions), and the Toxic Substances Control Act (TSCA) of the United States.

To ensure the company's quality management system continues to comply with requirements from customer and applied regulation, we regularly implement reviews over compliance with related information and regulations, and make a list of the company's stakeholders and issues of their concern. We also continue to work with the Conflict-Free Minerals Plan and request suppliers to conduct reasonable due diligence on supply chain to ensure that materials provided to us by supplier are conflict-free, for the purpose of meeting requirements from customers and regulations.

The 2015 "Modern Slavery Act" passed by the British government in October 2015 is applicable to enterprises with annual revenues of £36 million and operating activities in the UK. Our operation activities in respective countries comply with all local laws which include various acts preventing human trafficking and slavery systems. GlobalWafers will never tolerate any behavior of modern slavery system, and insists all its commercial transactions, business relationships and supply chain activities comply with moral requirements, upholding integrity as its highest principle.

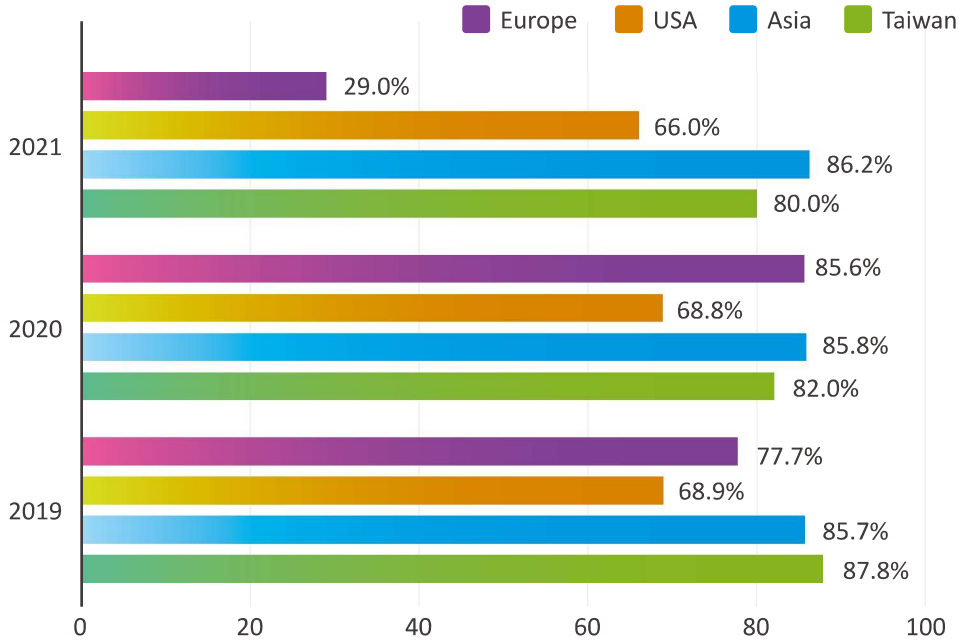
GlobalWafers has identified silicon raw materials as key materials with potential risks to operations and adopted the supplier diversification and material reserve risk control strategy.



Local procurement

GlobalWafers' procurements are roughly categorized into equipment, parts & components, raw material, factory matter and automation equipment. Respective factories conduct their own procurement. We aim at localized supply chain as our goal which can increase supply flexibility and reduce unnecessary costs and supply chain carbon emission, promote green industry development and create local employment opportunities. GlobalWafers production bases are located throughout the regions of the globe. We regard the promotion of local industry development as an critical part of corporate social responsibility. We have endeavored to fulfill the local industry development promotion concept.

Ratio of Local Procurement by Plants Worldwide

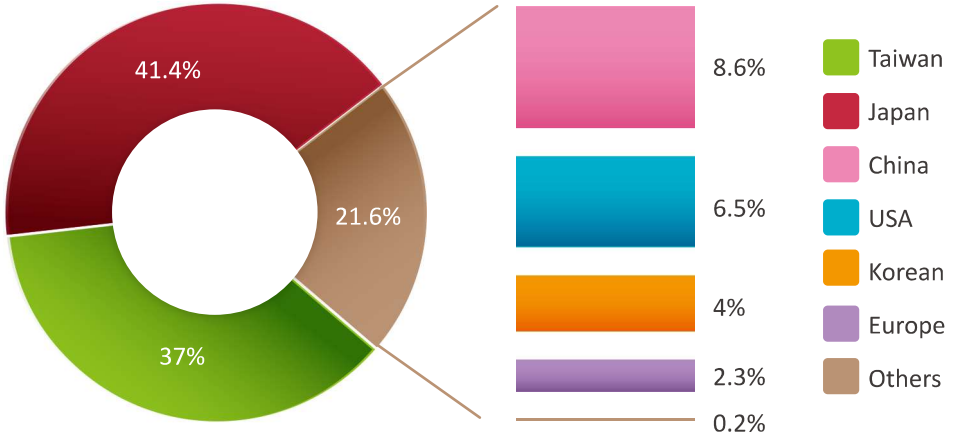


Note: 1. Local Procurement: The factory and its supplier are located in the same country.

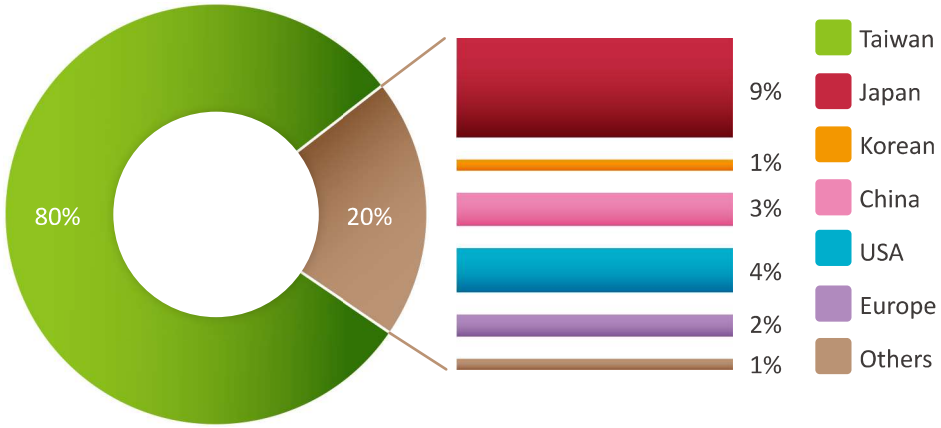
Note: 2. Local procurement percentage is calculated by dividing the number of local procurement by the supplier number.

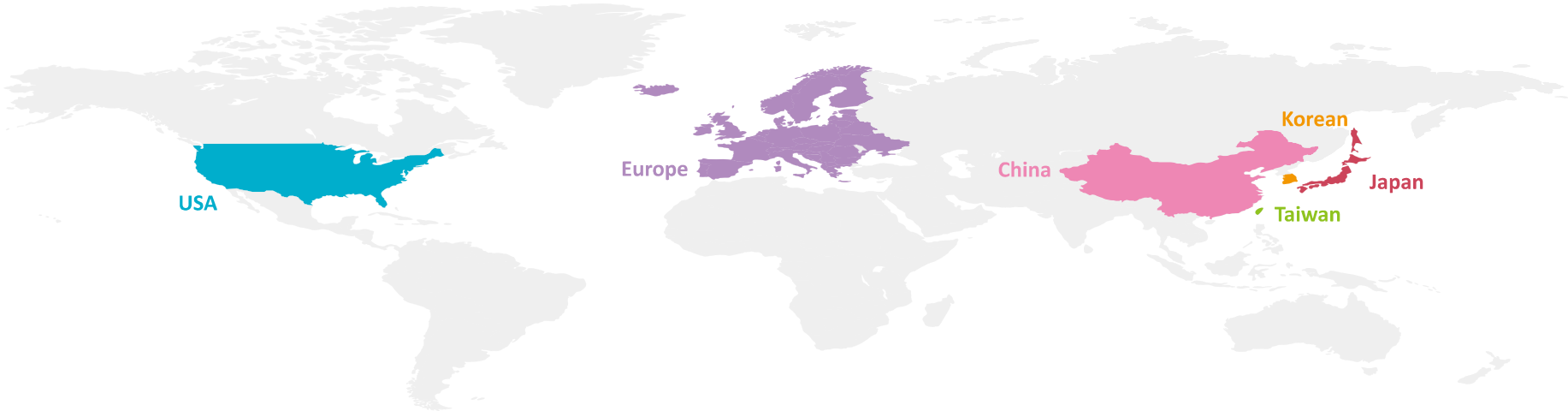
The number of suppliers of the Taiwan plants accounted for approximately 23.5% in 2021 compared to other plants worldwide. This ratio has slightly dropped. In terms of Taiwan plant suppliers' geographical distribution, 80% of the suppliers were local and the local procurement amount accounted for 37%, the second highest among total procurement amount in Taiwan plants.

Amount of local procurement by the Taiwan plant



Supplier Location Distribution for Taiwan Plants





04

Major aspects for consideration

Climate change risks and opportunities | Reduction at source | waste management | water management

Significance to GlobalWafers

Under the policy of "Circular Economy" which is promoted aggressively by the government, GlobalWafers is aware that the economic and technological development shall also consider importance of environmental protection, and considers that corporates have the responsibility to share impacts on the environment. As such, GlobalWafers fulfills facilitation on resources recycling in line with the "Circular economic" vision. In addition to the three Rs (Reduce、Reuse、Recycle), we focus more on the 4th R (Redesign), which ensures pre-planning of recycling effects of reduction, reuse and re-application for the product/manufacturing process during its design stage, while continues to enhance pollution prevention technological capability. Self-monitoring is also required in order to achieve the vision of a sustainable environment.

Management mechanism

GlobalWafers has introduced the product life cycle concept by promoting the ISO 14001 environmental management and ISO 50001 energy management systems. The goal is to reduce raw material consumption at the source starting from the production process and product design phases. We have implemented the environment & energy management system by setting the annual energy-saving and material-saving goals, and continued to execute water recycling and waste reduction measures in order to cherish resources, reduce resource consumption, and achieve the greenhouse gas emission reduction objective. Our plants have continued to conduct the material flow cost analysis (MFCA) in order to achieve effective management by identifying improvement opportunities through production process inventory.

2021 Key Results

With respect to prevention of air pollution and water pollution, the company also works with the promulgation of the environment management system. Each year, goals for energy conservation, water conservation, waste reduction and resource saving are established in order to lower energy resource consumption while achieving results of reducing greenhouse gas emission. With respect to waste management, traditional cleaning and disposal are transferred into the concept of effective resource management in order to reduce waste generation. Meanwhile, audit management on waste clearance companies is enhanced to ensure that waste is disposed in an appropriate manner. For regulation compliance, GlobalWafers insists on legal operations and conducts compliance assessment focusing on internal/external environment related issues. Preventive rectification measures will be taken immediately in the event of discoveries of regulatory risks, and policy fulfillment will be ensured through comprehensive management and vigilant operation and maintenance.

- GlobalWafers has continued to promote the Carbon Disclosure Project (CDP). In the 2021 results, the climate change category questionnaire has been upgraded from "C" to "B," and the water issue questionnaire category has been upgraded from "B-" to "B."
- GlobalWafer's environmental and social sustainability performance for items such as carbon emission reduction, electricity consumption, and waste has met the predetermined goals. In February 2021, HSBC (Taiwan) Commercial Bank announced providing a Sustainability Linked Loan for GlobalWafers sustainable development, another important step on the path to sustainable finance. The parties will work together to help Taiwan move towards a zero-carbon economy.
- GlobalWafers has adopted the "Natural-based Solutions (Nbs)" as one of the carbon reduction options. As an example of Italian sites (MEMC Electronic Materials S.P.A), participated in the Treedom social innovation platform for the first time, and planted about 1,602 trees in Africa as well as Central and South America (such as Tanzania, Ecuador, Madagascar, Kenya) to absorb carbon dioxide and add greenery to the earth.
- GlobalWafers has fulfilled its corporate social responsibility and is committed to promoting environmental protection. We have continued to improve energy conservation and waste reduction by establishing green factories, improving processes, and encouraging employees to participate in environmental conservation activities. The government has recognized our ongoing efforts, and we are dedicated to environmental development. The Taiwan Hsinchu plant won the Copper Award of the "Third Term of National Enterprise Environmental Protection Award," the highest national environmental honor from the Environmental Protection Administration, Executive Yuan.
- The Topsil GlobalWafers A/S in Denmark has effectively reduced the amount of plastic used for silicon ingot packaging starting April 2021, which can effectively reduce the amount of plastic by 100% and the number of other packaging materials by 50%.
- GlobalWafers Hsinchu factory in Taiwan has added recycling system equipment in 2021 to treat the ROR wastewater generated by the cleaning machine QDR, pure water system RO, and recycle the RO treated water to the tap water valve. The equipment had recycled about 120CMD of water per day in 2021, according to the designed capacity.
- GlobalWafers Chunan factory in Taiwan has added recycling system equipment in 2021 to treat the ROR wastewater generated by the cleaning machine QDR, pure water system RO, and recycle the RO treated water to the tap water valve. The equipment had recycled about 177CMD of water per day in 2021, according to the designed capacity. Rainwater is also recycled and reused for garden watering after collection, saving about 0.1 tons of tap water per day.

4.1 Climate Change Risks and Opportunities

According to the 2022 Global Risks Report from the World Economic Forum, the perception survey for the world's most serious risks for the 10 years indicated that among the top 10 risks, 5 are considered "environmental" risks, and 4 are catalyzed by the COVID-19 outbreak (social cohesion disruption, livelihood crisis, infectious diseases, debt crisis). Among them, "Climate Action Failure" and "Extreme Weather" occupy the top 2 spots consecutively. The key commitments signed by countries at the 2021 Conference of the Parties (COP26, Glasgow Climate Pact) include:

- The Glasgow Financial Alliance for Net Zero (GFANZ) comprises 450 financial institutions with US$130 trillion in assets. It has signed on to the sustainable finance principles to assist in developing global net-zero emissions.
- Net-zero carbon emissions by 2050 is a global consensus, and the world is focusing on the medium-term emission reduction target for 2030.

This shows that governments, international enterprises, and investment institutions are more focused on the "zero carbon economy." In light of the clean technology and energy transition trend, GlobalWafers has supported climate initiatives/carbon neutrality and planned its own climate roadmap. Regarding climate action, GlobalWafers has continued to implement greenhouse gas mitigation and adaptation actions in phases from greenhouse gas inventory, energy management, energy conservation, and carbon reduction. In 2021, GlobalWafers announced its commitment to using 100% renewable energy by 2050 and will achieve this renewable energy goal in phases.

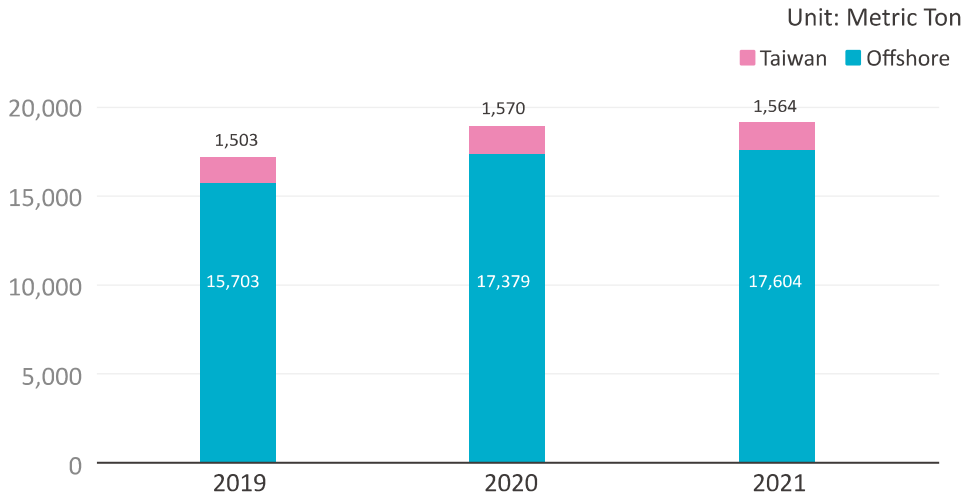
4.1.1 Greenhouse Gas

In collaboration with the country's overall greenhouse gas reduction strategy development and the global net-zero transition action goal, GlobalWafers has autonomously promoted and completed the systematic greenhouse gas emission inventory (ISO 14064-1:2018) and established an inventory list database. 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 in 2021. The overseas factories have voluntarily implemented greenhouse gas emission inventory and plan to complete the third-party verification by 2023. The goal is to implement an effective voluntary emission reduction action plan, slow down global warming, and fulfill the obligations of being a part of the global village.

