2022

Zhen Ding Technology Holding Limited

Sustainability Report

臻鼎科技集團
Zhen Ding Tech. Group

About this Report

Reporting Period

This report is the 7th ESG Report issued by Zhen Ding Technology Holding Limited. It covers data for 2022 (January 1 to December 31, 2022). The previous reporting date was May 31, 2022. For information integrity and comparability, a portion of the performance data will be traced back to December 31, 2021 and earlier information.

Boundaries and Scope of this Report

This report has included Zhen Ding Technology Holding Limited and its subsidiaries. The regions of operation are Taoyuan, Taiwan and Shenzhen, Huai'an, and Qinhuangdao in China. The company's business scale, business activities, and supply chain did not change significantly during the reporting period.

Data Collection Process and Method of Measurement

The information and statistical data in this report were sourced from the results of statistical calculations and surveys performed by the company. Performance data relevant to this report were collected by inviting applicable departments to provide routine management data, education and training, discuss issues and take part in interviews. The data were then compiled in accordance with the requirements of GRI Standards and indicators to reflect Zhen Ding's performance in economic, social, and environmental aspects. The data for each indicator were collected, measured, and calculated according to local regulations. International standards are used where no local regulations apply. If there are no international standards available then industry or applicable standards are used. If the disclosed quantitative indicator has a special meaning, a note will be added to explain the meaning.

Reporting Guidelines and Principles

This report is compiled by following the 2021 GRI Standards issued by the Global Reporting Initiative (GRI). It has adopted the TCFD framework and SASB guidelines for disclosure to further enhance the integrity of ESG information. Please refer to the Comparison Table of the GRI Guideline Index and the SASB Content Index.

Report Assurance

The company has engaged PwC Taiwan to conduct limited assurance on this report in accordance with the Assurance Standard No. 3000 "Assurance Engagement of Examinations or Audits of Non-Historical Financial Information" (based on ISAE 3000) issued by the Accounting Research and Development Foundation of the Republic of China. Please see the Accountant Limited Assurance Report in this report.

Zhen Ding Sustainable Responsibility Website

Download the full ESG Report

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Message from the Chairman

2022 was a year full of challenges but also opportunities for Zhen Ding. Despite the instability of the global economy, Zhen Ding continues to maintain a stable financial position and achieve excellent results in sustainable development.

In 2022, we yielded outstanding operating results. Revenue for the year reached NT$171.356 billion, representing a 10.5% increase compared to the previous year and setting a record high. Zhen Ding will continue to conduct R&D and innovate based on customer needs. We will develop our PCB core business and offer diversified product combinations and services, in order to further expand our market share. We have always believed that in an era of rapid economic changes, continuing to invest in sustainable development is a key strategy for the company. Therefore, we will continue promoting ESG management to create long-term value for our shareholders and stakeholders, while contributing to sustainable developments for the future.

In 2022, we continued to develop high-end products with our customers, including AR/VR, low-orbit satellites, autonomous driving, and AI. We actively expanded our production capacity to satisfy the mid- to long-term needs of customers. The company continues to focus on cultivating high-end PCB demand. With the gradual mass production of IC substrates and high-end orders for automotive and server boards from customers, the company is optimistic about stable mid- to long-term growth. In addition to improving operating performance, we also uphold the EPS+ESG strategy to actively promote sustainable developments. Last year, we achieved outstanding results in ESG performance, winning several international awards. At the beginning of this year, we became the first PCB company in the world to be included in the Bloomberg Gender Equality Index (GEI). This demonstrates our unwavering commitment to improving transparency in gender equality information disclosure and promoting a diverse and inclusive workplace environment.

Zhen Ding will continue promoting sustainable development and put the developments into practice through the group's "10 Sustainable Commitments".

In the pursuit of sustainable business growth, Zhen Ding is actively working together with its team members, partners, and customers to drive the sustainable impact of the industry as a whole and move towards the goal of becoming a leader in innovation and sustainability. We have been selected as the TWSE Corporate Governance 100 Index (CG100) for the fourth consecutive year, and selected as a constituent of the "FTSE4GOOD TIP Taiwan ESG Index" for the third consecutive year. We received a low risk rating in the ESG Risk Ratings by Sustainalytics published in 2022. We also received the best ever score of 102.84 in the "TWSE/TPEx Corporate Governance Evaluation for Listed Companies".

In the future, we will continue to devote ourselves to the development of ESG and further strengthen our performance in sustainability. We firmly believe that only through the joint efforts of enterprises and society can we achieve our sustainable development goals.

In terms of green products and low-carbon manufacturing, we will continue to accumulate green manufacturing capabilities in terms of technology development and process equipment improvement, and promote the recycling of production raw materials and precious metals to create green economic value. Furthermore, we will formulate diverse carbon neutrality strategies, referencing methods such as SBTi (Science Based Targets initiative) for green-

house gas reduction. We will assess various emission reduction scenarios and combine them with the use of 100% renewable energy to achieve net-zero emissions by 2050.

In terms of resource recycling and sustainable utilization, we will promote various solutions through an intelligent water treatment system to achieve water conservation at the source of production and promote end-of-pipe wastewater reuse. We will also continue to drive the three major control processes of waste reduction, resource utilization, and harmless treatment in order to minimize waste generation and maximize resource efficiency. In terms of human capital development and management, we will continue to pay attention to talent cultivation and development while strengthening talent attraction and retention.

