2.3 Risk Management

Risk Management Policy and Procedures

To adapt to changing management environments and support stable, sustainable growth, GlobalWafers established "Risk Management Policies" and "Risk Management Guidelines" in 2015. In 2021, these were updated and integrated into comprehensive "Risk Management Policies and Procedures" to enhance risk oversight, assess tolerance, monitor exposure, determine response strategies, and ensure procedural compliance.

Risk Management Organization Framework

GlobalWafers' risk management organizational structure is as follows:

I. Board of Directors / Audit Committee: As the Company's highest risk management unit, the board of directors aims to ensure legal compliance according to the overall business strategy and environment, promote and implement the Company's overall risk management, and clearly understand the risks faced by the Company's operations, ensure risk management effectiveness, and take the ultimate responsibility for risk management. The above risk management-related matters are supported and supervised by the Audit Committee.

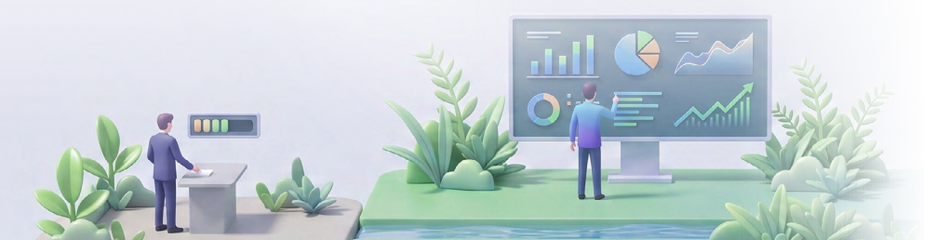
II. Senior management: Responsible for planning and executing the board of directors' risk management decisions and coordinating cross-departmental risk management interactions and communications to reduce strategic risks.

III. Various functional units: Responsible for analyzing, managing, and monitoring related risks within the subordinate units and ensuring that risk control mechanisms and procedures are effectively implemented.

IV. Internal audit: This independent unit reports to the board of directors, helps oversee risk management, reviews how functional units implement controls, and recommends improvements in risk monitoring.

Risk Management Process and Operations

GlobalWafers' risk management procedure consists of risk identification, assessment, supervision, reporting, and response operations. This procedure is designed to support the implementation of the company's risk management strategies.



GlobalWafers has established an assessment method as a foundation for risk management. For risks that can be quantified, the company applies statistical analysis techniques and manages these risks through a structured process. Risks that are not easily quantified are evaluated qualitatively, using descriptive language to indicate the likelihood and potential impact of their occurrence. Information about operations and risk management is disclosed in the company's annual report and on its website.

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

1 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 internal control system and provisions and serve as the initial risk discovery, assessment, and control unit.

2 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 (revise or) amend the relevant internal provisions when necessary.

3 Tier-3 liability[Note]

- Senior management must review the integrity of the company's risk management-related mechanisms, supervise the risk management implementation and effectiveness, and report to the Audit Committee and board of directors every year.
- The assessment of the implementation of risk management is conducted by internal audit personnel to evaluate whether risk management is effectively carried out, ensuring proper implementation and compliance with the established system.

To ensure robust risk management practices, the Company's Sustainability Development Committee presents an annual report to both the Audit Committee—comprised of four independent directors—and the Board of Directors. These reports address significant environmental, social, and corporate governance (ESG) concerns, as well as strategies, operational management, and execution related to risk within the Company's activities. The Audit Committee and Board of Directors provide constructive feedback and oversight, with the most recent update submitted on May 6, 2025. Recognizing the critical nature of climate change, the Sustainability Development Committee additionally submits quarterly reports to the Board focused on environmental performance indicators, climate-related targets, and ongoing response and management initiatives.

Risk Management Process Audit

GlobalWafers has established an Audit Office as an independent function under the Board of Directors, reporting directly to both the Board and the Audit Committee. The Audit Office supports the Board in overseeing effective implementation of risk management by conducting independent evaluations and audits of risk mitigation and control measures across all functional units. This process ensures the integrity and effectiveness of the Company's internal control and risk management systems. The annual audit plan is developed based on comprehensive risk assessments and is subject to Board approval.

GlobalWafers performs a self-assessment of its internal control system at least annually. The Audit Office systematically reviews self-assessment reports submitted by every department and subsidiary, as well as monitors remedial actions for deficiencies and irregularities identified through audit processes. These efforts provide the foundation for the Board of Directors and the Audit Committee to assess overall internal control effectiveness and to issue the Declaration of Internal Control System. Audit findings, including identified weaknesses, are transparently disclosed in audit reports, and follow-up actions are documented at least quarterly until all issues are fully resolved, ensuring prompt and appropriate corrective measures by relevant units.

The Audit Office delivers quarterly updates to the Audit Committee regarding audit activities and offers timely recommendations to enhance risk controls. This practice guarantees alignment between policy requirements, operational procedures, and the performance objectives and risk tolerances set by management. The Head of Audit attends Board meetings to report on the progress of the annual audit plan's implementation.

Risk Culture Development

To foster a culture of risk awareness throughout the organization and integrate risk control principles into everyday operations, GlobalWafers provides ongoing annual training and simulation exercises covering a range of risks—including emergency response, environmental, health and safety, intellectual property, legal compliance, and information security. In 2025, the Company conducted the following risk management-related training programs: "Information Asset Collection and Risk Management Methodology" (1.5 hours); three sessions of "Corporate Information Security Awareness Training" (each session lasting 1.5 hours); and two sessions of "Email Social Engineering Awareness Training" (each session lasting 1 hour). A total of 1,724 participants attended these programs. The training addressed risk management from a corporate sustainability perspective and incorporated practical case studies to strengthen the Company's risk management mindset and implementation capabilities.

Furthermore, to strengthen cybersecurity awareness, GlobalWafers has incorporated cybersecurity risks as a formal performance indicator at each business site. Alongside profitability, both cybersecurity resilience and organizational adaptability are now recognized as key metrics for operational assessment across facilities.

Material Topics and Enterprise Risk Management (ERM)

GlobalWafers has implemented a risk management mechanism to evaluate and monitor its risk resilience and ongoing risk status, as well as to identify appropriate response strategies and ensure adherence to risk management procedures. The Company integrates material topic analysis within its Enterprise Risk Management (ERM) framework. Identified risks for each material topic, along with related mitigation and response actions, are outlined as follows:

Material Topic	Risk Item	Risk Category	Risk Level[note]	Risk Mitigation and Response Measures
Corporate Governance	Changes in regulatory frameworks have introduced new requirements in corporate governance, including specifications regarding board composition and the implementation of internal control systems for sustainability information management. Non-compliance with these evolving standards may expose the company to regulatory penalties	Compliance Risk	Medium	• Participate annually in the Corporate Governance Evaluation to systematically assess regulatory benchmarks and develop targeted action plans • Enhance board diversity and independence by expanding the representation of female directors • Establish robust internal policies and control frameworks to mitigate risks, ensuring the Internal Audit Unit conducts regular and special audits to assess the effectiveness of internal controls
Business Strategy and Financial Performance	The dynamic nature of the international environment, coupled with ongoing regional trade disputes, generates significant macroeconomic volatility that can impact investment strategies within the semiconductor sector	Financial Risk	High	Establish operational and production sites across various global locations and flexibly allocate production capacity to respond to relevant regulations and reduce the impact of trade tariffs on operating costs
	Impact of exchange rate fluctuations on operating costs			Follow the principle of natural hedging by offsetting liabilities and asset positions to minimize net exposure to exchange rate fluctuations. The treasury function of the Company pays close attention to the trend of the exchange rate, and will match with appropriate foreign exchange instruments for hedging where necessary to mitigate the influence of exchange rate fluctuation on the cost of operation
Ethics and Integrity	Without a control environment grounded in ethical integrity, there is a risk of fraud, which could lead to financial losses for the company and investors, increased management costs, and potential legal risks such as litigation and penalties	Compliance Risk	Medium	Establish employee grievance and illegal conduct reporting channels, and improve the internal audit system
Information Security and Personal Data Protection	Leakage of confidential information and personal data	Operational Risk	Medium	Participate in the Corporate Governance Evaluation to comprehensively review and implement regulatory indicator requirements. Through the establishment and certification of the ISO 27001 Information Security Management System, the Company continuously strengthens its information security management mechanisms. At the same time, regular software and hardware updates and upgrades are carried out, information security education and training are conducted, and annual information security tabletop exercises are performed to enhance overall information security protection capabilities
Product Quality and Safety	Gaps between product quality and customer expectations or unsafe products may lead to product recalls, loss of customer trust, and increased consumption of resources and energy	Operational Risk	High	By strengthening risk analysis, closely aligning customer requirements with product quality, and enhancing the maturity of quality monitoring and system management, while implementing safety requirements and regularly reviewing product strategies, the Company effectively reduces the risks of product recalls, resource waste, and environmental impacts arising from defective or unsafe products
Sustainable Supply Chain Management	Geopolitical tensions may lead to shortages of critical raw materials or supply chain disruptions	Operational Risk	Low	• Establish multiple suppliers for critical raw materials to avoid overreliance on a single source and mitigate the risk of supply chain disruptions • Procure the Company's primary raw material, polycrystalline silicon, from world-renowned manufacturers under supply agreements to ensure stable quality and sufficient supply • The Supply Chain Management Department closely monitors the latest developments and adjusts transportation routes as needed • Maintain close relationships with customers and suppliers to build a resilient local supply chain and implement a Business Continuity Plan (BCP)
	Insufficient supplier sustainability strategies and capabilities			• Implement responsible sourcing and actively promote sustainability initiatives, such as optimizing transportation and packaging processes, incorporating carbon costs into procurement decisions, and collaborating with suppliers to develop innovative materials and processes to reduce resource consumption and waste • Conduct tiered management of suppliers to ensure supply chain compliance with ethical standards, including the protection of human rights, prohibition of forced labor and child labor, and avoidance of conflict minerals

Material Topic	Risk Item	Risk Category	Risk Level[note]	Risk Mitigation and Response Measures
Climate Strategy and Actions	Regulations from governments, institutional investors, customers, and national policies of trade partners regarding energy conservation and carbon reduction are becoming increasingly stringent	Environmental Risk	High	• Conduct a comprehensive inventory of greenhouse gas emissions across the entire Group and obtain third-party verification statements • Incorporate a 1.5℃ warming scenario to establish GlobalWafers' short-, medium-, and long-term carbon reduction targets, including science-based targets (near-term targets, long-term targets, and net-zero commitments). These are supported by the Group's RE100 roadmap, with five key decarbonization strategies: (1) adoption of renewable energy, (2) improvement of energy efficiency, (3) purchase of carbon offsets, (4) carbon removal, and (5) upstream value chain decarbonization, along with the implementation of specific action plans
Energy Management	Operational electricity consumption increases due to abnormal high temperatures, along with rising electricity costs	Environmental Risk	Medium	Implement energy-saving projects annually and regularly track energy consumption targets for each power-consuming unit, with an annual reduction goal of ≥ 1%
Waste Management	Increasingly stringent environmental regulations worldwide have led to higher costs for waste treatment equipment and external waste disposal service providers. The value chain has also begun promoting Zero Waste to Landfill certification (UL 2799)	Environmental Risk	Low	• Install the pollutant emission supervision system; devote to pollutant reduction • Increase waste generation tracking and improve overall (broad-scope) waste recycling rates across all operating sites • Strengthen the risk control for turning waste into resources and reuse; use regenerated raw materials as much as possible
Water resources management	Increasingly severe abnormal climate conditions affect the stable availability of clean water resources	Environmental Risk	Low	• Regularly track progress toward unit water withdrawal reduction targets, implement water resource management initiatives, and increase water recycling rates or frequency of reuse
Talent Attraction and Retention	A lack of fair and sustainable talent strategies may exacerbate workplace inequality and negatively affect employee morale and mental health. Excessive competition in employee benefits may also increase financial burdens, thereby reducing overall operational effectiveness	Operational Risk	High	• 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. • Employee complaints channel: Install designated personnel for handling employee opinions, handle problems raised by employees in a timely manner, reduce labor-management conflicts • Regularly review salary levels in the technology industry and adjust employee compensation appropriately based on macroeconomic indicators and price indices • Develop internal employee care programs to ensure comprehensive physical and mental well-being
	High turnover in production labor and shortage of key talent pose risks to workforce stability			• Establish key talent incentive programs and manage working hours and output • Promote talent succession planning at the managerial level and increase the internal promotion or transfer rate for supervisory positions
Talent Development	In response to industry trends and technological innovation, investment in talent development increases short-term costs	Operational Risk	Medium	• Provide diverse learning resources and a comprehensive employee training system to support holistic career development • Promote talent exchange programs across different sites • Plan industry-academia collaboration with universities and support external training or education • Implement internship programs in which at least 10 interns are mentored by managers or above for a period of 3 months
Occupational Health and Safety	Workplace injuries among employees or major occupational accidents may result in penalties from competent authorities	Operational Risk	Medium	• Conduct regular inspections of plant facilities, promote occupational safety awareness, and implement safety equipment across sites • Regularly review and strengthen safety management measures for contractors
	The implementation of restrictive measures to enhance safety may lead to reduced productivity or efficiency; increasingly stringent occupational health and safety regulations may increase labor and operational costs			• Introduce automated guided vehicles (AGV) and automated storage systems to effectively reduce employees' physical workload and improve production efficiency • Encourage employee participation in job redesign through the innovative "I-Care Proposal Improvement Mechanism"

Note: The risk level is determined through a cross-assessment of "impact (on the Company's financials / business continuity / reputation)" and "likelihood of occurrence," resulting in an overall risk evaluation as follows:
High: Overall risk level is high Medium: Overall risk level is medium Low: Overall risk level is low

[Long-Term Emerging Risks]

GlobalWafers continuously monitors developments in the global macroeconomic environment and trends in the technology industry. It also references the latest edition of the Global Risks Report to identify emerging risks that may have significant impacts on operations and the semiconductor value chain over the medium to long term (3–10 years and beyond). By evaluating their potential impacts and corresponding response strategies, the Company aims to strengthen organizational resilience and long-term competitiveness.

Emerging Risks	Risk Description	Potential Impact	Response measures
Climate Change and Critical Resource Supply Risks	Increasing frequency of extreme weather events, intensifying water stress, and the accelerated implementation of carbon pricing and energy transition policies across countries may affect the stability of water and power supply required for semiconductor manufacturing, as well as the overall energy cost structure.	• Production disruptions or capacity constraints • Increased energy and water costs • Higher operating costs due to compliance with carbon emission regulations and fulfillment of international commitments • Increasing customer demand for low-carbon supply chains, affecting order competitiveness	• Develop solar power facilities, enter into power purchase agreements (PPAs), and procure Renewable Energy Certificates (RECs), supported by the Company's RE100 roadmap to achieve targets in phases • Optimize existing equipment and implement various energy-saving measures across all sites to reduce energy consumption and electricity costs; integrate energy-efficient equipment in new facilities during construction to increase renewable energy usage and reduce overall carbon emissions • Enhance water-saving processes and recycling systems to improve water efficiency • Collaborate with customers and suppliers to advance decarbonization and Scope 3 emissions management • Continue investing in low-carbon and sustainable product development
Key Technology Evolution and AI Application Risks	The rapid development of AI and high-performance computing accelerates demand for material specification and process innovations; meanwhile, the adoption of generative AI and smart manufacturing systems introduces risks related to data management, model bias, intellectual property, and information security.	• Technology investments lag behind market developments, affecting competitiveness • Improper use of AI leading to biased decisions or information leakage • Increasing customer requirements for data security and supply chain cybersecurity Increased pressure on R&D and capital expenditures	• Continue investing in advanced processes and high-end application materials to enhance product differentiation • Establish AI usage principles and data governance policies, and strengthen employee training • Conduct regular cybersecurity drills and third-party testing; implement the ISO 27001 Information Security Management System (ISMS) with external certification, and continuously protect information assets through structured planning, implementation, and monitoring mechanisms • Strengthen cybersecurity protection and Business Continuity Management (BCM), and include cybersecurity risk management as a performance indicator across operational sites, making cybersecurity resilience a key performance metric
Talent Shortage Risk in the Semiconductor Industry	As global semiconductor industry expansion and technological upgrades progress simultaneously, demand for highly skilled talent in engineering, materials science, and process expertise continues to increase; demographic changes and global competition for talent pose structural challenges to talent supply.	• Constraints on critical technologies and R&D capabilities • Impact on expansion progress and operational efficiency • Rising labor costs and risk of organizational knowledge loss	• Establish global talent deployment, cross-site technical exchange, and local training mechanisms • Introduce highly automated designs in new facilities • Strengthen industry–academia collaboration and professional training • Promote succession planning for key talent and knowledge management systems
Geopolitical and Supply Chain Restructuring Risks	Geopolitical tensions, export controls, and increasing regionalization policies are accelerating the localization and diversification of semiconductor supply chains, increasing operational complexity and uncertainty across regions.	• Tariff policies, technological restrictions, and export controls under geopolitical competition affect market deployment strategies • Regional demand fluctuations and risks of order shifting • Increasing capital expenditures and operating cost structures due to supply chain localization trends • Increased compliance risks and uncertainty in trade policies	• Strengthen localized production and customer service capabilities GlobalWafers operates 18 production sites across 9 countries and has established a fully integrated manufacturing capability from crystal growth to epitaxy across the Americas, Asia, and Europe. This enables the Company to serve as a local supplier to customers, meeting nearby demand and mitigating the impacts of geopolitical and macroeconomic fluctuations • Build cross-regional manufacturing and supply flexibility to reduce reliance on any single market The Company procures key raw materials from globally recognized suppliers under supply agreements to ensure stable quality and sufficient supply, while establishing multiple sources for critical materials to avoid overreliance on single suppliers • Continuously monitor policy developments across countries and strengthen compliance management mechanisms With production sites worldwide, GlobalWafers flexibly allocates production to comply with regulations and reduce the impact of trade tariffs on operating costs