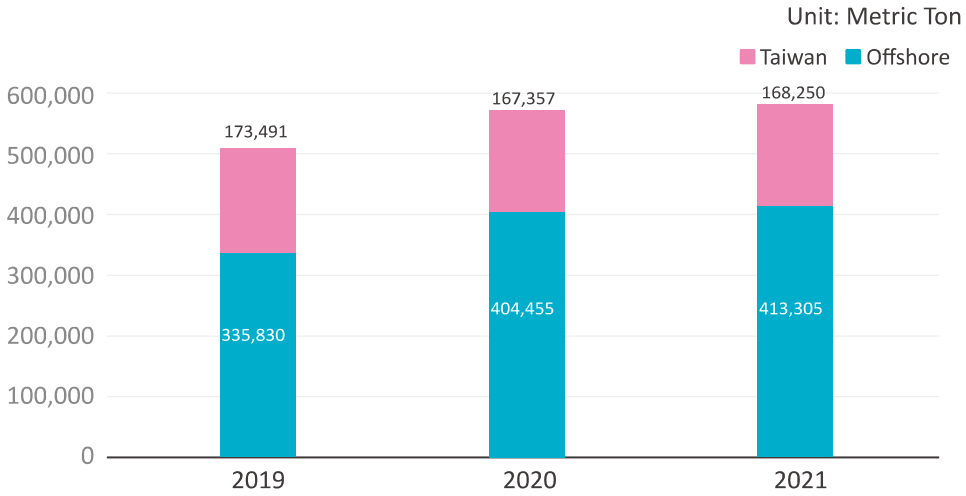
The Company has adopted the "Operational Control Act" for its organizational boundaries. The greenhouse gas emission outputs related to the organization's operations include direct (Category 1: greenhouse gases from process use & fuel use, septic tanks and firefighting equipment, and other emission sources), indirect energy (Category 2: purchased energy), and other indirect sources of greenhouse gas emissions (Category 3). In this report, we have disclosed the direct (Category 1), indirect energy (Category 2), and other indirect emission sources (in Taiwan). The gas types included in the calculation cover carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, and sulfur hexafluoride. The source of the GWP value used is from the 5th IPCC Assessment Report (2013).

GlobalWafers' total greenhouse gas emissions for Category 1 and Category 2 in 2021 are approximately 600,700 metric tons. It came from Category 2 electricity emissions, which have increased compared to 2020 primarily due to the increase in production capacity. However, the plants have continued to implement internal energy consumption management and improvement, achieving energy conservation and carbon reduction effects. Our carbon dioxide equivalent emissions in 2021 are approximately 9,000 metric tons, which has increased by 1.7% compared to 2020. Among them, direct emissions (category 1) carbon dioxide equivalent accounted for 3.19% of total emissions, and indirect energy emissions (category 2) accounted for 96.81%. Taiwan's carbon dioxide equivalent emissions accounted for 28.27% of the total emissions. In addition, the Taiwan region is an example to illustrate that no perfluorinated compound pollutant was emitted in 2021.

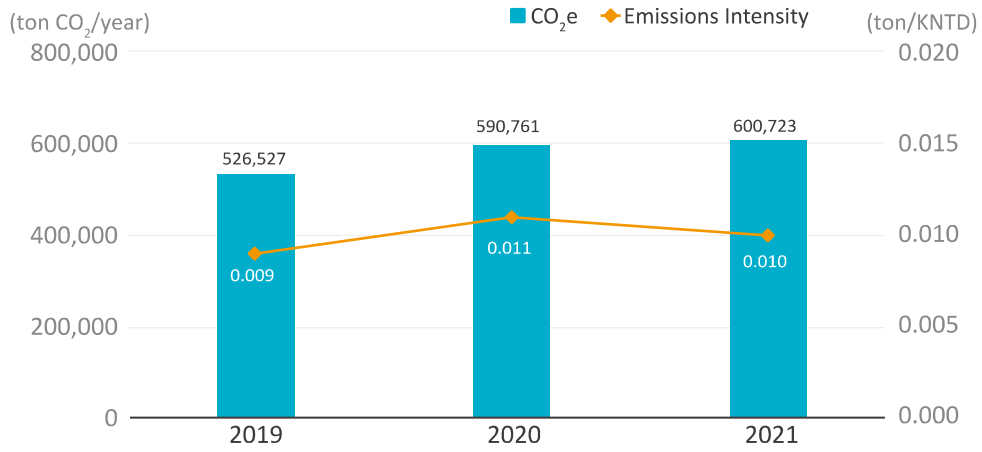
Type 1 GHG emissions



Type 2 GHG emissions



GHG emissions intensity



Note: 1. Taiwan: GlobalWafers Headquarters, Chunan Plant, Taisil Branch

Note: 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.

Note: 3. Carbon dioxide equivalent emissions are calculated based on emission factors issued by the countries where each factory is located.

Note: 4. GHG emissions intensity: Category 1 & 2 total emissions (ton CO_2e) / combined revenue (KNTD).

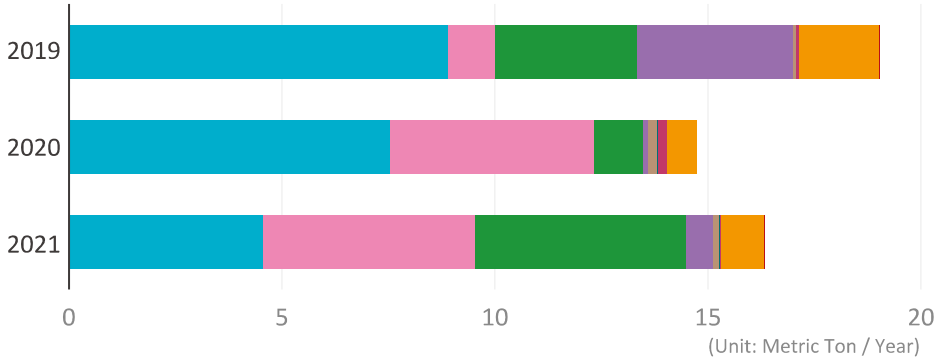
• Other indirect emission sources (Taiwan region)

Item	2020 emission volume in Taiwan	2021 emission volume in Taiwan	Description
Raw material procurement	212,463	234,681	Carbon emissions from main raw materials / auxiliary raw materials/packaging raw materials
Fuel and energy-related activities outside of scopes 1 & 2	36,141	31,224	Carbon emission deduction from power consumption, gasoline, diesel, and natural gas usage in each plant area
Upstream raw material transportation and distribution	1,771	2,051	Carbon emissions during the transportation stage for main raw materials / auxiliary raw materials/packaging raw materials
Waste produced from operations	583	676	Total carbon emissions from wastewater/waste generated by each plant
Employee business trips	7	2	Carbon emissions generated by employees' domestic and foreign travel
Employee commuting	740	868	Carbon emissions generated by employees' commuting to work
Downstream product transportation and distribution	5,235	2,723	Carbon emissions from product transportation to the customer
Total	256,940	272,225	

• Other Significant Gases

Taiwan's fixed pollution source emissions include nitrogen oxides, acid waste gas (hydrogen chloride, nitric acid, phosphoric acid, hydrofluoric acid), ammonia, volatile organic compounds, and particulate pollutants. Among them, emissions of nitrogen oxides, ammonia, and volatile organic compounds exceeded 1 metric ton in 2021.

Other gas emission volumes in Taiwan region



	NOx	VOCs	Ammonia	Nitric Acid	Hydrogen Chloride	Phosphoric Acid	Hydrofluoric Acid	Particulate Matier Pollution	Sulfuric Acid
2019	8.89	1.107	3.340	3.658	0.061	0.004	0.060	1.899	0.00004
2020	7.533	4.781	1.158	0.107	0.227	0.017	0.218	0.701	0.0025
2021	4.555	4.964	4.970	0.618	0.161	0.017	0.027	1.003	0.0022

Note: 1. Taiwan: GlobalWafers Headquarters, Chunan Plant, Taisil Branch

Note: 2. The annual emissions of particulate matter, inorganic acids, and alkalis are estimated based on the test report data from a qualified third-party laboratory; and the annual emissions of volatile organic compounds are calculated based on the test report results

Note: 3. Regular pollution source emission matter is disclosed according to the regular pollution source operation permit.

4.2 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 (offshore) 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 waste clearance and handling in accordance with 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. For the purpose of effective control over where wastes are shipped and to ensure that wastes have been carefully treated, audits are implemented each year based on the content of their work (clearance, handling, reutilization). 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:

• Preventing any significant impact caused by managed wastes

① GlobalWafers has installed air pollution prevention equipment, waste (sewage) pre-treatment facilities, and proper waste storage facilities in the factory to prevent any significant impact caused by managed wastes. The operation and management of each factory worldwide are compliant with the local environmental protection regulations to reduce the impact on the environment via proper operations and management.

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.

• Treatment flow for wastes derived from our own operations

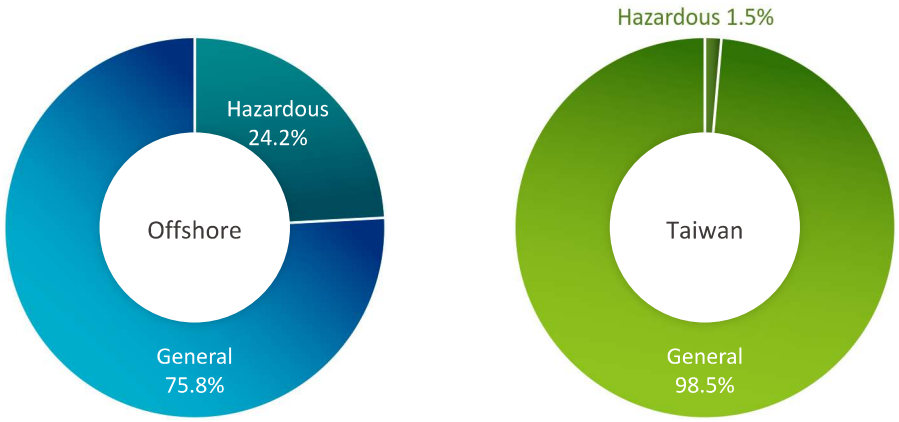
Wastes derived from our own operations can be treated via incineration, landfill, or recycling and reuse by third-party vendors, which have entered into contractual agreements with us to ensure proper waste disposal.

• Collection of waste-related data

The output quantity for wastes derived from our own business activities is recorded every month, and the removal operations for the plants worldwide are implemented according to the local environmental protection regulations, and the waste will be handled by the plants themselves or commissioned by third parties.

In 2021, Taiwan's waste disposal volume was 8,152.97 metric tons, of which general industrial waste accounted for 98.5%, and hazardous industrial waste accounted for 1.5%. The waste treatment volume in overseas regions is 27,207.6 metric tons, whereby general industrial waste accounted for 75.8% and hazardous industrial waste accounted for 24.2%. GlobalWafers' waste disposal volume in the past three years has shown an increasing trend each year, mainly due to the continuous expansion of production capacity.

Percentage of industrial waste in 2021



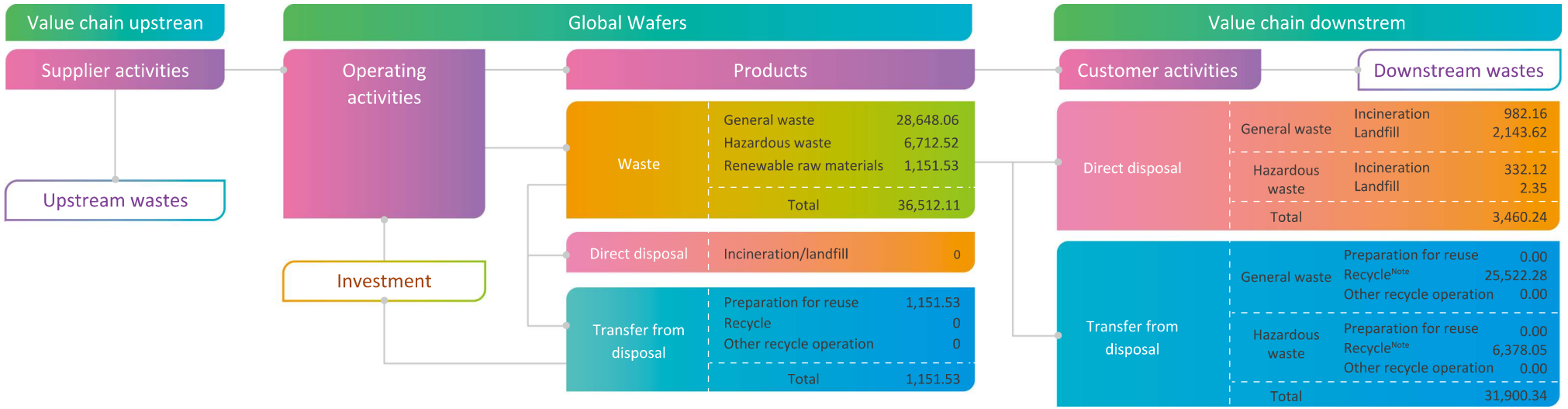
Note: 1. Taiwan: GlobalWafers Headquarters, Chunan Plant, Taisil Branch

Note: 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

Among the wastes generated by GlobalWafers' operations in 2021, general wastes (including recycled raw materials) accounted for 81.62% (29,799.59 metric tons) of the total wastes, and hazardous wastes accounted for 18.38% (6,712.52 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 90.5% of the total waste disposal volume.

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.
Note: 2 Recycle: Reprocess (chemical, physical, heat treatment, etc.) waste products or components to produce new materials.

Unit: Metric Ton

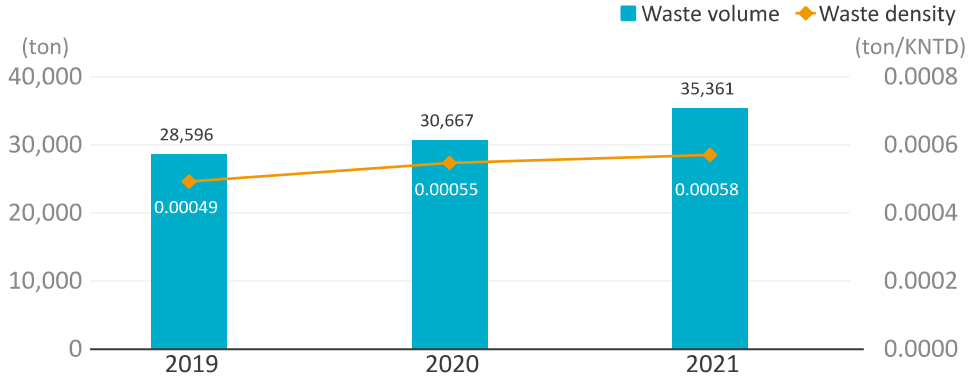


Note: The recycling back-end assumes that the waste is recycled after passing through the intermediate treatment processes.

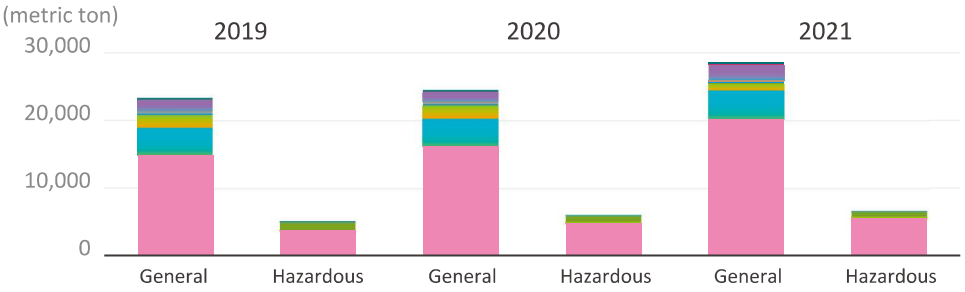
Unit: Metric Ton

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)	29,799.59	Preparation for reuse	1,151.53	0.00	1,151.53	Incineration	0.00	982.16	982.16
		Recycle	0.00	25,522.28	25,522.28	Landfill	0.00	2,143.62	2,143.62
		Total	1,151.53	25,522.28	26,673.81	Total	0.00	3,125.78	3,125.78
Hazardous waste	6,712.52	Preparation for reuse	0.00	0.00	0.00	Incineration	0.00	332.12	332.12
		Recycle	0.00	6,378.05	6,378.05	Landfill	0.00	2.35	2.35
		Total	0.00	6,378.05	6,378.05	Total	0.00	334.47	334.47
Total	**36,512.11**	**Total**	**1,151.53**	**31,900.34**	**33,051.87**	**Total**	**0.00**	**3,460.24**	**3,460.24**

2019~2021 Total waste output from GlobalWafers



GlobalWafers' Industrial Waste Disposal Method



	2019 General	2019 Hazardous	2020 General	2020 Hazardous	2021 General	2021 Hazardous
Other	292	148	291	112	289	112
Curing Treatment	116	1	115	1	126	1
Landfill	1,570	3	1,339	3	2,256	1
Thermal Treatment	290	2	283	2	317	7
Chemical Treatment	256	18	207	16	182	9
Chemicals	160	1,169	147	946	127	778
Incineration	1,782	149	1,913	215	959	332
Recycle	4,008	0	4,056	0	4,272	0
Recycle & reuse	14,897	3,736	16,183	4,838	20,120	5,473

Note: 1. Taiwan: GlobalWafers Headquarters, Chunan Plant, Taisil Branch

Note: 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.

Note: 3. Waste output and general waste, excluding recycled raw materials

Note: 4. Waste density: waste volume (ton)/consolidated revenue (KNTD)

4.3 Source Reduction

4.3.1 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, GlobalWafers utilize as much recycled raw materials as possible. Recycled raw materials utilized by sites 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.

2021 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	6,136.36	1,151.53	18.77%

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

Re-utilization Quantity for Silicon Raw Materials 1,151.5 metric tons

Re-utilization Quantity for Cutting Fluid (Supporting Agent) 2,720 metric tons

Wafer cassette 568 metric tons

Product Package Carton 20,432 pc

Single Factory Re-Utilization Rate

- GlobalWafers Headquarters 20.12%
- Taisil Electronic 18.94%
- GlobalWafers Japan Co., Ltd. 22.16%
- MEMC Electronic Materials S.p.A 13.25%
- MEMC Korea Company 18.82%

- Taisil Branch 60.35%
- MEMC Electronic Materials S.p.A 69.56%
- MEMC Electronic Materials Sdn. Bhd. 69.35%
- MEMC Japan Ltd. 63.79%

- GlobalWafers Headquarters 92.76%
- Taisil Branch 8.08%
- GlobalWafers Japan Co., Ltd 18.73%
- MEMC Japan Ltd. 56.24%

- GlobalWafers Headquarters 14.06%

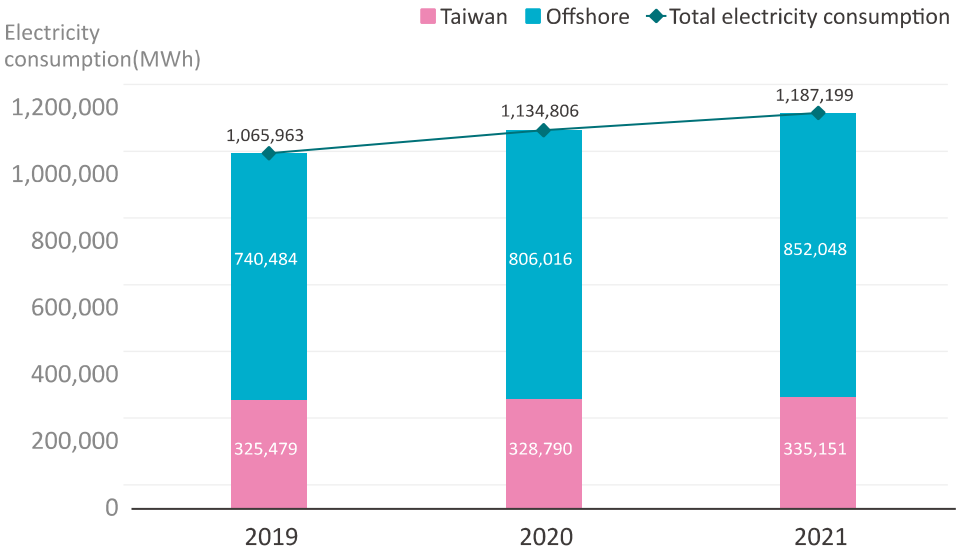
4.3.2 Energy Management

As stated in the previous chapter about organization inspection results on the greenhouse gas emission, the main resource for GlobalWafers' greenhouse gas emission is electricity. Therefore, GlobalWafers' current top priorities include reducing electricity utilization and enhancing energy efficiency. In Taiwan, through the introduction of ISO 50001 energy management system, GlobalWafers monitors and measures significant energy utilization equipment, establishes an improvement action plan and conducts regular performance tracking for improvement measures to achieve the goals of continuous improvement, energy-saving, and carbon reduction. The overseas factories are all anticipated to complete the ISO 50001 energy management system by 2024. We also expect 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.

Statistics for 2021 indicated that the total amount of electricity used by GlobalWafers' plants in 2021 is 1,187,199 kWh, which increased by about 52.3 kWh compared with 2020. Purchased electricity for the Taiwan region accounted for approximately 99.99% of the energy use. Regarding renewable energy, the solar power generation system established by GlobalWafers' Chunan Plant can generate power for self use, and the renewable energy utilization efficiency is approximately 0.0035%. In Taiwan, 31 new energy-conservation measures were added in 2021 in addition to the continuous implementation of previous energy-conservation measures. The total annual energy conservation items can save 6,003,710 kWh, equivalent to a reduction of 3,013.7 metric tons of carbon dioxide emissions throughout the year.

Note: Renewable energy use efficiency = renewable energy (MJ)/total energy used (MJ)

Total electricity consumption by plants worldwide



Note: 1. Taiwan: GlobalWafers Headquarters, Chunan Plant, Taisil Branch

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Energy usage in Taiwan

Unit: MJ

	Item	2019	2020	2021
Energy Type	Externally purchased electricity	1,171,722,672	1,183,643,478	1,206,543,762
	Renewable energy (solar power)	25,307	21,525	42,496
	Natural gas	20,440,292	20,898,797	20,754,905
	Diesel	220,792	86,994	213,797
	Gasoline	0	0	0
Total		1,192,409,063	1,204,650,795	1,227,554,960

Note: 1. Taiwan: GlobalWafers Headquarters, Chunan Plant, and Taisil Branch.

Note: 2. Due to incomplete data collection in overseas regions, only the Taiwan region is disclosed this year, and overseas regions will be consolidated into next year's annual report.

Note: 3. 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.

Energy-conservation measures in Taiwan

Category	Energy-saving items	Energy Saving Calculation Period	Annual savings (kWh)	Annual savings (GJ)	Carbon emission reduction equivalent (ton-CO_2e)	Electricity bill savings (NT$)
GlobalWafers Headquarters & Chunan Plant						
Air Condition Energy Saving	4th floor large office air-conditioning box inverter modification proposal	07/01~12/31	2,379 kWh	8,564 GJ	1.2	5,462
	Switch to energy-saving level 1 air-conditioning for Zhong Cang small office	07/01~12/31	500 kWh	1,798 GJ	0.3	1,147
Machine Efficiency Enhancement	Crystal growth furnace area air leak throttle inspection proposal (continued)	01/01~04/30	3,949 kWh	14,217 GJ	2.0	9,067
	1RO water pump replacement proposal (continued)	01/01~04/30	706 kWh	2,540 GJ	0.4	1,620
	No. 3 air compressor replacement project (continued)	01/01~07/31	86,218 kWh	310,384 GJ	43.3	197,962
	3R water pump A switched to IE3 pump	11/01~12/31	1,539 kWh	5,541 GJ	0.8	3,534
	Heat exhauster windmill 15hp variable frequency energy-saving windmill/add inverter for 10HP windmill	11/01~12/31	8,929 kWh	32,144 GJ	4.5	20,502
	Air compressor load reduction & air compressor efficiency adjustment (continued)	01/01~01/31	10,483 kWh	37,738 GJ	5.3	23,901
	Office computer virtualization	03/01~12/31	5,654 kWh	20,355 GJ	2.8	12,892
	General acid-base pool pump energy-saving improvement	01/01~12/31	878 kWh	3,160 GJ	0.4	2,001
	Old air compressor replacement	11/01~12/31	58,113 kWh	209,205 GJ	29.2	132,497
Machine Improvement	Washing machine circulation pipeline (continued)	01/01~09/30	61,554 kWh	221,594 GJ	30.9	141,332
	Switch PC to small PC (TC) energy-saving proposal (continued)	01/01~04/30	5,548 kWh	19,973 GJ	2.8	12,739
	Property management chemical warehouse energy-saving method (continued)	01/01~08/31	605 kWh	2,177 GJ	0.3	1,388
	WS process change to DW PPH energy-saving enhancement case (continued)	01/01~05/31	20,835 kWh	75,006 GJ	10.5	47,839
	HR-1000 grinder PPH energy-saving enhancement case	01/01~06/30	814 kWh	2,930 GJ	0.4	1,869
	Slicer crystal rod length-trim breakthrough energy-saving proposal	06/01~12/31	4,182 kWh	15,055 GJ	2.1	9,602
	Automatic cleaning machine wafer thinning division energy-saving improvement	10/01~12/31	2,265 kWh	8,154 GJ	1.1	5,164
	Introduce dry pump into the KX170 crystal growth process	01/01~12/31	1,303 kWh	4,691 GJ	0.7	2,971
	Introduce full energy-saving thermal field into crystal growth furnace	05/01~12/31	1,123,200 kWh	4,043,520 GJ	563.8	2,560,896
	Energy saving cover plate process development	05/01~12/31	82,944 kWh	298,598 GJ	41.6	189,112
	Decrease energy consumption for heavily phosphorus-doped products	10/01~12/31	40,694 kWh	146,498 GJ	20.4	93,436
	PC change to small PC (TC) energy-saving proposal (16 units)	12/01~12/31	1,224 kWh	4,406 GJ	0.6	2,810
	18-inch full energy-conservation thermal field (F3, F8) (continued)	01/01~02/28	43,200 kWh	155,520 GJ	21.7	98,496
	Energy-saving plan for silicon carbide mass production etching furnace (continued)	01/01~09/30	14,300 kWh	51,480 GJ	7.2	32,604
	Milling machine 158A water supplement via self-circulation (continued)	01/01~10/31	70 kWh	252 GJ	0.0	160

Category	Energy-saving items	Energy Saving Calculation Period	Annual savings (kWh)	Annual savings (GJ)	Carbon emission reduction equivalent (ton-CO_2e)	Electricity bill savings (NT$)
Energy Saving on Lighting	Product inspection T8 fluorescent lights are changed to LED fluorescent lights (continued)	01/01~07/31	3,493 kWh	12,575 GJ	1.8	8,020
	Circular grinding station LED lighting replacement	01/01~12/31	20,966 kWh	75,478 GJ	10.5	47,802
	ESG timer switch socket	01/01~12/31	1,409 kWh	5,072 GJ	0.7	3,212
	Floor light energy saving improvement	05/01~12/31	12,915 kWh	46,493 GJ	6.5	29,445
	3F automatic storage lighting improvement	05/01~12/31	4,800 kWh	17,280 GJ	2.4	10,944
	Replace Zhong Cang T5 lamp to LED lamp	01/01~12/31	1,413 kWh	5,087 GJ	0.7	3,222
	Switch diffusion area traditional light to LED light proposal	11/01~12/31	274 kWh	985 GJ	0.1	628
	G1 (microwave energy-saving fluorescent lamp) energy saving	11/01~12/31	238 kWh	856 GJ	0.1	546
Taisil Electronic Plant						
Air Compressor Energy Saving	Optimize air-conditioner fan frequency control according to indoor load	01/01~12/31	214,970 kWh	773,892 GJ	107.9	504,320
Machine Improvement	XPS305T uses bottom insulation material with better insulation effects (continued)	01/01~11/30	1,244,907 kWh	4,481,665 GJ	624.9	2,920,552
	Change the 32-inch bottom thermal field design to improve the thermal insulation effect (continued)	01/01~10/31	293,820 kWh	1,057,752 GJ	147.5	689,302
	32 inch uses side insulation material with better insulation effect (continued)	01/01~10/31	190,420 kWh	685,512 GJ	95.6	446,725
	Increase the number of 200mm LPHZ machines (continued)	01/01~12/31	385,501 kWh	1,387,804 GJ	193.5	904,385
	DGRD equipment reduce the vacuum pump usage rate	01/01~09/30	9,246 kWh	33,286 GJ	4.6	21,691
	Replace with new In-line heater (continued)	01/01~09/30	11,794 kWh	42,458 GJ	5.9	27,669
	ASM heating bulb fitness rate improvement (continued)	01/01~09/30	123 kWh	443 GJ	0.1	289
	Change the 32-inch bottom thermal field design to improve the thermal insulation effect-2021	09/01~12/31	320,742 kWh	1,154,671 GJ	161	752,461
	32 inch uses side insulation material with better insulation effect is used-2021	02/01~12/31	935,146 kWh	3,366,526 GJ	469.4	2,193,853
	Increase the number of 200mm LPHZ machines-2021	02/01~12/31	747,073 kWh	2,689,463 GJ	375	1,752,633
	300mm WIRESAW stirring motor inverter replacement	04/01~12/31	2,281 kWh	8,212 GJ	1.1	5,351
	200mm wafer polisher LED tube replacement	12/01~12/31	595 kWh	2,142 GJ	0.3	1,396
	Replace a new internal heater to improve the 200mm heating efficiency	03/01~12/31	2,544 kWh	9,158 GJ	1.3	5,968
	300mm EPI CENTURA uses low energy dry pump	10/01~12/31	16,957 kWh	61,045 GJ	8.5	39,781
Taiwan Total	Electricity		6,003,710 kWh	21,613,355 GJ	3013.7	13,981,198

Note: 1. Electricity carbon emission factor is calculated at 0.502 (kg CO_2e/kWh)

Note: 2. After weighted calculation, the electricity fee of each factory is calculated at 2.29607 NTD/kWh for GlobalWafers Headquarters, 2.28 NTD/kWh for the Chunan plant, and 2.346 NTD/kWh for the Taisil Branch.

4.3.3 Water Resources 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.

- Water Intake, Discharge, and Consumption Volume

Management of water intake-related impacts

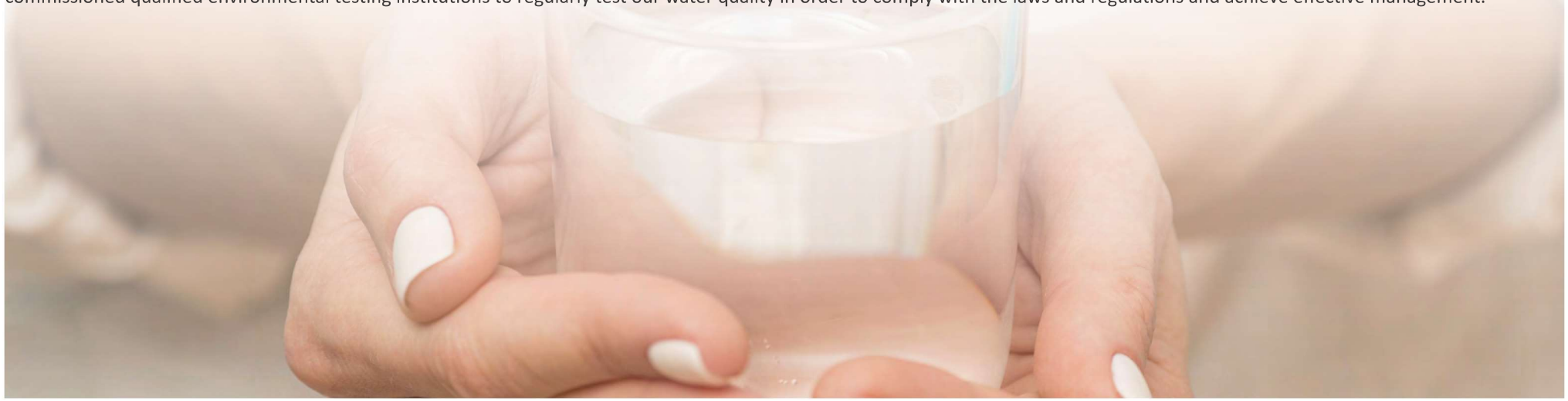
The water sources for GlobalWafers' factories worldwide are divided into the third-party water supply, surface water, and groundwater sources. The water source of each base is fresh water (≤1,000 mg/L total dissolved solids). The water in the Taiwan area is taken from the tap water supplied by the Taiwan Water Company. The water sources come from Baoshan Dam #1 and #2 as well as Yongheshan Reservoir. None of the raw water sources are classified as national or international nature reserves or sensitive water bodies.

GlobalWafers' total water intake in 2021 showed a downward trend compared to 2020. The water intake in 2021 was 20,895.9 million liters (kM^3), which decreased by 1,226 million liters (kM^3) compared to 2020. Regarding water intake impacts, the water intake volume from Taiwan's factories in 2021 was approximately 2,117 kM^3, and the (tab) water consumption volume from the factories was about 289,498 kM^3 (information source: 2021 data from the Water Resource Agency, MOEA). Water intake by our factories accounted for only 0.73% of the total water consumption for the region, which has no significant impact on the water source.

Moreover, we have adopted the wri aqueduct water resource risk assessment from the "Water Resources Risk Assessment Tool" of the World Resources Institute. The water resource risk assessment results for our global factories indicated that mainland China's factory 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 intake/total water consumption and high water stress areas are 1.64% and 1.16%, 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

GlobalWafers' total water discharge volume in 2021 was 17,347.6 million liters (kM^3), which slightly dropped compared to 18,086.1 million liters (kM^3) in 2020. In addition to practicing pollution prevention and control according to local environmental protection laws and regulations, we have also conducted self-testing for our factories worldwide. We have also commissioned qualified environmental testing institutions to regularly test our water quality in order to comply with the laws and regulations and achieve effective management.



• 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. Regarding water recycling and reuse, the total volume of water recovered by our plants worldwide in 2021 is 6,017.9 million liters (kM^3). In 2021, the plants in Taiwan recovered and reused 2,645.2 million liters (kM^3) of water, which accounted for 43.95% of the total water volume recovered. In terms of water recovery rate, our factories' average worldwide water recovery rate in 2021 was 22.36%, which slightly increased by nearly 2% from 20.41% in 2020. The water recovery rate in Taiwan for 2020 and 2021 is 50.35% and 55.55%, respectively. Taiwan is considered the top primary water recovery region among our plants worldwide.

Moreover, under the impact of the La Niña phenomenon and the abnormally strong Pacific high pressures during the rainy season in 2021, a severe drought occurred in Taiwan's first half because there was no precipitation during the important catchment period. The Science Park Administration required manufacturers in the park to conserve water according to the water conditions. The water conservation rate gradually increased from 7% to 17%, and the water supply was decompressed throughout the day. We have implemented the following measures to achieve the water-conservation effect and meet the competent authority's requirements.

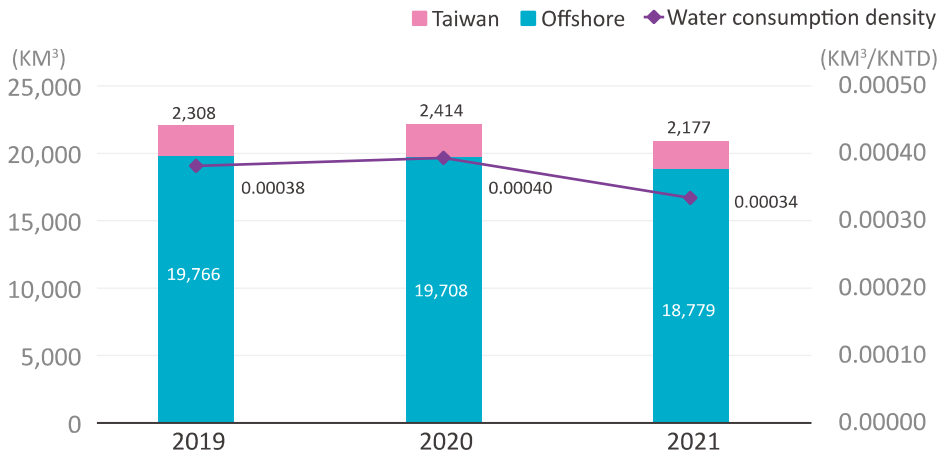
1. Adjusted the cooling water system control parameters (conductivity, ice water temperature), reduced the number of air conditioners turned on, and recycled the drain water from the cooling water system for use by the washing tower of air pollution control equipment to reduce the discharge/supplement water volume for the water cooling system and water loss due to evaporation.
2. Relevant water conservation measures include process ROR water recycling/rainwater recycling/reducing water for garden irrigation.

2019~2021 Water intake, discharge, and consumption volume

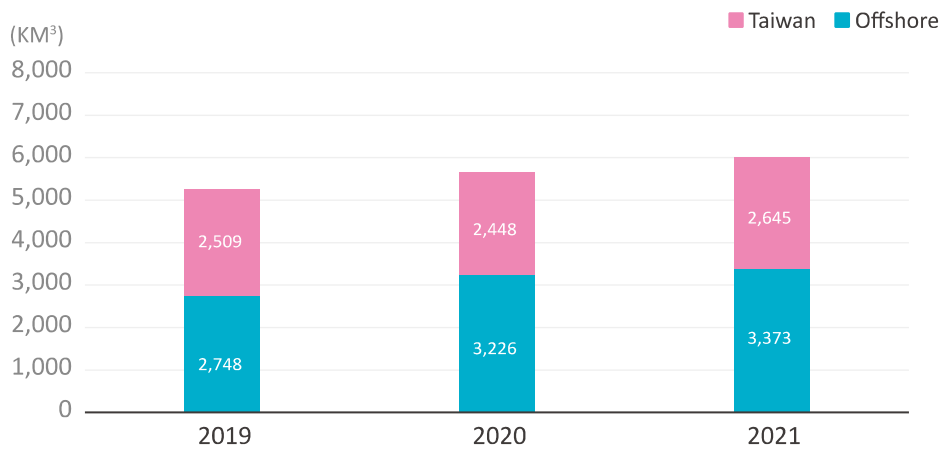
Unit: million liters (kM^3)

Item		2019			2020			2021		
		Taiwan	Offshore	Water resource stressed areas	Taiwan	Offshore	Water resource stressed areas	Taiwan	Offshore	Water resource stressed areas
Water withdrawal quantity	Surface water	0	1,240.2	0	0	1,250.3	0	0	1,269.4	0
	Underground water	0	11,287	0	0	10,810.2	0	0	9,492.5	0
	Seawater	0	0	0	0	0	0	0	0	0
	Third-party water	2,308.2	7,238.7	265.7	2,414	7,647.4	310.3	2,117	8,016.9	341.8
Total		22,074.1		265.7	22,121.9		310.3	20,895.9		341.8
Water discharge quantity	Surface water	0	7,506.7	0	0	6,631.8	0	0	5,656.7	0
	Underground water	0	0	0	0	0	0	0	0	0
	Seawater	0	4,584.7	0	0	4,652.8	0	0	4,738	0
	Third-party water	1,812.2	4,287.2	233.3	1,981.6	4,819.8	267.3	1,731.3	5,221.6	300.6
Total		18,190.8		233.3	18,086.1		267.3	17,347.6		300.6
Water consumption quantity		496	3,387.3	32.3	432.4	3,603.4	43	385.7	3,162.6	41.2
Total		3,883.3		32.3	4,035.8		43.0	3,548.3		41.2

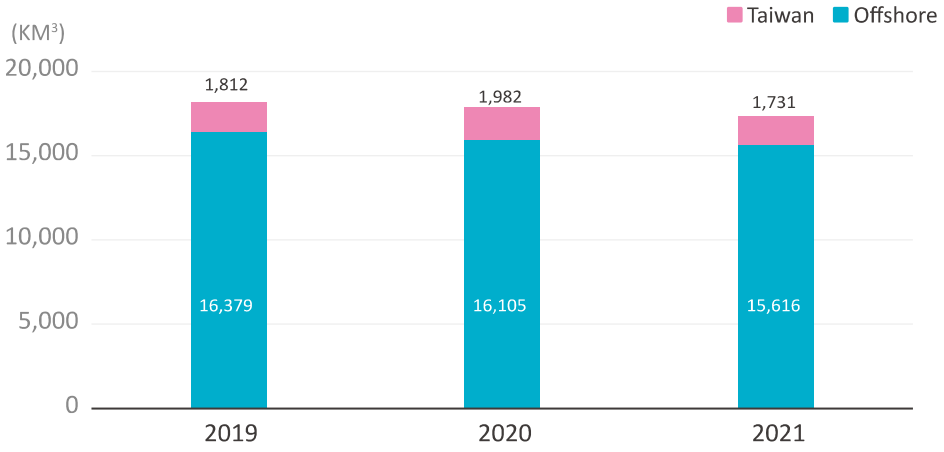
Total water withdrawal quantity



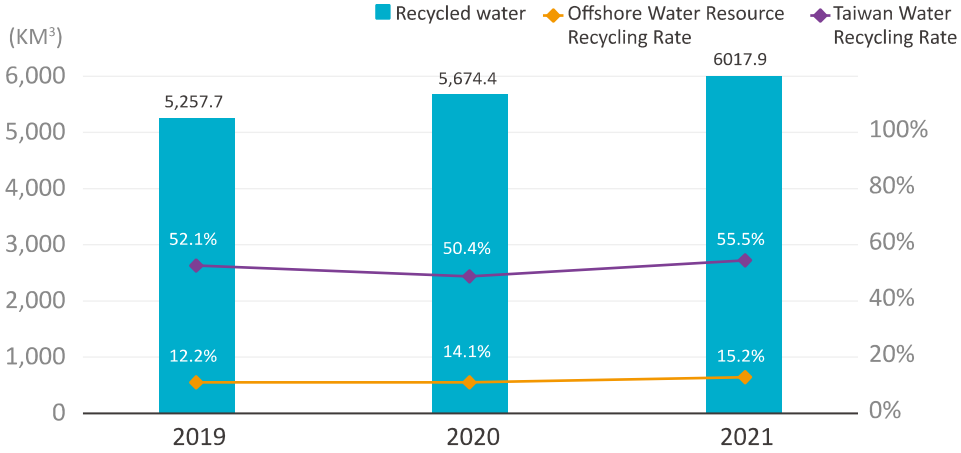
Recycled water reuse quantity



Total water discharge quantity



Water Resource Recycling Rate



Note: 1. Taiwan:GlobalWafers Headquarters, Chunan Plant, Taisil Branch

Note: 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

Note: 3. Water consumption density: water consumption (KM³)/consolidated revenue (KNTD)

05

Major aspects for consideration

Safety Environment (Emergency Response)

Talent Cultivation

Significance to GlobalWafers

Diversified employee composition is one of the key sustainable development factors for GlobalWafers, and our bases are distributed throughout the world. Under the principle of "creating a friendly workplace," GlobalWafers is committed to equal treatment despite gender, age, and ethnic group. In addition to providing friendly working conditions, the Company also attaches great importance to the harmonious development of the society and environment.

We value all of our employees; have formulated discrimination, remuneration, promotion, privacy, environmental safety and health, human resource development, and labor relations related policies; and actively encourage employees to participate in social welfare activities.

GlobalWafers strives to care about social issues while serving customers, and pledges to provide bilateral channels for employees to create a better, safer, and healthy working environment in order to promote sustainable development for the Company.

Management mechanism

- Formulate comprehensive regulations and methods related to discrimination, appointment, salary, promotion, privacy, environmental safety and health, human resource development, and labor-management relations. Recruit talents, maintain good labor-management relations, as well as track and analyze the Group's human resources utilization in order to grasp the organization's manpower and intellectual capital changes.
- The Company holds regular labor/management meetings and provides various communication channels and report mechanism in order to effectively understand employees' opinions and resolve their problems.
- We have established an Employee Caring Program (ECP) team composed of cross-departmental members. The team's objectives are to integrate and plan the overall welfare measures for employees, improve the general welfare of the Company, and enable colleagues to choose the appropriate resources and use them properly when encountering personal problems.
- The Company promotes occupational health and safety management system, safety education training and safety culture activities. We enhance employees' safety awareness, strengthen their professional literacy and discipline in order to reduce accident rate effectively and safeguard employees' occupational safety.
- Regularly conduct emergency response team training as well as emergency escape and evacuation drills; strengthen in-plant disaster relief as well as the colleagues' familiarity with the working environment and escape routes; and minimize any possible personnel injury, property damage, and environmental impacts caused by accidents.

2021 Key Results

- GlobalWafers is committed to creating the equal career development opportunities for both genders. The Company pioneered a Women's Leadership Committee at the MEMC Korea Company, which convenes various meetings and conferences to resolve issues and activities related to women's work.

- GlobalWafers' Utsunomiya Factory (MJL) in Japan passed the certification and won the highest three-star Eruboshi mark honors, showcasing GlobalWafers' continuous efforts to enhance the career development of female employees. In the future, we will also move towards increasing women's participation in the workplace and a more friendly working environment to fulfill the "global unity, sustainable future" mission.

- In 2021, GlobalWafers introduced the Employee Assistance Program Center (EAPC) to its Taiwan plant to provide comprehensive employee care. The service items include emotional management, interpersonal relationship, law, career, family, parent-child, financial, and other diversified consultation services.
- GlobalWafers co-organized the 2021 Industrial Safety and Environmental Protection Monthly Walk with the Taiwan Hsinchu Science Park Administration to improve employee and public occupational safety, health, and environmental protection awareness. The event allowed the science park staff to relax and enjoy diversified activities such as leisure walks in the gardens, mountains, and forests together. The parent-child interaction activities also enabled the seeds of industrial safety and environmental protection to germinate in children's hearts from an early age and achieve the advocation effects through the edutainment activities.

5.1 Employee Care

5.1.1 Human Resources

Diversified talents are the cornerstone of enterprise growth. We value the right to select talents and work autonomy, and are committed to creating the results together with our employees. In light of the challenges brought by globalization, technological progress, organizational development, and demographic changes; we have developed short-, medium-, and long-term human resource management plans in order to meet our corporate goals and achieve the attraction, integration, retention, evaluation, and development objectives. In sum, we have designed a structured interview process to effectively recruit knowledge-based talents; attached significant importance to employee potential and personal development; implemented job rotations to cultivate worker versatility; formed work teams to jointly formulate and execute projects; committed to creating a safe, happy, and healthy environment; upheld the basic rights of every employee; developed a reward system linked to performance; and encouraged employees and supervisors to jointly set and achieve personal goals. We will continue to provide employees with high-quality human resources services to help them create higher value.

In 2021, we had a total of 7,095 employees. Male employees account for 76.76%, and female employees account for 23.24%. In terms of official and non-official employees, official employees account for 95.21%, and non-official employees account for 4.79%. Regarding employment types, the non-fixed term (general employees) accounts for 85.91% of official employees, and fixed-term accounts for 14.09%. Regarding work locations, the number of employees in Taiwan accounts for 23.59%. Regarding management level in Taiwan, the total number of supervisors is 221, of which 77.83 % are males, and 22.17% are females. Regarding management ranks, there are 40 high-level supervisors (department level or higher), 79 managers or deputy managers, 33 director-level personnel, and 69 sectional-level personnel. Foreign employees accounted for 3.3%, and overseas employees accounted for 0.03%.

Man Power Structure in Global Factories

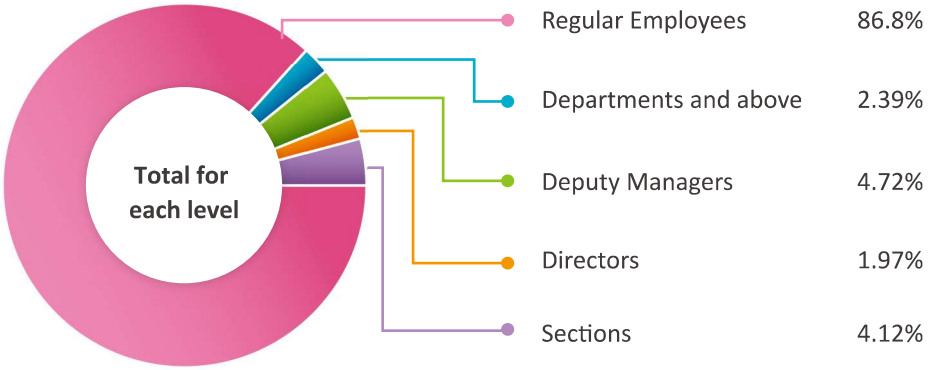
Workforce structure \ Year			2019	2020	2021
By gender	Male		5,145	5,326	5,446
	Female		1,584	1,600	1,649
Official / Non-official (all are formal employees)	Official		6,286	6,484	6,755
	Non-official		443	442	340
By employment contract	Non-fixed term		6,054	5,912	6,095
	Fixed term (contractors, interns, migrant workers, seasonal)		675	1,014	1,000
By nature of work	Direct		4,133	4,089	4,426
	Indirect		2,596	2,837	2,669
By education level	Doctorate degree		56	57	62
	Master degree		497	499	493
	College		1,425	1,451	1,752
	Senior high school and vocational school		4,309	4,492	4,344
	Junior high school and below		442	427	444
By age	< age 30	Male	852	945	995
		Female	388	367	386
	Age 30-50	Male	3,052	3,007	2,950
		Female	899	908	902
	> age 50	Male	1,216	1,357	1,501
		Female	322	342	361
Foreign employees			-	-	234
Overseas staff			-	-	2
Total			6,729	6,926	7,095

Note: Foreign and overseas employee statistics are compliance indicators added this year, so the relevant data is disclosed since 2021.

All Levels Executive Percentage in Taiwan

All Levels	Male	Female	Total	Percentage
Departments and above	36	4	40	2.39%
Deputy Managers	58	21	43	4.72%
Directors	25	11	36	1.97%
Sections	53	16	69	4.12%
Regular Employees	1,025	428	1,453	86.80%
Total	1,197	477	1,674	100.00%

Note: This table reveals the proportion of supervisors in GlobalWafers Headquarters, GlobalWafers Zhunan Plant, and Taisil Branch. It is difficult to unify the titles of foreign supervisors, so they are not included at present.



In 2021, GlobalWafers had 815 new employees in Taiwan. Regarding gender, new male employees account for 8.14% of the total, and women account for 3.65%. In terms of age, new recruits <30 years old had the highest ratio and accounted for 6.63%, followed by new recruits between 30~50 years old at 4.56%. When employees submit a resignation letter, the HR department would immediately schedule an exit interview to understand the reasons for the resignation. This also enables the HR department to provide active assistance in adjustments and detailed explanations concerning work contents, personal characteristics, and identified problems to achieve the goal of talent retention.

Statistical Analysis for New Employees

Year	2019								2020								2021							
Region	Taiwan				Offshore				Taiwan				Offshore				Taiwan				Offshore			
Age	Male (no. of people)	Percentage	Female (no. of people)	Percentage	Male (no. of people)	Percentage	Female (no. of people)	Percentage	Male (no. of people)	Percentage	Female (no. of people)	Percentage	Male (no. of people)	Percentage	Female (no. of people)	Percentage	Male (no. of people)	Percentage	Female (no. of people)	Percentage	Male (no. of people)	Percentage	Female (no. of people)	Percentage
< age 30	24	1.45%	28	1.69%	132	2.42%	91	1.67%	48	3.02%	20	1.26%	282	5.49%	59	1.15%	113	7.10%	51	3.20%	223	4.18%	72	1.35%
age 30~50	44	2.65%	17	1.02%	57	1.05%	14	0.26%	68	4.28%	33	2.08%	62	1.21%	28	0.54%	104	6.53%	71	4.46%	99	1.86%	42	0.79%
Age 50 and above	1	0.06%	1	0.06%	28	0.51%	20	0.37%	3	0.19%	2	0.13%	20	0.39%	10	0.19%	3	0.19%	2	0.13%	22	0.41%	15	0.28%
Total	69	4.16%	46	2.77%	217	3.98%	125	2.29%	119	7.48%	55	3.46%	364	7.08%	97	1.89%	220	13.82%	124	7.79%	344	6.45%	129	2.42%

Statistical Analysis for Resigned Employees

Year	2019								2020								2021							
Region	Taiwan				Offshore				Taiwan				Offshore				Taiwan				Offshore			
Age	Male (no. of people)	Percentage	Female (no. of people)	Percentage	Male (no. of people)	Percentage	Female (no. of people)	Percentage	Male (no. of people)	Percentage	Female (no. of people)	Percentage	Male (no. of people)	Percentage	Female (no. of people)	Percentage	Male (no. of people)	Percentage	Female (no. of people)	Percentage	Male (no. of people)	Percentage	Female (no. of people)	Percentage
< age 30	49	2.95%	28	1.69%	159	2.92%	143	2.62%	37	2.33%	19	1.19%	118	2.30%	63	1.23%	68	4.27%	31	1.95%	106	1.99%	64	1.20%
age 30~50	68	4.10%	43	2.59%	144	2.64%	73	1.34%	75	4.72%	31	1.95%	54	1.05%	38	0.74%	105	6.60%	52	3.27%	87	1.63%	33	0.62%
Age 50 and above	3	0.18%	3	0.18%	61	1.12%	41	0.75%	9	0.57%	3	0.19%	57	1.11%	17	0.33%	7	0.44%	7	0.44%	48	0.90%	31	0.58%
Total	120	7.23%	74	4.46%	364	6.68%	257	4.72%	121	7.61%	53	3.33%	229	4.46%	118	2.30%	180	11.31%	90	5.65%	241	4.52%	128	2.40%

Note: The percentage of new and resigned employees is based on the percentage of the total number of employees at the end of the previous year

• Hiring People with Disabilities

Regarding social care, GlobalWafers supports the employment of people with disabilities and has established channels to hire people from this demographic. As of 2021, GlobalWafers has employed a total of 93 people with disabilities, which accounted for 1.3% of all employees. The Company is in compliance with the government's regulations for hiring people with disabilities.

5.1.2 Remuneration and Benefits

Employees are a critical force in 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 developed internal and external audit mechanisms, regular workforce system reviews, and current labor market status observations to continuously improve the workforce development systems and inspire employee potential, develop their strengths, and grow together with the Company. The goal is to let the colleagues know that GlobalWafers is willing to share business results with every colleague and maintain a good teamwork relationship, enhance employee cohesion and identity, create a culture of positive growth, and become a working environment that professional workers yearn for.

Each year, GlobalWafers measures the market salary level via annual salary surveys, and makes appropriate adjustments to employee salaries by referring to objective data such as the overall economic indicators and price indices. Meanwhile, the salary standards of colleagues are judged based on work-related items such as position, seniority, and professional ability to ensure equal pay for equal work and prevent any bias 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 2021

Item		2020	2021	Difference compared to the previous year
Non-supervisory positions	Number of full-time employees (persons)	1,453	1,563	7.57%
	Average salary (NT$ thousand)	1,104	1,205	9.15%
	Median salary (NT$ thousand)	1,068	1,124	5.24%

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.

Note 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; deputy 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.

Note 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.).

Note 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' Hsinchu plant, Zhunan plant, and the Taisil Branch.

• Connection between Appraisal and Remuneration

We have conducted performance reviews on all employees each year and focused on employees' commitment to work, duty, responsibility, and contribution level. The goal is to make a salary adjustment under considerations of future development possibility and market salary levels and offer encouragement cash rewards and bonuses based on performance results to ensure employees' remuneration and development combine with the company's finance and performance, and encourage employees to make breakthroughs and create personal value in GlobalWafers.

• Comprehensive Benefits System

We provide employee labor and health insurance, labor retirement and group insurance, employee meal subsidy, annual travel subsidy, employee health exams, gifts for three major festivals and birthday, wedding and funeral subsidies, hospitalization subsidies for injuries and illnesses, club activities subsidies, education and training subsidies, on-site physicians, cancer condolences, epidemic prevention protection measures, vaccine subsidy, employee welfare savings trust, workplace psychological counseling, and other related benefits to help employees reach a balance between work and life.

• Rewards to Excellent Employees

The Company has established various rewards schemes to encourage proactive and outstanding workers e.g. outstanding achievements reward, project submission reward and patent reward. The Taiwan region also implements the annual model employee selection activity, whereby model employees are selected and publicly praised for recognition. The goal is to build a more positive and active corporate culture, and strive to fulfill the promise of 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, cancer insurance, and epidemic prevention insurance. We aim to provide comprehensive protection to maintain the safety and health of employees.

• Employee Stock Ownership Trust

In Taiwan, the Company will reward 100% of the amount corresponding to the employees' monthly deposit. The goal is to encourage employees to enjoy the steady returns of shareholder value through regular and fixed investments in the Company's stocks. We want to uphold the employees' independent rights, improve their benefits, and assist them in planning for retirement.

• Pension System

We appropriate pension funds in accordance with the laws in countries where our operation sites are located. In Taiwan, we follow "Labor Standards Act" and "Labor Pension Act" in establishing labor retirement guidelines. We have also set up labor pension reserve supervision committee and appropriate sufficient amount of labor pension each month to allow laborers to apply for pension and to safeguard employees' rights.

We not only provide benefits but also want the benefits to be filled with flexibility and possibility. The goal is to grasp the needs of frontline workers by increasing employee engagement. After a series of investigations in Novara, Italy's factory area, the program "Take Away, from the factory to home" that combines health and convenience was selected by everyone and was launched. Through the handy app "Appetie," employees can view the nutritional content of all meals and order their favorite meals directly using their smartphones. After getting off work, employees can also take meals home to share with the family directly from the workplace. We not only advocate work-life balance but also hope that work can be integrated into employees' lives to promote harmony between family life and work.

In addition, the MEMC Japan Ltd. factory in Japan also signed a formal contract with the kindergarten affiliated with Kiyohara Industrial Park to prioritize the children of corporate employees in the park. We will continue to provide a comfortable environment so employees can work with peace of mind.

• Unpaid child care leaves

GlobalWafers provides employees with the right to parental leave. Employees who have worked for 6 months and have a child under the age of 3 may apply for childcare leave without pay from the Company to take care of their child. A total of 31 colleagues in Taiwan have applied for parental leave between 2019 and 2021.

Execution results of unpaid child care leave application

Item	Gender	Total number/ratio		
		2019	2020	2021
Total employee staff number eligible for unpaid child care leave	Male	58	58	60
	Female	13	16	24
Total number of employees who actually took unpaid child care leave	Male	1	4	2
	Female	5	8	11
Total number of reinstated employees upon the expiration of their child care leaves	Male	2	4	2
	Female	11	6	10
Total number of employees who actually resumed their duties upon the expiration of their child care leaves	Male	1	2	2
	Female	9	6	8
Ratio of employees who resumed their duties upon the expiration of their child care leaves (reinstatement rate)	Male	50%	50%	100%
	Female	81.82%	100%	80%
Total number of employees still in service 12 months after expiration of their unpaid child care leaves	Male	1	0	2
	Female	9	7	5
The ratio of employees still in service 12 months after expiration of their parental leaves (retention rate)	Male	100%	-Note	100%
	Female	100%	87.5%	83.33%

Note: "-" means no one meets the criteria

5.1.3 Talent Cultivation

Each year we establish annual education training program based on our operation strategies and short/mid/long term goals, and consider talent cultivation and technology inheritance as our task focus. We strengthen our talent database in order to keep track of the talent dynamics and development direction in the group. We host various types of training courses, academia-industry collaboration and research projects, in order for our staff members to stay tuned to real-time global political and economic trends and status, technology updates, while supplementing the training with job substitutes, job rotation and on-the-job training to strengthen different professional capacity of our employees. We provide diversified training resources, and our training system includes 5 major functions: newcomer competency education and training, professional competency education and training, general management competency education and training, intellectual property education and training, as well as safety and health management training. The goal is to provide employees with appropriate training courses at different stages of career development; enable the Company and colleagues to adapt to the rapid changes in world trends; and help everyone to keep abreast of the latest knowledge, technology, and skills.

GlobalWafers provides a comprehensive and diversified learning environment

Training effectiveness review framework - based on AIAG-VDA FMEA related courses as an example

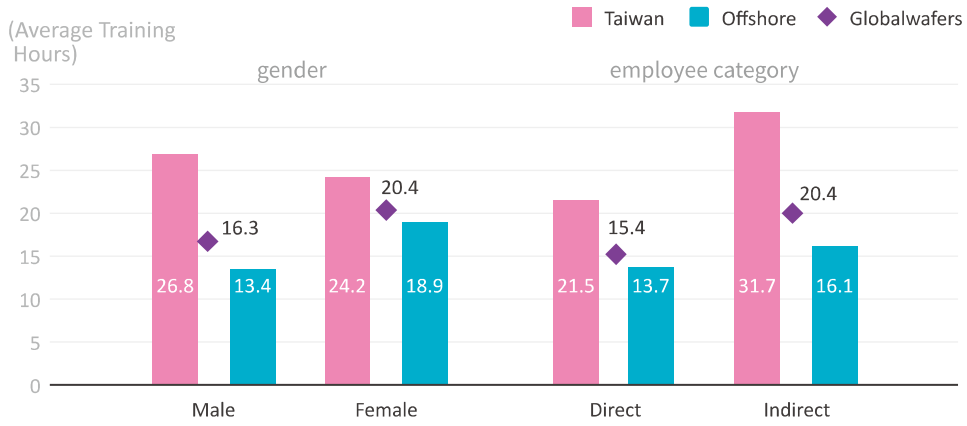
The purpose of this course is to enable students to understand the core tools of the latest FMEA version, which is applicable to work and audits. The main training subjects are R&D personnel, internal auditors, etc.

In 2021, our plants' average hours of education and training for men and women according to gender were 16.3 hours and 20.5 hours, respectively. Based on employee classification, the average hours of education and training received by direct and indirect personnel are 15.4 hours and 20.5 hours, respectively. The total training hours for GlobalWafers in 2021 is 122,592 hours.

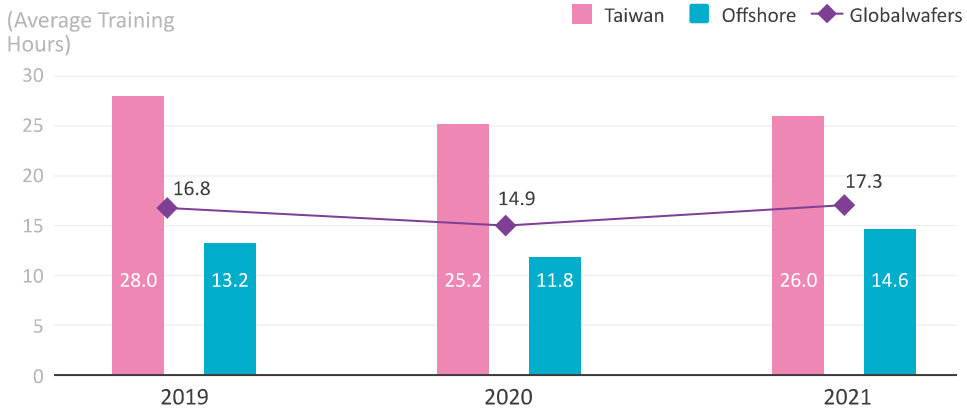
Number of people and hours for education and training from 2019 to 2021

Training type	2019				2020				2021			
	Number of sessions	Number of people	Total class opening hours	Total class hours	Number of sessions	Number of people	Total class opening hours	Total class hours	Number of sessions	Number of people	Total class opening hours	Total class hours
Competency training for new recruits	130	960	727	8,227	126	921	747	7,546.5	295	1,092	1,571	9,259
Professional competency training	1,366	14,267	6,038.5	42,030.5	1,670	14,308	5,462.3	47,371	1,426	12,513	24,830	57,709
General management competency training	635	41,714	1,530.8	60,253.3	425	33,335	780.6	46,480.5	767	39,749	6,482	55,624
Total	2,131	56,941	8,296.3	110,510.8	2,221	48,564	6,989.8	101,398	2,488	53,354	32,883	122,592

Average employee education and training hours in 2021



Employee Education & Training Statistics



Note: 1. The education and training statistics table covers GlobalWafers Headquarters & Zhunan Plant, GlobiTech Incorporated., GlobalWafers Japan Co., Ltd., Kunshan Sino Silicon Technology, Taisil Branch, MEMC Electronic Materials Sdn. Bhd., MEMC Electronic Materials S.p.A., MEMC Japan Ltd., MEMC Korea Company, MEMC LLC, Topsil GlobalWafers A/S.

Note: 2. Direct personnel: personnel who actually engaged in production-related operations such as technical workers and foremen at the production site

Note: 3. Indirect personnel: workers who do not directly involved in production such as supervisors, product designers, accountants, procurement, or engineers

5.1.4 Human rights

GlobalWafers has always attached great importance to the rights and interests of all employees regardless of class, complied with the relevant human rights regulations of various countries, and endeavored to maintain zero human rights complaint as our ultimate goal. We also believe that a smooth communication channel and grievance system can ensure the rights and interests of employees. Regarding the company's internal updates like important policies, remuneration & benefits, and leave system changes, the employees will be notified via labor-management meetings, electronic newsletters or HR announcements, prior to execution, so as to safeguard the employees' rights and interests.

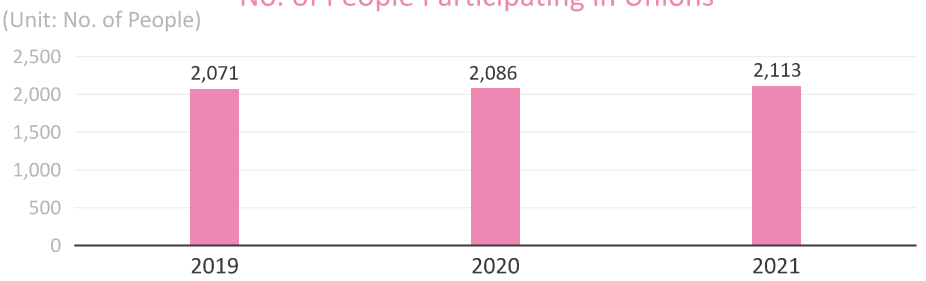
Employees in the Taiwan region can freely provide views and opinions via regular labor-management meetings, employee suggestion boxes, occupational safety and health committees, old retirement reserve fund supervision committee meetings, welfare committee meetings, and many other channels. The goal is to enable employees to fully express their opinions via exchanges and discussions, and enable effective bilateral communication between labor and management in order to achieve a win-win between labor and management. To workplace violence and sexual harassment, we in Taiwan specifically establish relevant guidelines and report contact to serve as employees' report channel and communication platform to prevent against workplace violence and sexual harassment.

We conduct relevant human rights education and training for new employees in most of our operating sites. In 2021, a total of 6,320 people received human rights education and training, the total number of training hours reached 10,139 hours, and the percentage of employees trained was 89.07%. In addition. Courses on workplace violence and sexual harassment prevention and abatement are also held annually for in-service employees. There have been no human rights incident complaints (forced labor, child labor, discrimination, harassment, and violation of freedom of association) from our operating locations in the past 3 years, and we will continue to strive for zero human rights complaints as our ultimate goal.

• Union

The number of our unions is 2,113 in 2021, which accounts for 29.8% of the total number of employees. There is no union in Taiwan, and the operating bases for unions are Japan, South Korea, Italy, and the United States.

No. of People Participating in Unions



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

5.2 Occupational Safety and Emergency Response

5.2.1 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 plants in Taiwan have introduced the occupational health and safety management system (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 disasters, and fulfill the duty to ensure employee safety and health. Each year, the Company has conducted internal audits to inspect the management system implementation and entrusted third-party verification units to perform external certification and system inspections in order to ensure management system effectiveness. All plants in Taiwan have obtained the ISO 45001 certification. In addition, the overseas factory MEMC Korea Company passed the process safety management (PSM) evaluation from the Korean Ministry of Labor with a “S” grade (good) by gaining a score of between 80 to 90 points.

• Participation, Consultation, and Communication of Occupational Safety and Health Workers

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 3 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.

Occupational Safety & Hygiene Committees for Respective Factories in Taiwan Region

Item	GlobalWafers	Taisil
Committee (Number of People)	20	32
Labor Representatives (Number of People)	7	19
Labor Representatives Percentage	35%	59%

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 Accident Investigation

We have identified possible hazards in all Company operations, including workers and workers under the control of the Company. The goal is to evaluate the potential risks and injuries hazards such as machines, equipment, chemicals in the operation, limited space, warehouse stacker, etc., to assess and reduce such hazards.

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.

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. 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 disaster 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.

Chemical GHS Hazard Labeling and Safety Data Sheet (SDS)

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.

The full-scale respiratory protective equipment quantitative fit test was conducted via the instrumental measurement method

Qualitative fit test for face masks and half-face respirators

⊙ Monitoring of Operation Environment

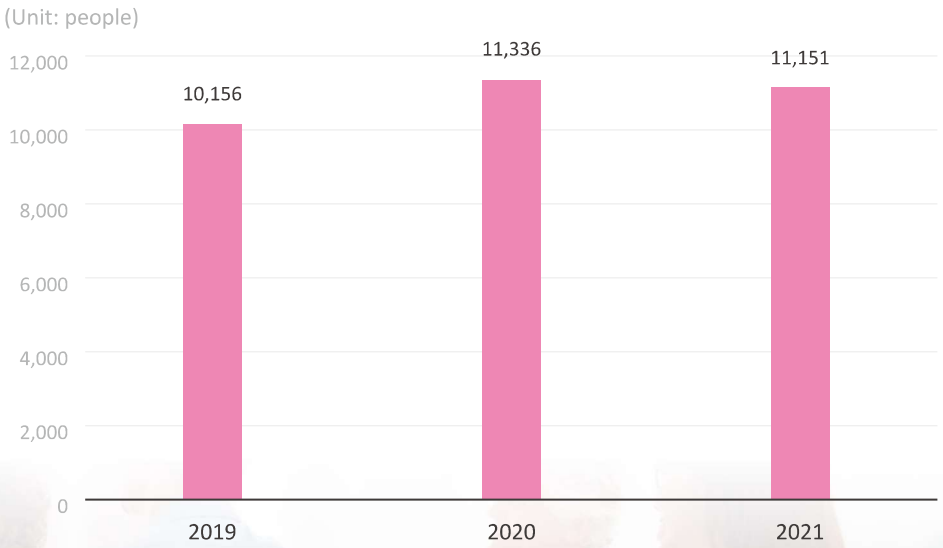
To ensure workplace safety, the Company has appointed qualified industrial and mining sanitation technicians and work environment monitoring agencies to regularly study the operation monitoring plan pursuant to the “Regulations Governing Labor Work Environment Monitoring Implementation,” performed risk 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.

5.2.2 Occupational Safety and Health Worker Training

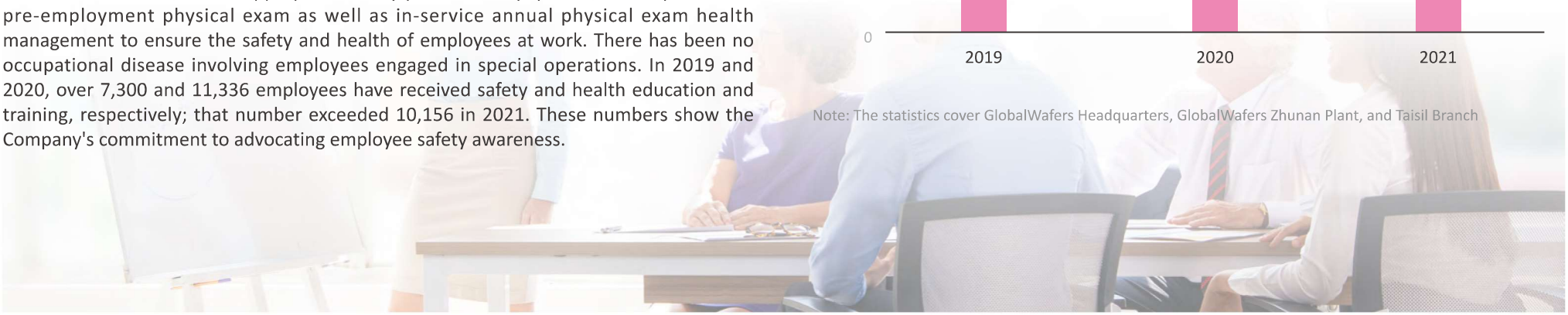
We have listed the following safety and health education training as compulsory courses for new and on-the-job employees: Hazardous substance identification, emergency escape drills, personal protective equipment wearing, fire training operations, mechanical protection, human musculoskeletal injury prevention, 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 2021. 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 2019 and 2020, over 7,300 and 11,336 employees have received safety and health education and training, respectively; that number exceeded 10,156 in 2021. These numbers show the Company's commitment to advocating employee safety awareness.

Number of people who received safety and health education and training



Note: The statistics cover GlobalWafers Headquarters, GlobalWafers Zhunan Plant, and Taisil Branch



• Contractor Management

The Company 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.

▼ Firefighting emergency escape training






▼ Occupational safety and health education and training for new recruits

▼ Contractor safety as well as health education and training

▼ Chemical hazard prevention training

▼ Traffic Safety & Defense Driving Education & Training

5.2.3 Emergency Response

The purpose of emergency response management is to enable immediate handling of emergency accidents in the plant, stop the expansion of disasters; enable correct and effective response strategies in case of an abnormal emergency; and minimize the personal injury, property damage, and environmental impact caused by such incidents. The Company has conducted emergency response team training, emergency escape, and evacuation drills every year in order to strengthening-plant disaster relief as well as the colleagues' knowledge and familiarity with the working environment and escape lines. In addition, all plants in Taiwan have established poison response personnel in accordance with the law. The emergency response training held in 2021 include emergency response equipment training (COVID-19 prevention) operation training, toxic chemical substances and chemical leakage treatment drills, earthquake drills, cardiopulmonary resuscitation, Hamlich maneuver emergency rescue training, firefighting emergency evacuation, and cooperate with the fire department to conduct fire drills for chemical warehouse fires.

▼ Conduct fire drills for chemical warehouse fires with the fire department




▼ First aid training



▼ Chemical spill response drill



5.2.4 Occupational Disaster Management

• Disabling Injuries

Pursuant to the Occupational Safety and Health Act, the Company 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.

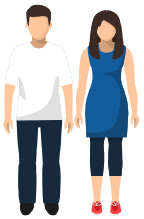
The department head as well as the safety and health personnel shall conduct accident investigation and analysis when an accident occurs, and the accident unit shall be responsible for tracking and handling the accident until the case is closed. The safety and health management unit shall report occupational 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.

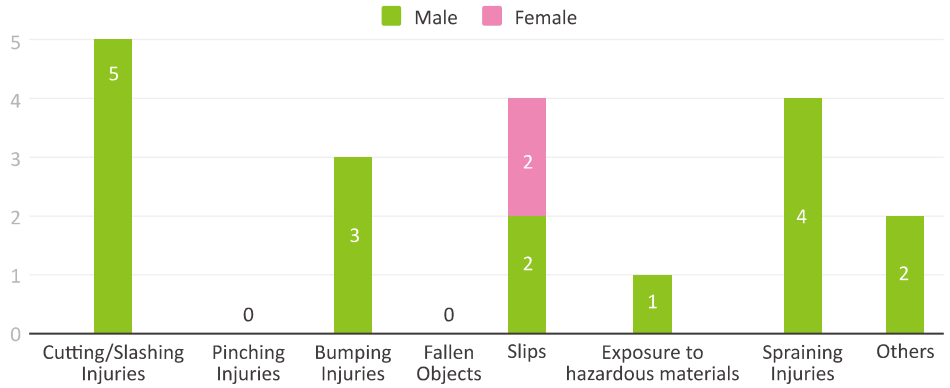
Our occupational hazard statistics analysis data are generated based on disability injuries statistics indicator published by the Ministry of Labors and GRI. One million work hours being the base line, our statistics are mainly based on the Disabling Frequency Rate, (FR), Disabling Severity Rate (SR),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

In 2021, there were 3 work-related injuries and disability incidents in Taiwan and 16 work-related injuries and disability incidents at overseas plants. Cut-type accidents accounted for 26.32 % of the total work-related injuries, and fall and sprain injuries accounted for 21.02%. The disability injury rate in plants worldwide is 1.36 (1.59 for men and 0.6 for women), and the severe disabling injury rate is 29 (37 for men and 2 for women). There are no occupational diseases and work-related deaths. According to the occupational disasters statistics for the past 3 years, the disabling injury rate and the disabling injury severity rate in 2021 were slightly lower than 2020. In addition, no work-related injuries have occurred among contractors operating in various plants at home and abroad in 2021.

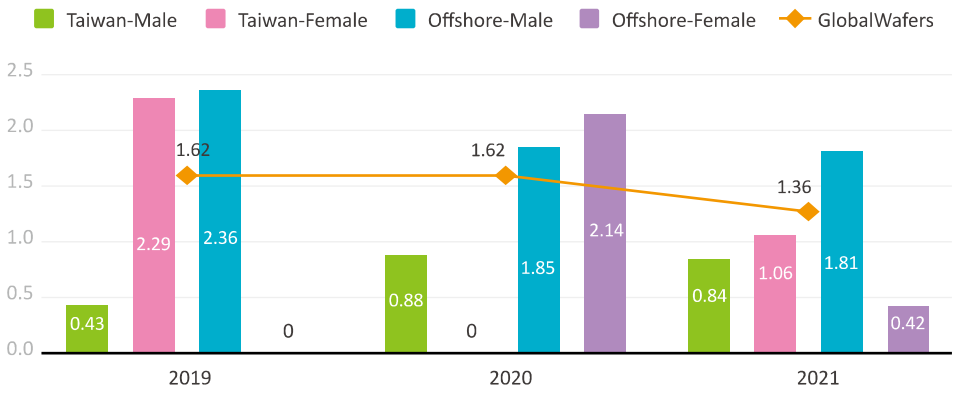




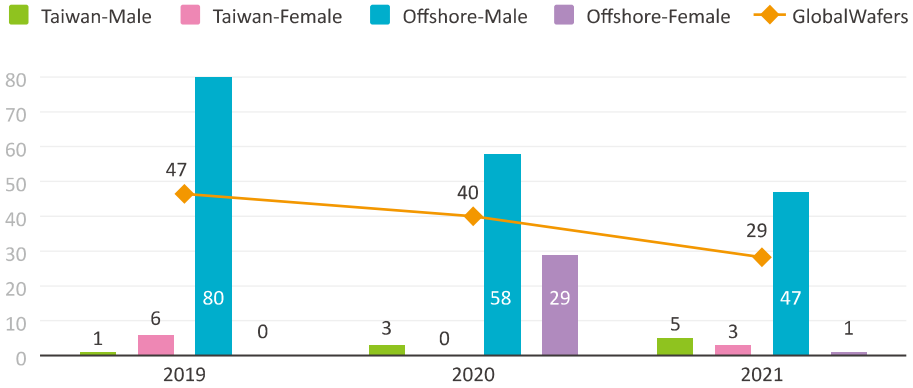
Statistics of Work Injury Types in 2021



Disabling Frequency Rate (FR)



Disabling Severity Rate (SR)



Note: 1. Taiwan: GlobalWafers Headquarters, Zhunan Plant, Taisil Branch

Note: 2. Offshore: 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

Note: 3. Disabling Frequency Rate (FR) = total number of disabled employees $\times 10^6$ / Total work hours

Note: 4. Disabling Severity Rate (SR) = Total number of work days lost to injuries $\times 10^5$ / Total work hours

Note: 5. Total work hours: Mandatory work days in respective factories × mandatory work hours × total number of employees for that factory

2021 Major Occupational Disaster Statistics	GlobalWafers (Taiwan)	
	Employees	Other non-employee workers
No. of people	1,674	88
Work Hours	3,321,216	265,810
No. of disability injuries	3	0
Days of disabling injuries	14	0
Death toll due to work	0	0
No. of severe occupational accidents	0	0
No. of recordable occupational injuries	10	0
Recordable occupational injury rate (IR)	0.602	0
Occupational disease rate (ODR)	0	0

Note: 1. 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.

Note: 2. 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.

Note: 3. 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.

Note: 4. 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.

Note: 5. Recordable occupational injury rate (IR): (recordable occupational injury number / total working hours) * 200,000

Note: 6. Occupational disease rate (ODR): (total number of occupational diseases / total working hours) * 200,000

5.2.5 Healthy Workplace

Employees are the most valuable asset of GlobalWafers. We are committed to creating a safe and comfortable working environment and regard employee health as the key element to Company success and sustainable development. Take the Taiwan region as an example. The plants have set up medical rooms equipped with full-time nurses and special professional medical doctors and continue to promote the 4 core protective measures: maternity protection, human injury prevention, overwork prevention, and illegal infringement prevention. The goal is to protect colleagues' physical and mental health, create a happy and healthy workplace environment via diversified health care programs, and provide health seminars and various types of health promotion activities. In 2021, GlobalWafers won the CHR Healthy Corporate Citizenship Promise Enterprise certification label from " Health Magazine," which showcases the Company's commitment to creating a benchmark for a happy and healthy workplace.

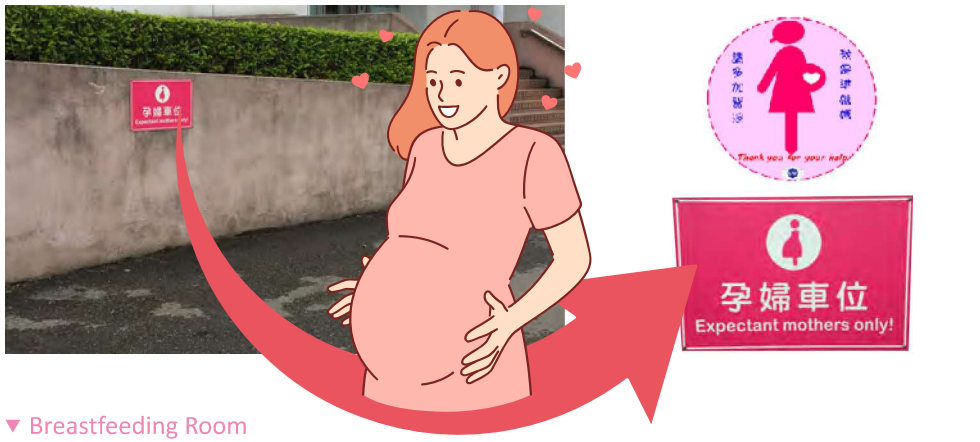
The four pillars of health protection

Pillars	Execution direction	2021 results
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: 24 people Level-II management: 2 people (GlobalWafers 17 people; Taisil 9 people) Health risk assessment completion rate: 100%
Prevent overload	Based on employee health examination data, Flemingham Risk Assessment Scale, overwork scale, and other data to analyze the high-risk overload groups and provide factory 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: 243 people (GlobalWafers 61 people; Taisil 182 people)
Prevention of unlawful violation	To provide a healthy and positive workplace, we conduct a risks assessment for the entire factory once 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. The physical lectures are postponed due to COVID-19, but we still issue health-related articles monthly to care for our employees' physical and mental health.
Prevention of ergonomic hazards	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 (KIM) to gradually improve the operation/construction by the year and to prevent the ergonomic hazards.	-

● 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. The Company has implemented hierarchical management and work adjustments after referencing comprehensive evaluations from professional medical doctors to provide exclusive parking spaces, breast collection rooms, care armbands for pregnant colleagues and create a friendly working environment for working mothers. 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.

Prevention of unlawful violation

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

Human-factor injury 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.

Health promotion and reinforcement of health concepts

GlobalWafers has implemented diversified health care for employees. Each year, the Company has formulated an 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. Free medical institution cancer screenings for colorectal cancer, cervical cancer, mammography, oral cancer, etc., are also provided to employees so they may better grasp their health status. 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.

New recruits	Existing employees	High-ranking executives	Catering personnel
General physical examination	General health check-up	Exquisite health examinations	Health examination for food catering personnel
Completed in designated hospitals before arriving for work	Implemented in line with regulations regarding labor health protection	Implementation exceeding standards as required by regulations regarding labor health protection	In line with Clause 322 in the occupational health and safety facilities regulations
Assessment record archive for work selection operation	Assessment record archive for the work distribution operation	Assessment record archive for health risks	Catering contractors conduct self-assessments and submit the record/report to the company.

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 2021, the health centers promoted numerous health management events with up to 4,589 participants. The events include cancer screening, health lectures (Put a Hold on High Blood Pressure, Healthy Diet for High Cholesterol Control, and other liver care topics), and emergency rescue courses to help employees build the correct health care knowledge and improve health care awareness. There is also the annual employee influenza vaccination activity to enhance employees' defenses and reduce the chance of workplace group infections. The Company also holds regular blood drives and offers gift cards as participation rewards to encourage colleagues to donate blood, embrace charity work, and show the spirit of care.

To ensure workplace environment 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) 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 stuff 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.

Moreover, the Company has established a comprehensive epidemic prevention mechanism and set up an active infectious disease notification system in order to prevent the threat of infectious diseases in the workplace and ensure continuous and normal company operations. The Company also posts the latest domestic and foreign epidemic information on the internal website in an irregular basis to remind colleagues to strengthen personal hygiene and strengthen their epidemic prevention knowledge. We have organized free influenza vaccination activities in the plants each year to strengthen employees' flu resistance, and provided "epidemic prevention kits" for colleagues to carry along during business trips to provide epidemic and disease prevention related information as well as health promotion, and help to protect colleagues from the threat of disease during business trips.

2019~2021 health promotion / emergency rescue events

Unit: No. of people

Year	2019	2021	2021
GlobalWafers - Taiwan (GlobalWafers Headquarters, Zhunan Plant, Taisil Branch)	4,556	4,136	4,589

▼ CPR and AED Training Courses



▼ Liver screening event, flu vaccination, high-fat diet health talks



● 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 also 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 and number of people tracked from 2019 to 2021

		2019	2020	2021
GlobalWafers - Taiwan	Number of service sessions	1,346	1,298	1,247
	Number of people were tracked	1,051	1,113	915

Note: ※ GlobalWafers - Taiwan include the Hsinchu Plant / Zhunan Plant, and Taisil Branch

※ Definition of special ethnic group:

(1) Overload 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 C or higher according to the physical examination scale / 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).

● 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.

In 2021, GlobalWafers has introduced the Employee Assistance Program Center (EAPC) to provide comprehensive care for employees. The service items include emotional management, interpersonal relationship, legal, work career, family parent-child, financial, and other diversified consultation services. Each employee can receive 2 free one-to-one consultation services every year. Nurses will actively refer those with high scores on the mood thermometer questionnaire to EAPC, and regularly track and care for the colleagues' status. We also provide new recruit training programs, contact description cards, and deliver psychological activity articles regularly. The goal is to help employees resolve and eliminate problems via professional counseling services, and help them feel at ease and work confidently.

Employee Assistance Program Center (EAPC)		Starting 2021/8
Live chat E-mail consultation service	All regions*	23 people
One on one Expert advisor consultation	GlobalWafers - Taiwan	8 people
Total number of consultation		31 people
Professional consultants for colleagues Overall satisfaction with on-site psychological counseling		100 points

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

5.3 Social Participation

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" by matching the donation proceeds 1:1. (The Company donates the same amount as the employees.) The goal is to combine the donation power to offer care and warmth to more places in need.

● Stacks of Love Shilei Elementary School Renovation

Due to the subtropical climate in Taiwan, the weather is hot and rainy. Many buildings are seriously affected and prone to hidden concerns such as water leakage, wall mold, and damage to the insulation layer. The Shilei Elementary School building is also facing the same problems. The colleagues have conducted a fundraising to assist Shilei Elementary School with its waterproof and heat insulation projects to prevent the school building from being eroded by rainwater, provide good thermal insulation and cooling functions, and give teachers and students better teaching and learning environment.

● Love Breakfast Adoption Event

GlobalWafers has long been focusing on education issues to help schoolchildren in need through practical means. Therefore, the Company's colleagues have launched this charity fundraising event to provide delicious breakfast to disadvantaged minority schoolchildren and help them "eat well and study well."

● Food Boxes for Home Schooling + College Student Assistance Program

In May 2021, Taiwan entered the Level-3 alert due to COVID-19. Because most of the parents and students served by the Hsinchu Family Support Center mainly engage in the service and catering industries, and such industries have been hit the hardest by COVID-19, it became increasingly difficult for the Hsinchu Family Support Center to provide 3 meals to schoolchildren. School lunches cannot be delivered to schools, leading to increased food expenditure and worsening the economy. So GlobalWafers launched an employee love fundraising activity within the Company to encourage employees to care about the disadvantaged groups in Taiwanese society and help needy families through donations.

● Leaning and Development Care for the Disadvantaged Children

Purpose:

I. Improve the adaptability of children's schools and maintain subject learning

II. Inspiring children's learning motivation and interest and building core literacy

III. The specific purpose or goal of each supplementary class

[Healthy Diet and Exercise: Luodong Summer School Supplementary Class]

Provide hygiene education, cooking, and swimming classes to improve home hygiene, self-care ability, and learn basic swimming skills

[Running game: Yilan Summer School Supplementary Class]

Provide health experts and sports topic curriculum planning to offer good character education, life skills, and emotional management classes to children and help them maintain good exercise habits to promote healthy physical and mental development

Emergency Assistance for Vulnerable Families

GlobalWafers has joined forces with World Vision to provide living assistance to vulnerable families that have fallen into economic crisis due to unemployment and lack of work or income due to COVID-19. We have also invested in an emergency medical subsidy program to assist vulnerable children and families suffering from injuries, emergencies, family accidents, and facing difficulties in life. The goal is to offer short-term financial support, regular visits, and active counseling by social workers to accompany the families through the crisis. By supplementing their basic needs and reducing their financial burdens, the families and children in need can receive appropriate care and help to get back up in life.

Garden Party Gifts

Due to the severe impact of COVID-19, the economic situation of many families served by the Miaoli Family Support Center has been greatly affected. To help these vulnerable families overcome the difficulties, the Company launched an employee love fundraising activity internally to donate money, buy garden party gifts for the economically disadvantaged families, and let their children feel the warm blessings of society during the cold winter.

2021 Hot Summer Bath

For elderly people with a disability, dementia, or dependency, daily body cleaning is a very difficult thing for them. GlobalWafers has jointly launched this charity fundraising event with the Taiwan Red Cross Hsinchu County branch. We hope to use the colleagues' fundraising to provide good care for the elderly. There are many other things we can do besides body cleaning, such as medical treatment or long-term care, and these are the goals we can continue to work on in the future.

Epidemic Peace of Mind Consultation and Care Program

In 2021, everyone's life was severely impacted by COVID-19, which brought serious challenges to everyone's life in Taiwan. Many people have been forced to reduce their working hours or were even laid off by their employers and forced to face severe financial, physical, and psychological pressure. In light of the many serious social incidents that have occurred recently, GlobalWafers believes that the psychologically vulnerable group is prone to mental health issues. Preventive measures can help avoid unfortunate events and prevent this group from becoming vulnerable in society. GlobalWafers has joined forces with the Hsinchu Lifeline Association to provide professional consultation services to help those in need overcome the psychological difficulties caused by COVID-19. We hope to exert the Company's power to help the Taiwanese society overcome the epidemic.

Adopted a Coast and Beach Cleaning

GlobalWafers adheres to environmental conservation and giving back to the village by adopting and maintaining the coast of Longfeng fishing port and actively participating in environmental protection activities. In 2021, the Company held a beach cleaning event. We hope to encourage colleagues, their relatives, and friends to participate in environmental protection through these events, arouse their environmental and ocean protection awareness, exert their influence, and convince others to help reduce plastics and other wastes and contribute to environmental protection.

Mid-Autumn Festival moon cake donation charity event

GlobalWafers has delivered Mid-Autumn Mooncake gift boxes to colleagues every year. The company has also launched an employee love fundraising event and matched the donations from colleagues to provide care to the disadvantaged and fulfill the corporate social responsibility of charity and public welfare.

Foreign Bases

Donate anti-epidemic masks to nearby police stations

MEMC Electronic Materials Sdn. Bhd. donated masks and some necessities to the police unit as a gesture of gratitude to the frontline staff during the epidemic.

Mid-Autumn Festival Care Donation

In response to COVID-19, Sino Silicon has donated daily necessities and food during the annual children's care event organized by the Social Welfare Department to help those in need of care in the society and give the children a wonderful Mid-Autumn Festival.

The Warm Heart is Always There

MEMC St. Peters has recruited employees to sponsor food and toys on Thanksgiving and Christmas every year to share the donations collected with the families in need through the regional distribution center.

Sponsor the Novara City Run

The Novara City Run is sponsored by our Company and co-organized by the WHP team (Workplace Health Promotion)

2021 Feedback and Participation

Donation Activities	Recipient Organization	Quantity
2021 Mid-Autumn Festival moon cake donation charity event	Shihguang Nursing Home and Huakuang Mental Development Center Hiangyuan Memorial Correctional Home	$81,000
Stacks of Love Shilei School Renovation	Shilei Elementary Schools	$259,050
Hot Summer Bath	The Red Cross Society, Hsinchu Branch in Taiwan	$288,450
Love Breakfast Adoption Activity	Zhuxing Elementary School + Zhunan Elementary School	$101,700
Epidemic Peace of Mind Consultation and Care Fundraising Program	Hsinchu City Life Line	$149,100
Yilan Family Support - Family Support Doll Adoption	Yilan Center of Taiwan Fund for Children and Families	$238,000
Garden Party Gifts Budget Fundraising	Miaoli Family Support Center	$103,900
Hsinchu Family Support Food Boxes for Disadvantaged Children Studying at Home Program	Hsinchu Family Support Center	$203,950
Family Support Winter Warmth Kindergarten Party - Infinite Love Public Welfare Sponsorship Event	Hsinchu Family Support Center	$10,000
College Student Aid Program	Hsinchu Family Support Center	$207,150
COVID-19 - Vulnerable Families Support Public Welfare Fundraising	World Vision Yilan Branch	$113,000
2022 Emergency Medicaid Program	World Vision Yilan Branch	$62,500
2021 Beach Cleanup - Long Fong Fishing Port, Miaoli County	-	A total of 123 people participated in helping remove garbage.
2021 Hsinchu Science Park Industrial Safety and Environmental Protection Month Mountain Hike Event	-	A total of 300 people participated in the 5 sessions

Annex

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GRI Guideline Index

Index No. (Core Selection*)	Description	Corresponding chapters	Page No.	Note / Reasons for non-disclosure	External assurance
Organizational Profile					
102-1 *	Name of the organization	About GlobalWafers	14		◎
102-2 *	Activities, brands, products, and services	About GlobalWafers	14		◎
102-3 *	Location of headquarters	About GlobalWafers	14		◎
102-4 *	Operation Site	About GlobalWafers	14		◎
102-5 *	Nature of ownership and legal form	About GlobalWafers	14		◎
102-6 *	Markets Served	About GlobalWafers	14		◎
102-7 *	Scale of the organization	About GlobalWafers 2.3 Operation performance	14 36		◎
102-8 *	Information on employees and other workers	5.1 Employee Care	72		◎
102-9 *	Supply Chain	3.4 Industry Supply Chain & Management	53		◎
102-10 *	Significant changes to the organization and its supply chain	—		No Major Changes	◎
102-11 *	Precautionary Principle or approach	2.4 Risk Management	38		◎
102-12 *	External initiatives	—		Not Attending Relevant Advocacy	◎
102-13 *	Membership of associations	About GlobalWafers	14		◎
Strategies					
102-14 *	Statement from senior decision-maker	Message from the Chairperson	10		◎
102-15 *	Key impacts, risks, and opportunities	2.4 Risk Management	38		◎
Ethics and integrity					
102-16 *	Values, principles, standards, and norms of behavior	2.2.2 Ethics and integrity	31		◎
102-17 *	Mechanisms for advice and concerns about ethics	2.2.2 Ethics and integrity	31		◎
Governance					
102-18 *	Governance Structure	2.1 Sustainable organization 2.2.1 Governance structure	26 27		◎
Stakeholder engagement					
102-40 *	List of stakeholder groups	1.1 Stakeholders identification	20		◎
102-41 *	Collective bargaining agreements	—		There are currently no union organizations in our Taiwan region, hence no employees having signed group agreements.	◎
102-42 *	Identifying and selecting stakeholders	1.1 Stakeholders identification	20		◎
102-43 *	Approach to stakeholder engagement	1.2 Stakeholder Engagement and Response	20		◎
102-44 *	Key topics and concerns raised	1.3 Identification and analysis of material issues	21		◎
Reporting practice					
102-45 *	Entities included in the consolidated financial statements	About This Report	2		◎

Index No. (Core Selection*)	Description	Corresponding chapters	Page No.	Note / Reasons for non-disclosure	External assurance
102-46 ※	Defining Report Content and Topic Boundaries	1.3 Identification and analysis of material issues	21		◎
102-47 ※	List of material topics	1.3 Identification and analysis of material issues	21		◎
102-48 ※	Restatements of information	—			◎
102-49 ※	Changes in reporting	About This Report	2	This report has adopted and followed the standards to add sustainable accounting standards for semiconductor industry category indicators Adopted the GRI 306-2020 indicator version	◎
102-50 ※	Reporting Period	About This Report	2		◎
102-51 ※	Date of most recent report	About This Report	2		◎
102-52 ※	Reporting Cycle	About This Report	2		◎
102-53 ※	Contact point for questions regarding the report	About This Report	2		◎
102-54 ※	Claims of reporting in accordance with the GRI Standards	About This Report	2		◎
102-55 ※	GRI Content Index	GRI Guideline Index	94		◎
102-56 ※	External assurance	Verification Disclaimer	99		◎◎
Category: Economy					
Economic performance (material issues-financial performance, financial soundness, business strategy, and financial goals)					
103	Management Approach	1.3 Identification and analysis of material issues Chapter 2 Governance and Operation	21 23		◎
201-1	Direct Economic Value Generated and Distributed by Organizations	2.3 Operation performance	36		◎
201-2	The financial impact, other risks and opportunities that climate change caused on organizational activities.	2.4 Risk Management	38		◎
Procurement Practices					
204-1	Proportion of spending on local suppliers	3.4 Industry Supply Chain & Management	53		◎
Anti-Corruption					
205-2	Communication and training about anti-corruption policies and procedures	2.2.2 Ethics and integrity	31		◎
205-3	Confirmed incidents of corruption and actions taken	2.2.2 Ethics and integrity	31	No occurrence of corruption incidents	◎
Category: Environment					
Materials (material issues - source reduction)					
103	Management Approach	1.3 Identification and analysis of material issues Chapter 4. Sustainable Environment	21 56		◎
301-2	Recycled input materials used	4.3.1 Raw Material Re-Utilization	63		◎
301-3	Reclaimed products and their packaging materials	4.3.1 Raw Material Re-Utilization	63		◎
Energy (material issues - source reduction)					
103	Management Approach	1.3 Identification and analysis of material issues Chapter 4. Sustainable Environment	21 56		◎
302-1	Energy consumption within the organization	4.3.2 Energy Management	64		◎
302-4	Reduce Energy Consumption	4.3.2 Energy Management	64		◎

Index No. (Core Selection*)	Description	Corresponding chapters	Page No.	Note / Reasons for non-disclosure	External assurance
Water (material issue - resource management)					
103	Management Approach	1.3 Identification and analysis of material issues Chapter 4. Sustainable Environment	21 56		◎
303-1	Interactions with water as a shared resource	4.3.3 Water Resources Management	67		◎
303-2	Management of water discharge-related impacts	4.3.3 Water Resources Management	67		◎
303-3	Water withdrawal quantity	4.3.3 Water Resources Management	67		◎
303-4	Water discharge quantity	4.3.3 Water Resources Management	67		◎
303-5	Water consumption quantity	4.3.3 Water Resources Management	67		◎
Emissions (Major Topic - Risks and Opportunities of Climate Change)					
103	Management Approach	1.3 Identification and analysis of material issues Chapter 4. Sustainable Environment	21 56		◎
305-1	Direct (scope 1) GHG emissions	4.1.1 Greenhouse Gas	58		◎
305-2	Energy indirect (Scope 2) GHG emissions	4.1.1 Greenhouse Gas	58		◎
305-5	Reduction of GHG emissions	4.1.1 Greenhouse Gas	58		◎
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	4.1.1 Greenhouse Gas	58		◎
Waste (Major Topic - Waste Management)					
103	Management Approach	1.3 Identification and analysis of material issues Chapter 4. Sustainable Environment	21 56		◎
306-1	Waste Generation and Significant Waste Related Impacts	4.2 Waste Management	61		◎
306-2	Management of significant waste-related impacts	4.2 Waste Management	61		◎
306-3	Waste generated	4.2 Waste Management	61		◎
306-4	Waste diverted from disposal	4.2 Waste Management	61		◎
306-5	Waste directed to disposal	4.2 Waste Management	61		◎
Environmental Compliance (material issue - Legal Compliance)					
103	Management Approach	1.3 Identification and analysis of material issues Chapter 2 Governance and Operation	21 23		◎
307-1	Non-compliance with environmental laws and regulations	2.2.4 Legal Compliance	34		◎
Category: Society					
Labor-Management Relationship					
401-1	New employee hires and employee turnover	5.1.1 Human Resources	72		◎
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	5.1.2 Remuneration and Benefits	74		◎
401-3	Parental leave	5.1.2 Remuneration and Benefits	74		◎
Occupational Safety and Health (material issues - Occupational Safety and Emergency Response)					
103	Management Approach	1.3 Identification and analysis of material issues Chapter 5 Friendly Workplace	21 70		◎

Index No. (Core Selection*)	Description	Corresponding chapters	Page No.	Note / Reasons for non-disclosure	External assurance
403-1	Occupational health and safety management system	5.2.1 Safe Environment	78		◎
403-2	Hazard identification, risk assessment, and incident investigation	5.2.1 Safe Environment	78		◎
403-3	Occupational health services	5.2.1 Safe Environment	78		◎
403-4	Worker participation, consultation, and communication on occupational health and safety	5.2.1 Safe Environment	78		◎
403-5	Worker training on occupational health and safety	5.2.2 Occupational Safety and Health Training for Workers	80		◎
403-6	Promotion of worker health	5.2.5 Healthy workplace	85		◎
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	5.2.1 Safe Environment 5.2.2 Occupational Safety and Health Training for Workers	78 80		◎
403-8	Workers covered by an occupational health and safety management system	5.2.1 Safe Environment	78		◎
403-9	Work-related injuries	5.2.4 Occupational Disaster Management	83		◎
403-10	Work-related ill health	5.2.4 Occupational Disaster Management	83		◎
Training and Education (Major Topic - Talent Cultivation)					
103	Management Approach	1.3 Identification and analysis of material issues Chapter 5 Friendly Workplace	21 70		◎
404-1	Average hours of training per year per employee	5.1.3 Talent Cultivation	76		◎
Diversity and Equal Opportunity					
405-1	Diversity of governance bodies and employees	2.2.1 Governance structure 5.1.1 Human Resources	27 72		◎
Non-discrimination					
406-1	Discrimination incidents and improvement action taken	5.1.4 Human rights	77	No occurrence of discrimination incidents	◎
Human rights assessment (material issue - human rights)					
412-2	Employee training on human rights policies or procedures	5.1.4 Human rights	77		◎
Customer Privacy					
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	3.1 Innovation management	47	No complaints regarding customer privacy violation or customer data loss	◎
Socioeconomic Compliance (material issue - Legal Compliance)					
103	Management Approach	1.3 Identification and Analysis of Material Aspects Chapter 2 Governance and Operation	21 23		◎
419-1	Non-compliance with laws and regulations in the social and economic area	2.2.4 Regulation compliance	34		◎

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

Disclosure Topics	Index No.	Disclosure Index	Nature	Corresponding chapters/description	Page No.
GHG emissions	TC-SC-110a.1	Global Total Emission Volume (Scope 1) Total emissions from perfluorinated compounds	Quantitative	4.1.1 Greenhouse Gas ※Non-semiconductor process, no utilization or emission of perfluorinated compounds	58
	TC-SC-110a.2	Discuss long- and short-term strategies or plans for managing Scope 1 emissions, emission reduction targets, and performance analysis	Qualitative	4.1.1 Greenhouse Gas ※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.	58
Energy Management in Manufacturing	TC-SC-130a.1	Total Energy Consumption Ratio accounted for by electricity grid compared to total energy consumed Ratio accounted for by renewable energy compared to total energy consumed	Quantitative	4.3.2 Energy Management	64
Water resource management	TC-SC-140a.1	Total water intake and ratio of areas with high water stress Total water consumption and ratio of areas with high water stress	Quantitative	4.3.3 Water resource management	67
Waste Management	TC-SC-150a.1	Hazardous waste generated in the manufacturing process and the ratio recycled	Quantitative	4.2 Waste management	61
Employee Health and Safety	TC-SC-320a.1	Describe how to assess, monitor, and reduce employee exposure to hazardous environments	Qualitative	5.2.1 Safe Environment	78
	TC-SC-320a.2	Total monetary damages due to legal incidents related to employee health and safety	Quantitative	2.2.4 Regulation compliance	34
Recruit and manage global professional talents	TC-SC-330a.1	Explain (1) foreign employees and (2) ratio of overseas employees	Quantitative	5.1.1 Human Resources	72
Product Lifecycle Management	TC-SC-410a.1	Ratio of product revenue including IEC62474 substances	Quantitative	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. 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	The processor's overall system-level energy efficiency: (1) Server (2) Desktop (3) Notebook	Quantitative	Not terminal product manufacturer, no corresponding content	-
Raw material procurement	TC-SC-440a.1	Describe the risk management method for critical materials used	Qualitative	3.4 Industry Supply Chain & Management	53
Intellectual property protection and competitive behavior	TC-SC-520a.1	Total monetary damages attributed to legal events related to anti-competitive conducts	Quantitative	2.2.2 Ethics and integrity	31
Activity Indicators	TC-SC-000.A	Total output	Quantitative	2.3 Operation performance	36
Activity Indicators	TC-SC-000.B	Percentage of output from self-owned factories	Quantitative	2.3 Operation performance	36

Independent Assurance Statement

DNV

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 2021 Sustainability Report (the "Report") for the year ended 31 December 2021

We performed our work using DNV's assurance methodology VeriSustain™[1], 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.

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 review of financial data taken from the Annual Report and Accounts 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 contract with GWC and this is the 5'th year that we have provided assurance. 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 sustainability 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 2021 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 (Core Option).
- The verification was conducted based only on the Chinese version Report.

[1] The VeriSustain protocol is available on dnv.com

DNV

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.

- To improve the reporting completeness, more effort should be put in the data collection and verification process of the overseas subsidiaries.
- When reporting using a SASB standard, the following requirement should be implemented:
  - An entity that omits one or more disclosure topics and/or accounting metrics should disclose the omission(s), as well as the rationale for the omission(s).

Stakeholder Inclusiveness
The Company has identified the expectations of stakeholders through internal mechanisms in dialogue with different groups of stakeholders. The stakeholder concerns are well identified and documented. The significant sustainability issues identified through this process are reflected in the Report.

Sustainability Context
sustainability Report provides an accurate and fair representation of the level of implementation of related sustainability 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 core 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.

Accuracy and Reliability
The Company has developed the data flow for capturing and reporting its sustainability performance. In accordance with Moderate level assurance requirements, we conclude that no systematic errors were detected which causes us to believe that the specified sustainability data and information presented in the Report is not reliable.

For and on behalf of DNV Taiwan
Date: 12 May, 2022

Chun-Nan Lin
Lead Verifier
DNV – Business Assurance Taiwan

David Hsieh
Sustainability Service Manager,
Greater China

Statement Number: C533016-2021-DNV-TWN

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