In the new year, we will focus on cultivating high-end PCB demand and continue to implement the "One ZDT" strategy. Guided by our mission of "developing technologies for the betterment of human beings and protecting the environment for a greener earth", we will strive towards our goal of achieving a market share of over 10% by 2030. Our aim is to create greater value for our shareholders. We believe that steady progress is the cornerstone of sustainable development. Therefore, we uphold "integrity" as our core value and continuously propose innovative formulas to accelerate transformation and upgrade. We strengthen the resilience of our organization, enabling us to promptly and flexibly address various challenges and emerging risks in the future. We look forward to joining hands with all parties on the path ahead, creating a better future for our next generation.

沈慶芳

Awards and Recognition

S&P Global

Received a total score of 71 in the electronics equipment and components industry category of the S&P Corporate Sustainability Assessment (CSA), and was included in the S&P Sustainability Yearbook for the first time.

FTSE4Good TAIWAN INDEX PLUS

Selected as a constituent of the FTSE4Good TIP Taiwan ESG Index for three consecutive years.

TAIWAN STOCK EXCHANGE

Selected as the TWSE Corporate Governance 100 Index (CG100) for four consecutive years.

SUSTAINALYTICS

Received a low risk rating in the ESG Risk Ratings by Sustainalytics.

Win.d

Our subsidiary Avary Holding received the Wind ESG Rating of "A" industry.

CDP DRIVING SUSTAINABLE ECONOMIES

Received B in Water Security and B- in Climate Change of CDP.

Certification / Validation	
Quality Management System (ISO 9001: 2015)	Range: All of Zhen Ding's major plants in China and BoardTek Electronics Corp., Taiwan received certifications
Environmental Management System (ISO 14001: 2015)	Range: All of Zhen Ding's major plants in China and BoardTek Electronics Corp., Taiwan received certifications
GHG Inventory (ISO 14064: 2018)	Range: All of Zhen Ding's major plants in China and BoardTek Electronics Corp., Taiwan received certifications
Energy Management System (ISO 50001: 2018)	Range: All of Zhen Ding's major plants in China received certifications
Hazardous Substance Process Management System (QC 080000: 2017)	Range: All of Zhen Ding's major plants in China and BoardTek Electronics Corp., Taiwan received certifications
International Standard for Automotive Quality Management Systems (IATF 16949: 2016)	Range: All of Zhen Ding's major plants in China and BoardTek Electronics Corp., Taiwan received certifications
Telecommunications Sector Quality Management System (TL9000)	Range: BoardTek Electronics Corp., Taiwan received certifications
Information Security Management (ISO/IEC 27001: 2013)	Range: All of Zhen Ding's major plants in China received certifications
Occupational Health and Safety Management System (ISO 45001: 2018)	Range: All of Zhen Ding's major plants in China and BoardTek Electronics Corp., Taiwan received certifications
Business Continuity Management System (ISO 22301: 2019)	Range: All of Zhen Ding's major plants in China received certifications
Sustainable water management standard Alliance for Water Stewardship (AWS)	Range: All of Zhen Ding's major plants in China awarded Platinum Certification
Zero Waste to Landfill (UL2799 Zero Waste)	Range: All of Zhen Ding's major plants in China awarded Platinum Certification

ESG Achievements in 2022

SUSTAINABLE DEVELOPMENT GOALS

Zhen Ding has integrated our existing ESG management mechanism and actively responded to the United Nations Sustainable Development Goals (SDGs) through joint efforts and cooperation with employees, customers, and suppliers.

Key Environmental Achievements

Climate Action

- **25,310 tons** — Amount of carbon reduction
- **35%** — GHG emission intensity (Scope 1 and Scope 2) Reduction (2013 as baseline)
- **15,000 square meters** — On-site solar system

Water Management

- **40%** — Reduced water intensity (2013 as baseline)
- **>50%** — Waste water reuse rate
- **97 thousand tons** — Water conservation performance

Waste Management

- **91%** — Waste recycling (Percentage of recycling)
- Acquired **UL 2799** Zero Waste to Land Platinum certification

Key Social Achievements

Diversity, Equity, and Inclusion

- **39,941** Total no. of employees worldwide
- **35.9%** Percentage of female employees
- **14.4%** Percentage of female supervisors

Talent Cultivation and Development

- **98.8%** Usage of E-Learning platform
- **6,778** Self-produced online training courses
- **60** Average employee learning hours

Talent Recruitment and Retention

- **93.8%** Key talent retention rate
- **80%** Employment engagement rate

Human Rights Protection

- **600+ thousand** Total hours of training on human rights protection
- **100%** Employees completing human rights-related training
- **0** Major violation cases

Social Participation

- **50** Industry-academia-research collaboration technology development projects
- **547** Number of scholarships received by outstanding students
- **376** Number of students funded
- More than NT$**65.77 million** Total amount of public donations
- **12+ hectares** Supported the friendly rice field project

Key Governance Achievements

Directors' Governance Functions

Directors have completed at least six credits for ESG and sustainability-related continuing education courses.

External performance evaluation of the Board of Directors and functional committees

Integrity and Compliance

0
No significant violations of laws and regulations

0
No major violations of ethical management

0
No legal actions involving any violation of anti-competitive behavior, anti-trust, and monopoly practices and their outcomes

Risk Management

2,963 hours
Training hours of risk management-related personnel

Information Security

Completed the "Operating and Management Procedures for Smart Device Connections"

0
No information security incidents have occurred

187,532
Information security education and training hours

R&D and Innovation

NT$8.3 billion
Annual R&D expenses increased by 14% compared to last year

5,700+
Number of employees engaged in R&D, accounting for 15% of total employees

365 patent applications
247 patents granted
Number of patents issued and certified in 2022

74,000+ projects
NT$9.1 billion
Annual innovation improvement projects for enhancing project volume and improving cost effectiveness.

1,440
Total global patents

21 cases
Industry-academia-research collaboration projects

Key Governance Achievements

Responsible Supply Chain

- **100%** Suppliers sign the Supplier's Declaration of Business Management
- **100%** Supplier completed audit
- **100%** Supplier completed performance review
- **100%** Promotion of green supply chain by manufacturers in China
- **100%** Procurement of non-conflict minerals

Products and Services

- **100%** Compliance with U RoHS, EU REACH chemical regulations, IEC62474 Material Declaration standards
- **179** Number of suppliers audited for quality, hazardous substances, environment, and social responsibility
- **74 companies** Suppliers received quality-related training, with 307 participants
- **89.5%** Average customer satisfaction survey score

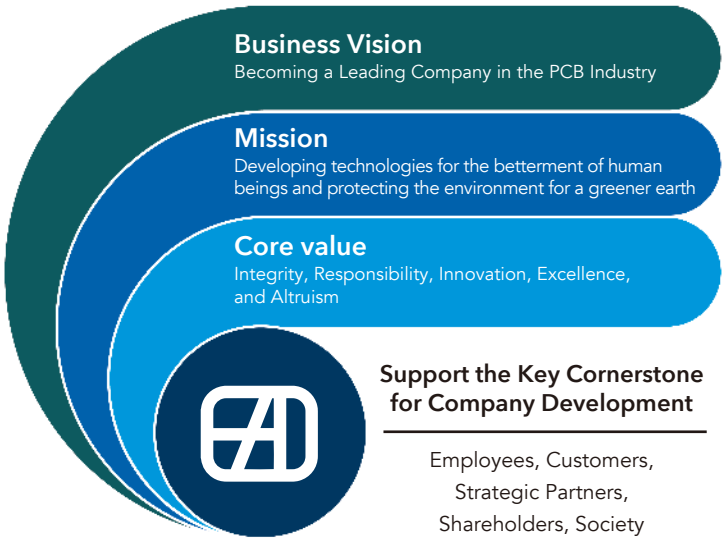
Participation in external advocacy associations

Every year, Zhen Ding participates in various international and local industry associations and non-profit organizations to promote initiatives and work in the areas of industrial sustainability, technological innovation, environmental interests, human rights protection and responsible supply chain. The total expenses for external initiatives of Zhen Ding Group was approximately NT$1,245 thousand in 2022. As a leader in the PCB industry, we look forward to working with all our partners to drive the energy of upward social mobility.

Name of Associations and Non-Profit Organizations	Position Held	Total Investment in 2022 (Unit: NT$ thousand)
Taiwan Printed Circuit Association (TPCA)	From 2002 to 2021, we have been an official member of the Taiwan Printed Circuit Association under the name of "Zhen Ding Technology Co., Ltd.". Our chairman also served as the ninth to fourteenth honorary director from 2016 to 2021.	1,245
Taoyuan Enterprise Chamber	Member	
Kaohsiung Port Listed Company Entrepreneurs Association	Member	
China Printed Circuit Association (CPCA)	Member	
Guangdong Printed Circuit Association (GPCA)	Member	
Shenzhen Printed Circuit Association (SPCA)	Member	
CDP (former as Carbon Disclosure Project)	Participated in the CDP and responses to the Climate Change Questionnaire for seven years and the Water Security Questionnaire for five consecutive years.	
Task Force Climate-Related Financial Disclosure (TCFD)	Since 2021, Zhen Ding has been a TCFD supporter, and annually discloses information on climate governance, strategy, risk management, and target setting in accordance with the TCFD framework.	
Responsible Business Alliance (RBA)	In 2021, Zhen Ding became a full member of the Responsible Business Alliance (RBA) and we are committed to complying with the RBA Code of Conduct to ensure that our global operations meet the requirements of labor, health and safety, environment, ethics, and management systems. We will also use this standard for supplier audit management.	

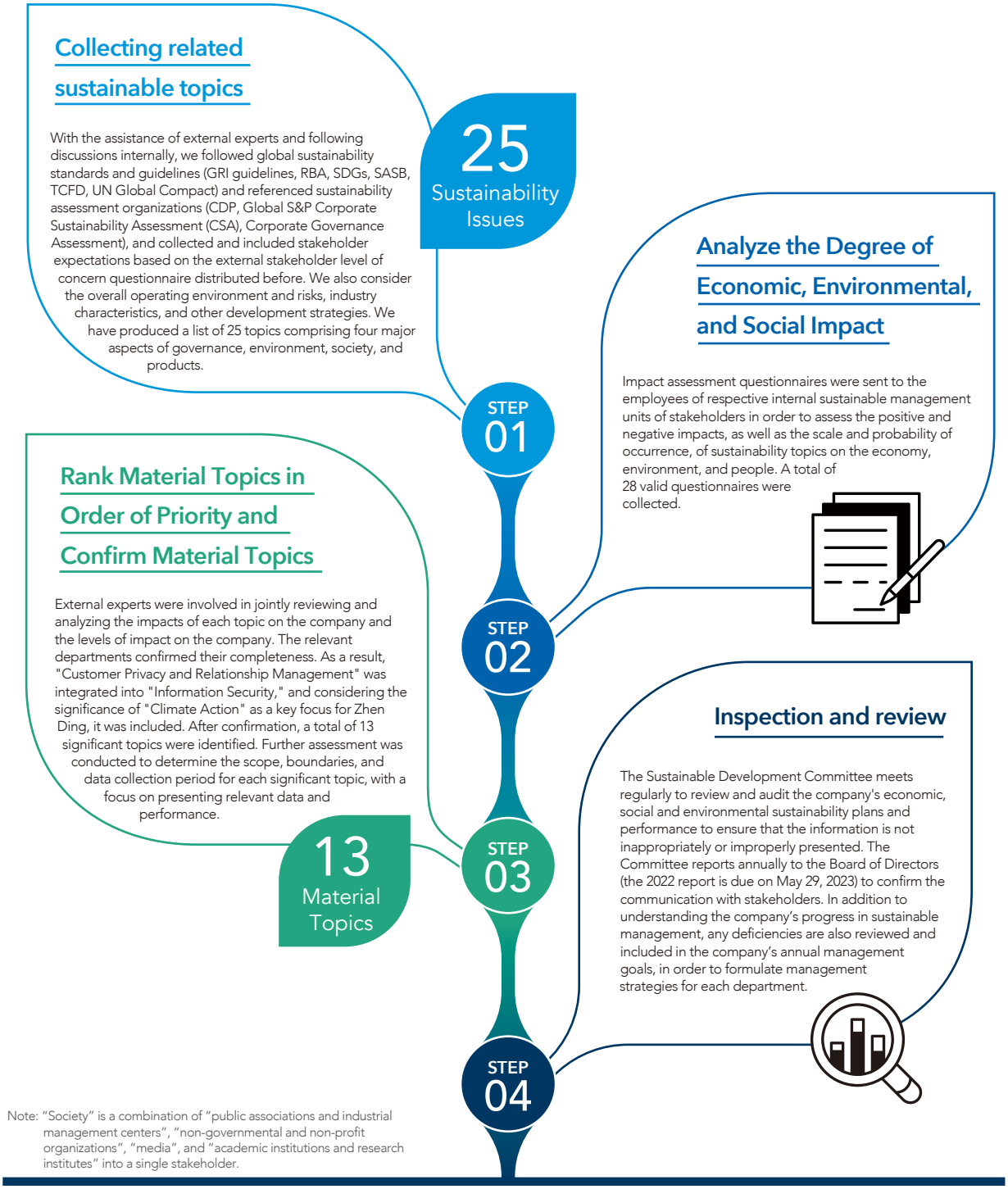
Sustainable Promotion and Management

"Integrity, Responsibility, Innovation, Excellence, and Altruism" are the core values of ZDT and also the cornerstone of our corporate culture. We believe that people form the foundation of a company and that we must create an excellent enterprise to achieve the company's vision of becoming a leading company. When we seek business profit and prosperity, we must also fulfill our social responsibilities. Therefore, our corporate mission is "developing technologies for the betterment of human beings and protecting the environment for a greener earth." With this cornerstone, we realize our commitment to sustainability and create the value of sustainable development for the economy, society, and environment.



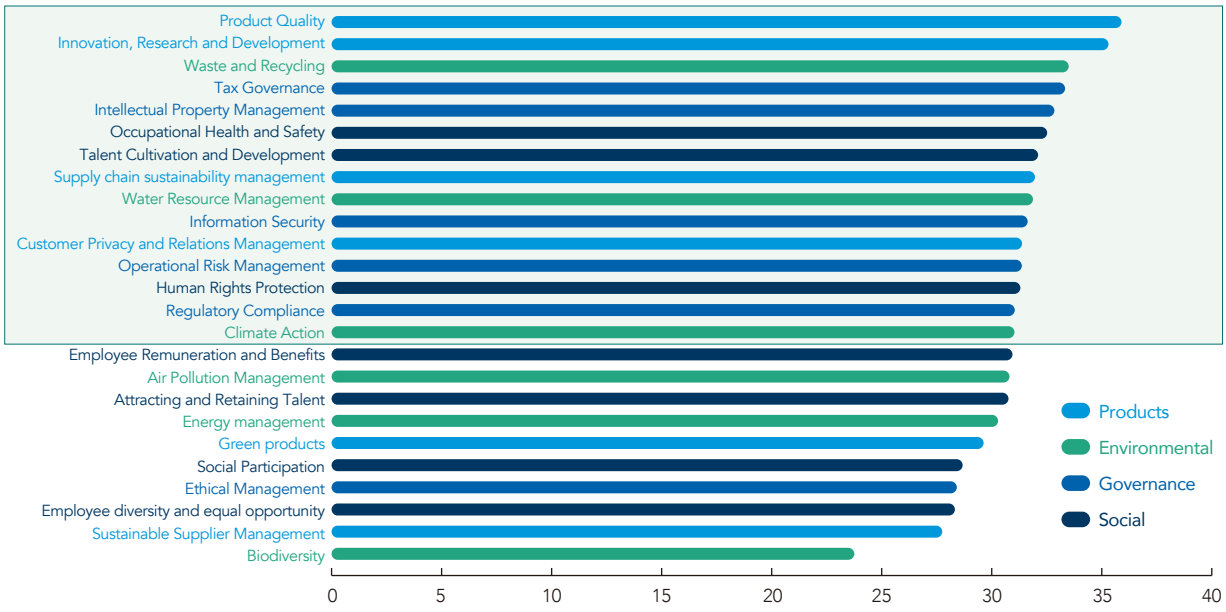
In the beginning of 2016, the Company decided to conduct a comprehensive inventory of the ESG activities that we have engaged in since our establishment. Through discussions and performance management internally and externally, we hope to focus on the core business competencies of Zhen Ding and implement strategies related to sustainable development into our daily operations. The company has established the "Sustainability Committee" as a functional committee under the Board of Directors, with the organization regulations approved by the Board on December 28, 2021. The Sustainable Development Committee serves as the highest-level governing body and is composed of the Chairman and two independent directors. The Chairman also serves as the chair of the "Sustainable Development Committee" and is responsible for overseeing the four executive task forces formed by the company's senior team: Sustainable Governance, Green Products, Energy Conservation, and Social Inclusion, which hold quarterly meetings to discuss and formulate the company's ESG sustainability management policy and specific promotion goals. In addition, the Sustainability Executive Secretary identifies the sustainability topics to be managed by each team, evaluates the performance of ESG implementation and discloses the related results, and reports to the Board of Directors at least once a year on the current year's implementation.

Zhen Ding uses sustainable development meetings to discuss and identify stakeholder groups that interact closely with the company and generate significant economic, environmental, and social impact on the company. We identified six major stakeholder groups for Zhen Ding based on dependency, responsibility, influence, diverse perspectives, focus, and the company's actual operations. The major stakeholders are employees, customers, suppliers, investors, competent authorities, and society (note). In addition to engaging in communication with stakeholders to understand their concerns regarding sustainability issues, the significant topics for Zhen Ding in 2022 have been identified through the application of the materiality assessment process based on the 2021 GRI Standards.



Note: "Society" is a combination of "public associations and industrial management centers", "non-governmental and non-profit organizations", "media", and "academic institutions and research institutes" into a single stakeholder.

Material topic results in 2022



Footnote: The assessment score is determined by multiplying the ratings of probability of occurrence and the magnitude of positive or negative impact. The top 15 topics based on this scoring method are considered the material topics for 2022. Among them, "Innovation, Research and Development" were combined with "Intellectual Property Management," and "Information Security" included "Customer Privacy and Relationship Management." As a result, the final list consists of 13 material topics.

Material Topics and Boundaries

Aspect	2022 Material Topics	GRI Topics	Boundaries of Impact			
			Zhen Ding Technology Holding Limited and subsidiaries	Customers	Suppliers	Communities
Governance	Regulatory Compliance	GRI 2-27 Legal Compliance	V	V	V	V
	Operational Risk Management	Identified according to GRI 3 (company-defined topics)	V	V	V	
	Information security (note)	GRI 418 Customer privacy	V	V	V	
	Tax Governance	GRI 207 Taxation	V			
Products	Product Quality	Identified according to GRI 3 (company-defined topics)	V	V	V	
	Supply chain sustainability management	GRI 308 Supplier Environmental Assessment; GRI 414 Supplier Social Assessment	V	V	V	
	Innovation and R&D (note)	Identified according to GRI 3 (company-defined topics)	V	V	V	
Environmental	Waste and Recycling	GRI 306 Waste	V	V		V
	Water Resource Management	GRI 303 Water and discharged water	V	V		V
	Climate action (note)	GRI 201 Economic Performance; GRI 305 Emissions	V	V		V
Social	Occupational Health and Safety	GRI 403 Occupational safety and health	V			V
	Human Rights Protection	Identified according to GRI 3 (company-defined topics)	V	V	V	
	Talent Cultivation and Development	GRI 404 Training and education	V	V		V

Note: Innovation and R&D includes intellectual property management, and information security includes customer privacy and relationship management. Climate action includes greenhouse gas and air pollution emissions.

Goals and performance of material topics management

Aspect	Material topics	Impact and influence	Commitments	2022 target	2022 performance
Governance	Tax Governance	We adhere to tax regulations, not only to implement sustainable development and enhance shareholder value, but also to fulfill our corporate social responsibility. Failure to implement tax governance and conduct tax risk assessments may result in potential tax impacts that could affect the company's profitability and even damage its corporate image.	Establish a relationship of mutual trust and respect with tax agencies and comply with local tax laws and regulations in all operating regions and file tax returns in a timely manner to ensure information transparency.	・Regularly report the tax governance implementation status to the Board of Directors to strengthen the tax governance structure.	・The tax governance implementation status has been regularly reported to the Board of Directors.
	Information Security	As Zhen Ding increasingly relies on the internet, we become more susceptible to malicious attacks that can lead to system crashes and operational disruptions. Operating automation and control systems in complex environments pose significant challenges to information security management. It is crucial to mitigate the operational risk of information leakage, safeguard the confidentiality of company data, gain customer trust, and strengthen information security.	Zhen Ding actively promotes information security by mutually supporting various operations in both managerial and technical aspects. We enhance the functions of our information security organization to achieve international compliance system certification, ensuring customer data security and effectively increasing international orders.	・Referred to the semiconductor industry information security standards (SEMI E187/E188) to optimize network security in various factories and strengthen the data protection of critical digital assets.	・Compared the 'Operating and Management Procedures for Smart Device Connections' with the SEMI E187 standard and explained it to the internal equipment units. ・Developed standardized processes and regulations for equipment onboarding, and implemented them in Leading Shenzhen Campus and Huai'an Campus III. ・In September 2022, the entire group completed self-inspection and self-checking of manufacturing equipment, identifying security risks in approximately 24.71% of machines. The improvements and re-evaluation were completed in November.
	Operational Risk Management	Zhen Ding established an early identification, accurate measurement, effective monitoring, and strict control risk management mechanism through internal and external environmental changes, ensuring the long-term and sustainable development of the company's business and overall operations. In the case of operational risks, if appropriate response measures are not taken and proposed, and countermeasures are not tracked regularly, there is a possibility of being unable to recover in a timely manner when facing a crisis, resulting in operational damage.	By establishing the Group's "Risk Management Policy" as a reference basis for strategic decision-making, Zhen Ding aims to reduce operational risks that may be encountered. Zhen Ding will adhere to the principles of "long-term focus, continuous development, and striving for excellence," and implement the policy of "prevention as the primary approach with source control, establishing total participation for total control".	・Risk management-related personnel completed risk management education and training, reaching 1,000 class hours.	・Class hours of responsible personnel was 2,963 hours.
	Regulatory Compliance	Compliance with regulations has positive impacts such as stabilizing market order and safeguarding the rights and interests of stakeholders. However, non-compliance with regulations can lead to harm to the rights and interests of stakeholders.	No significant violations of laws (penalties exceeding NT$1 million).	・No significant violations of laws (penalties exceeding NT$1 million).	・No significant violations of laws (penalties exceeding NT$1 million).
Products	Product Quality	Zhen Ding is dedicated to implementing total quality management to provide customers with high-quality products and services, achieving customer satisfaction. Meeting customer requirements for product quality can enhance and sustain Zhen Ding's competitive advantage.	Establish quality policy and formulate quality objectives. Meet customer requirements and product development safety requirements through relevant product certifications from external organizations.	・The average customer satisfaction survey score reached 86%	・Average customer satisfaction score was 89.5%.
	Supply Chain Sustainability Management	Enhancing suppliers' green performance will improve Zhen Ding's social responsibility impact. Failure to implement relevant management will result in the inability to meet international trends and customer requirements, leading to a decrease in company image, customer attrition, and financial impact.	By adhering to the Zhen Ding Seven Greens principle, and with the assistance of the suppliers, we select quality raw materials that meet our quality requirements and are friendly to the environment. We will strive to seek alternative materials or reduce material usage, collaborate with relevant suppliers, and pay attention to future trends in related technological applications.	・The achievement rate of the various annual targets of supplier management was 100%. ・The usage rate of recycled materials - potassium gold cyanide is greater than 35%. ・170 supplier audits were expected to be completed. ・Conflict minerals were not used in the supply chain.	・100% achievement rate in annual supplier audits, 100% compliance in supplier performance reviews, and 100% progress in promoting a green supply chain. ・The usage rate of recycled materials - potassium gold cyanide was 42%. ・179 suppliers audited ・Conflict minerals were not used in the supply chain. ・The recycling rate of packaging trays reached 10%.
	Innovation, Research and Development	By integrating innovative technology sharing platforms, promoting industry-academia research collaboration, and fostering R&D talents, we are enhancing our long-term core competitiveness and growth momentum, improving the competitiveness of PCB products and our sales performance.	We have linked global patents and conducting efficient and precise analysis, establishing a clear patent strategic map, building patent barriers, and mitigating potential risks. Furthermore, we are cultivating "technology development, intellectual property first" and actively deploying effective intellectual property rights, strengthening the protection of core technologies.	・Submission of filing 340 patent applications to official Patent Office.	・Completed customer collaboration development projects on time without any customer complaints. ・Totally completed 365 patent applications, and got 247 patent certifications granted by official Patent Office.
Social	Occupational Health and Safety	Zhen Ding's operations leading to employee occupational injuries, occupational diseases, or workplace accidents have a detrimental effect on employees' physical health, resulting in impacts on operations and productivity.	We have established applicable occupational health and safety legal regulations within the company to prevent work-related injuries and occupational diseases, as well as set quantifiable goals for occupational health and safety. We have also implemented a document management system to strive towards the ultimate goal of zero accidents.	・Prevention of industrial safety incidents: 0 incidents of fire. ・Occupational health management: 0 incidents of occupational disease. ・Fire prevention system maintenance: Suitability reached 100%.	・0 incidents of fire. ・0 incidents of occupational disease. ・0 incidents of major occupational injury. ・Reached 100% for fire protection system maintenance.
	Talent Cultivation and Development	Zhen Ding actively promotes self-directed learning and on-the-job training in training and development, which can foster operational growth. There is a positive correlation between employee learning and development and the company's growth.	The company identifies and cultivates outstanding talents. Together with diverse learning resources, we have established self-directed learning mechanisms to achieve learning anytime, anywhere. We continuously enhance organizational learning capabilities and employee self-growth, establishing an organization of learning.	・Average employee learning hours exceeded 48 hours.	・Average employee learning hours was 60 hours.
	Human Rights Protection	Zhen Ding complies with human rights-related regulations to safeguard employee rights, allowing employees to implement human rights in their work and promote a harmonious workplace environment.	Part of Zhen Ding's corporate culture is "do not engage in things that render sleepless nights". We are committed to implementing and complying with social regulations, and establishing a friendly work environment that safeguards human rights.	・The completion rate of education and training related to employee human rights protection was 100%.	・The completion rate of education and training related to employee human rights protection was 100%.
Environmental	Waste and Recycling	Zhen Ding's waste management implementation strategy is to reduce waste, recycle waste, and remove hazardous waste from the source to the end, to achieve the goal of minimizing the harm caused by waste to the environment. Due to the nature of the industry, hazardous industrial waste is generated during the product manufacturing process, and if the management is not well, it can have a significant impact on the environment.	Waste management is based on reducing waste, recycling, and generating harmless waste to achieve the goal of minimizing the harm caused by waste. With the concept of "green innovation, green chain of supply, green production", Zhen Ding optimizes the design, procurement, and production process to optimize the use of raw materials.	・The waste recycling rate was over 90%.	・The waste recycling rate reached 91%.
	Water Stewardship	By engaging in technology innovation, we continue to increase wastewater recycling rate, and improve the efficiency of water resources to improve operational resilience. Due to the PCB industry characteristics, the manufacturing process requires a significant amount of water consumption. If water stewardship is not well, it can impose increased pressure on water usage in the local area.	We actively enhance the reuse rate of wastewater, promote the use of recycled water, and reduce the pressure on water usage.	・The wastewater reuse rate reached 50%. ・The quality of wastewater reached the preset target.	・Water intensity was 0.0794 million liters/million revenue, wastewater reuse rate was 50.5%, and overall water reuse rate in the plant is 41.6%. ・The wastewater quality of all plants was superior to regulatory standards and meets the preset target values.
	Climate Action	We are actively engaging in initiatives such as the 1.5°C warming target and net-zero transition, which will contribute to Zhen Ding's commercial development opportunities and enhance Zhen Ding's climate risk management mechanisms and resilience adaptation capabilities.	Responding to climate change is the responsibility of sustainable management, our goal is to establish the "Advanced Environment-Friendly PCB-Conforming Demonstration Production Site" to become the promoter and demonstrator of environmental sustainability.	・Establish sustainable development and carbon emission targets. ・Optimize electrical power systems and improve energy efficiency.	・The 2025 carbon emission target and green energy target were stipulated. ・A solar energy system with a total area of 15,000m² has been constructed, generating an annual electricity output of 3,952 MWh. ・Obtained more than 36 million kWh of green electricity.

2023 target	2025 Goals	Target in 2030	Action plan	Grievance Mechanism
• Regularly report the tax governance implementation status to the Board of Directors.	• Regularly report the tax governance implementation status to the Board of Directors.	• Regularly report the tax governance implementation status to the Board of Directors.	• Establish a tax planning organization and maintain long-term cooperation with external tax advisory firms to strengthen expertise. • Establish asset management systems to ensure the safety and utilization efficiency of assets.	Employee suggestion box, email (zdt-report@zdtco.com), online reporting system (www.zdtco.com/tw/contact/report), complaint hotline +886(0)3383-5678
• Establish the Secure Software Development Life Cycle (SSDLC) to maintain system development and design security, enhancing systematic security.	• Establishing a Security Operations Center (SOC).	• Smartification of the Security Operation Center to automatically monitor security incidents and handling: Actively defend against hacker attacks to reduce information security risks, enhancing overall efficiency and response time and minimizing resource losses.	• Compliance standards: We are continuously implementing the updated ISO 27001 system standards. At the same time, through the Information Security Committee, the company initiates self-inspection of machines and conducts comprehensive inspections of machine security settings in all plant areas, ensuring compliance with the four dimensions of SEMI E187 requirements: Operating system support, network security, endpoint protection, and security monitoring. • Technology optimization: Establish an automated monitoring and real-time alert handling system; comprehensively monitor end devices and access controls to ensure real-time cybersecurity monitoring and defense; collect threat intelligence for analysis and proactively defend against hacker attacks; and integrate and establish a smart Security Operations Center (SOC).	
• Risk management-related personnel completed risk management education and training, maintaining 3,000 class hours.	• Risk management-related personnel completed risk management education and training, maintaining 3,500 class hours.	• Risk management-related personnel completed risk management education and training, maintaining 4,000 class hours (or all personnel completes the education and training).	• Conduct risk identification and establish risk management control execution plans and mitigation measures for the identified 14 risk factors.	
• No significant violations of laws (penalties exceeding NT$1 million).	• Implement the ISO 37301 system to achieve regulatory compliance and control risks.	• Implement the ISO 37301 system according to the company's global deployment to ensure comprehensive management of regulatory compliance in various operational regions.	• Compliance policy stipulation. • Compliance organization establishment. • Compliance procedure formulation. • Compliance education and training.	
• The average customer satisfaction survey score reached 90%.	• The average customer satisfaction survey score reached 92%.	• The average customer satisfaction survey score reached 95%.	• Conduct the customer satisfaction survey at least once a year.	Complaints were made through customer or supplier emails/the Company's website, onsite visits, audits, or seminars.
• The usage rate of recycled materials - potassium gold cyanide is 45%. • 185 suppliers audited. • Conflict minerals are not used in the supply chain.	• The achievement rate of the various annual targets of supplier management is 100%. • The usage rate of recycled materials - potassium gold cyanide is 60%. • Over 185 supplier audit are expected to be completed. • Conflict minerals are not used in the supply chain. • The recycling rate of packaging trays reached 15%.	• The usage rate of recycled materials - potassium gold cyanide is 80%. • Over 200 supplier audit are expected to be completed. • Conflict minerals are not used in the supply chain.	• Manage supply quality, delivery dates, technical support, and pricing through the "Supplier Management Operating System". • Select green supply chain partners and organize green supply chain seminars to enhance environmental protection performance throughout the industry chain. • The selection/screening of suppliers follows the six principles outlined by the company's supplier selection criteria. • Conduct on-site audits for high-risk suppliers in accordance with the "Supplier Audit Operating Procedure" to ensure all suppliers meet the standards. • Develop a supplier training plan annually and provide education and training courses.	Zhen Ding's anonymous or real-name complaint channels: Company website - "Contact Us - Business Ethics" section, or send reports/complaints to zdt-report@zdtco.com.
• Deploy patents and trade secrets. • Promote green and environmentally friendly innovative technologies to customers. • Promote industry-academia collaboration projects. • Submission of filing 350 patent applications to official Patent Office.	• Promoting customer projects with innovative green concepts and technologies. • Continuously establish a presence in key technology patents related to high-frequency/high-speed, antenna communication, power management, automotive systems, high-end chip packaging substrates, and smart manufacturing. • Submission of filing 360 patent applications to official Patent Office.	• Continuously focus on patent research related to advanced technologies and collaborations with academia and research institutions to align the development direction of cutting-edge technologies, reducing potential risks in future applications. • Submission of filing 380 patent applications to official Patent Office. • Develop innovative products for 6G communications.	• Establish the One ZDT architecture to develop innovative technologies. • Introduce an innovative technology sharing platform that provides resource sharing and facilitates three-way collaboration among the company, customers, and suppliers. • Implement process innovation improvement projects to enhance and improve efficiency in processes, technology, materials, and equipment.	Complaints were made through customer or supplier emails/the Company's website, onsite visits, audits, or seminars.
• The fatality rate of occupational injuries is 0%. • The fatality rate of occupational diseases is 0%.	• The fatality rate of occupational injuries is 0%. • The fatality rate of occupational diseases is 0%.	• The fatality rate of occupational injuries is 0%. • The fatality rate of occupational diseases is 0%.	• Continue to provide physical examinations to employees in hazardous positions before they start/during their time/after they resigned from work. • Continue to provide occupational health and safety education and training to employees.	Employee service center, employee suggestion boxes, complaint feedback email, care hotline, and employee relations/occupational safety officers.
• Average employee learning hours exceeded 60 hours.	• Average employee learning hours exceeded 62 hours.	• Average employee learning hours exceeded 65 hours.	• Develop an employee learning plan that encourages employees to choose learning resources and methods based on their individual needs. • Continuously strengthen the promotion and utilization of Ding Sheng E-Learning APP, align various learning and development projects with organizational needs, enhance employee learning efficiency, and cultivate a habit of self-directed learning.	
• The completion rate of education and training related to employee human rights protection was maintained at 100%.	• The completion rate of education and training related to employee human rights protection was maintained at 100%.	• The completion rate of education and training related to employee human rights protection was maintained at 100%.	• Provide human rights-related training, including introducing the Responsible Business Alliance (RBA) Code of Conduct and Act of Gender Equality in Employment, and professional code of ethics. • Regularly conduct human rights due diligence.	24-hour duty hotline, employee suggestion boxes, complaint feedback email, employee service center, and care hotline.
• The waste recycling rate continues to be over 90%.	• The waste recycling rate continues to be over 90%.	• The waste recycling rate continues to be over 90%.	• Established a panel of environmental experts to develop innovative resource recycling technologies that add value to recycled wastes, thereby minimizing the environmental impact of waste. • Implement the "Total Waste Management" project, which involves waste classification, disposal, recording, and tracking from the point of waste generation. • