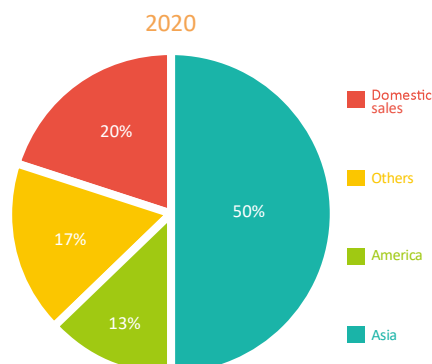
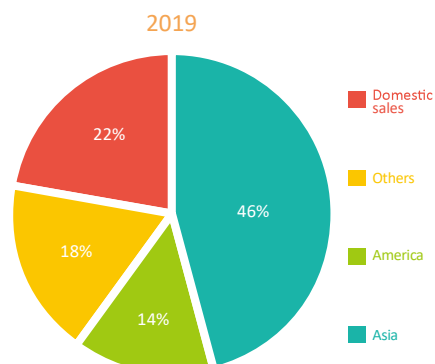
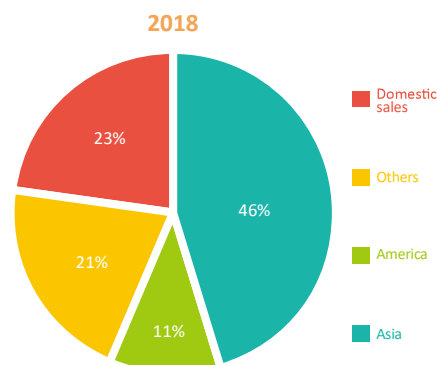




• Sales Area Ratios

Since GlobalWafers acquired Topsil and SunEdison 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 20%, followed by the Americas.



• Overall Economic Environment and Industry Trends

The COVID-19 epidemic and the geopolitical trade conflicts shrouded the year 2020, 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, stimulated the development of basic Netcom facilities such as the Cloud and servers, and boosted GlobalWafers' quarterly growth in terms of revenue and shipments. The accelerated 5G deployment is expected to stimulate the smartphone replacement wave and hasten the digitized long-distance communication / life model, and the self-driving electric vehicle development trend provides impetus for automotive market recovery. The global semiconductor chip demand is expected to continue to rise, but it remains uncertain if the COVID-19 epidemic can be effectively controlled, and the epidemic's impacts on the overall global economy and individual industries remain to be seen. GlobalWafers will continue to take advantage of its operating sites worldwide, keep abreast of the latest development status, and operate with caution.

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 stipulated in 2015 risks management policies and risks management guidelines. The three major objectives of the risks management system stimulation:

- Proactively engage in all businesses to enhance the quality and quantity of income, within the limits of acceptable risks standards.
- Strengthen the width and depth of risks control and management and respond, when necessary, with negative listings regarding standardized and key principles
- Thoroughly facilitate systems, computer operation and disciplines to ensure the compliance with risks control and management

GlobalWafers' risks management procedure includes risks identification, risks assessment, risks supervision, risks reporting and disclosure, and response to risks. With this risks 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

- The person in charge of each department or business operation is the risk liability holder for the said operation and must comply with the internal guidelines in business operation as the preliminary unit for risks discovery, assessment, and control.

Tier-2 liability

- The head of each department is responsible for the risks management of their relevant business as well as tracking and reviewing whether all operation details are compliant with laws and regulations.

Tier-3 liability

- The President's Office shall examine the completeness of the risks management mechanism for company hazards, operation, finance, strategies, legal compliance, and contract compliance while supervising the relevant risks for each department.

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 risks management procedure compliance status. The ESG risks and opportunities that we have identified are illustrated below.

Economic Aspect	Environmental Aspect	Social Aspect
<p>Identified risks • Strategies of turning risks into opportunities</p> <p>All risks involving management and investment</p> <ul style="list-style-type: none"> Proactively establish a comprehensive up-, middle- and down-stream integrated supply chain to expand the operation scale and 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 invest in advanced technology R&D, and 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 5G mobile telecommunication. <p>Risks of corporate governance</p> <ul style="list-style-type: none"> Implement corporate governance policies, stipulate relevant governance guidelines, design punishment and appeal systems, facilitate corporate social responsibility to demonstrate GlobalWafers' commitment and determination in pursuing sustainable operation. 	<p>Identified risks • Strategies of turning risks into opportunities</p> <p>Mitigation</p> <ul style="list-style-type: none"> The management is conducted in two major aspects: mitigation and regulation. 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. <p>Climate change risks</p> <ul style="list-style-type: none"> Implement water-conservation measures and increase the use of reclaimed water <p>Regulation</p> <ul style="list-style-type: none"> 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). <p>Risks for environmental protection</p> <ul style="list-style-type: none"> Install the pollutant emission supervision system; devote to pollutant reduction Strengthen the risk control for turning waste into resources and reuse; use regenerated raw materials as much as possible 	<p>Identified risks • Strategies of turning risks into opportunities</p> <p>Challenges for relationship maintenance and communication with internal & external stakeholders</p> <ul style="list-style-type: none"> Strengthen the Stakeholder Engagement on the company website; build a communication channel with our stakeholders so as to understand and respond to issues of concern to all stakeholders. <p>Risks for occupational health and safety</p> <ul style="list-style-type: none"> 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. <p>Risks for labor health</p> <ul style="list-style-type: none"> 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. <p>Risks for labor-management relationships</p> <ul style="list-style-type: none"> 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. Interviews with new recruits: Through interviews, we can more directly understand the employees' working status in the Company, shorten the time it takes for new recruits to get used to the work, and reduce labor-related risks. Employee complaints channel: Assigned designated personnel to handle employee opinions and problems raised by employees in a timely manner in order to reduce labor-management conflicts

In addition, GlobalWafers has identified 3 major emerging risks in 2020: climate change, information security, and epidemic infectious diseases. The Company has formulated corresponding risk strategies and implementation mechanisms for all aspects its corporate operations based on their possible impacts to ensure that the risks can be effectively controlled.



• Climate Change Risks and Opportunities

In December 2015, nearly 200 countries have strengthened their response to the threats posed by climate change via the “Paris Agreement,” and greenhouse gas emission mitigation has become a key topic for global economic development. In June 2017, the Financial Stability Board (FSB) has published the Task Force on Climate-Related Financial Disclosures (TCFD). We have followed the 4 core elements (governance, strategy, risk management, indicators & goals) under the framework recommended by the TCFD to reveal the climate change related information.

Climate-Related Financial Information Disclosure Framework

01

Governance

- Supervision of the board of directors on climate-related risks and opportunities
- Corporate Sustainable Development Committee

02

Strategies

- Identified climate-related risks and opportunities
- Impact of climate-related risks & opportunities on operations, strategies, and financial planning

03

Risk management

- Processes for identifying and assessing climate-related risks
- Processes for managing climate-related risks

04

Indicators and targets

- Indicators used to evaluate climate-related strategies and risk management processes
- Various categories of greenhouse gas emissions and related risks
- Targets used to manage climate-related risks and opportunities, and the corresponding target performances

GlobalWafers’ Corporate Sustainability Development Committee members have collected the risk and opportunity information related to climate change, and integrated the stakeholders’ concerns. The Corporate Sustainability Development Committee team members would identify and score the topics, and report the results in the Corporate Sustainability Development Committee meeting held every year. The relevant team members would then formulate the management practices and goals in response to the risks (major topics), and report the results to the board of directors.



Climate-related Risks and Opportunities

Type	Climate-related risks	Potential financial impacts
Transformation risks	Policy and regulations	Increase operating costs
	Greenhouse gas emissions disclosure	Policy changes leading to write-offs and early scrapping of existing assets
	Current and revised energy regulations	
	Technology	Capital investment in technology development
	New/low carbon technology investment and transformation	Novel and alternative technology R&D expenditure
	Market	Changes in consumer preferences resulted in a decline in demand for goods and services
Physical risks	Preferences and changes in customer behavior	Changes in income combinations and sources
	Rising costs for raw materials and waste disposal	Investment cost increase
	Reputation	
	Industrial stigmatization	Decline in demand for goods/services
	Immediacy	
	Increased frequency and severity of extreme weathers (typhoons, heavy rainfalls)	Production capacity decline or interruption
	Long-term	Operating cost increase
	Average temperature rise	Lower sales/output leads to lower revenue

Type	Climate-related opportunities	Potential financial impacts
Resource efficiency	Recycle & reuse	Reduce operating costs
	Reduce water resource consumption	
Energy source	Use of novel technologies	Reduce operating costs
Products and services	R&D and innovation of products and services	Improve competitive position in response to consumer preference changes
	Business activity diversification	
Market	Make good use of public sector incentives	Partner with the public sectors to enter new markets and increase revenue
		Reduce operating costs
Resilience	Energy plans and energy-saving measures	Reduce operating costs
	Resource substitution and diversity	

Response measures and goals

- Regularly track and check the greenhouse gas emissions trend for the factory every year
- Continue to track, identify, and respond to changes in laws and regulations
- Promote various energy-conservation and carbon-reduction measures, and develop low-carbon and renewable energy application ratios
 - Invest to replace old equipment in the factory area.
 - Adopt advanced reduction technology to extend the actual carbon reduction benefits.
 - Continue to formulate energy-conservation measures, and the annual energy-saving rate of each plant area must be at least > 1% each year.
 - Actively develop green energy farms
- Energy / resource consumption management and waste disposal to improve resource utilization efficiency
 - Residual silicon crystal ingots are returned to the furnace for reuse.
 - Recycling of industrial waste cutting oil.
 - recycle and reuse of packaging materials and wafer boxes.
 - Lapping waste is used to grind silica mud and turn it into secondary materials for the glass industry.
 - The slice/lactic acid hot water degumming case uses hot water to replace chemical degumming as the medium.
- R&D and optimization of products and services to enhance the innovative material/technology development
 - Silicon wafer process optimization has switched from Slurry to DW in order to improve production efficiency, and significantly reduce the amount of carrying agent used as well as the waste cutting oil (mud) output.
- Reputation
 - Participate in regional circular economy proposals and competitions.
 - Promote the green factory label system, and guide the industry to enhance green competitiveness and green corporate image.



• Information Security

According to the 2019 World Economic Forum Risk Report, large-scale cyber-attacks and data theft have become one of the top 10 risks. In 2020, many well-known companies worldwide and in Taiwan have all experienced virus extortion incidents that resulted in significant losses. 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 while reducing the risks of ever-changing and novel information security attacks. The Company has adopted the PDCA cycle operation model to achieve the objectives and provide continuous improvement, established information security monitoring and vulnerability scanning systems to prevent external hacker intrusions and internal secret theft, and implemented strict software and hardware control (including Internet and personal information equipment) to ensure personal data and internal confidential data protection and security.

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

1. Information System Security Management

- Installed endpoint protection software on servers and personal computers or laptops, and automatically updated virus definitions or signatures.
- Constructed e-mail security gateway equipped with information security modules such as spam filtering, malicious file detection, and phishing e-mail detection in order to enhance e-mail attack protection.
- Important systems and databases are regularly backed up and stored off-site to ensure data availability.
- 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.

2. Information System Access Control

- Strict control for the application system and file access setting permissions to ensure information confidentiality.
- Formulated and implemented account/password complexity principles, and updated passwords regularly to ensure the validity of identity authentication.
- For employees who have resigned and changed departments, the information department would adjust the permissions according to document instructions to ensure real-time and correct data permission & authorization.
- System service providers who perform system maintenance via remote login must go through the application process to gain permissions before connecting to the system and recording the processing status.

3. 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 them to stay alert for incoming e-mails 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 computer virus removal notification letter to the IT personnel.
- VPN connection verification is required in order to connect to the internal network from outside, and a two-stage verification method is used to ensure information security.

• Infectious Disease Prevention

COVID-19 has ravaged nations worldwide in 2020, and GlobalWafers has initiated its epidemic prevention measures at first instance. All of the departments have cooperated to execute comprehensive epidemic prevention operations, formulate epidemic prevention strategies for the plant areas, perform categorization measures and epidemic prevention resource inventory operations, and hold regular meetings to formulate epidemic prevention response measures in order to ensure that the workplaces are healthy and safe.

• Epidemic prevention information:

To enable employees to fully grasp the real-time epidemic prevention information, the Health Management Center has regularly issued global epidemic information and in-plant epidemic prevention measures to enable employees to quickly receive the correct epidemic prevention information.

• Health monitoring:

Temperature monitoring is implemented at all plant entrances. In case of a fever or suspected contact history with any infected, entry into the factory is strictly prohibited. In addition, internal electronic questionnaire surveys are implemented in collaboration with the central command center to fully grasp the travel history of the infected, and fulfill employee proactive notification and independent health management objectives.

• Visitor management:

Use e-mails and paper fliers to advocate on-site epidemic prevention measures to the supply chain manufacturers, require visitors to fill-in the health declaration form prior to entry, and wear masks to protect the safety of employees.

• Office epidemic prevention:

To prevent the infection risks due to crowd gathering, office workers have taken a number of contingency measures such as: crisscross seating, cabin separation, traffic flow diversion, and work from home in order to minimize crowd gathering and reduce the frequency of employee contact.

• 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, increase internal ventilation, encourage staff to open windows for confined spaces, affixed adhesive films on top of frequently used buttons, added partitions in restaurants, increased dry-cleaning equipment, and posted correct hand-washing instructions in all restrooms.

• Employee care:

The Company provides care and follow-up tracking for high-risk groups, conducts body temperature recheck follow-up management and control, and offers outpatient psychologist services when necessary to assist employees to alleviate negative emotions and pressure.

