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2023 Key Indicators and Recognitions

Message from the Chairperson

About GlobalWafers

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- 2.4 Sustainable Supply Chain & Management
- 3 Sustainable Environment
- 4 Talent Development and Social Inclusion
- 5 Occupational Health and Safety

Appendix

2.1.2 Intellectual Property Management System

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

• TIPS Validation History





2023 Sustainability Report



Intellectual Property Management Strategy

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

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

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

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

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









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• Risks and Countermeasures: Reinforce Secret Control to Reduce Secret Leakage Risk

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

Four Major Areas of Confidentiality Management



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

2.2 Product Quality

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

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

• Enhancement of Company Improvement Culture

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

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



Improvement Topic: Reduction of the wirecut wire cutting rate



IE4.0 Circle: Silver Tower Award Improvement Topic: Energy Conservation

Crisis and Joint Creation of New Opportunities for Carbon Reduction



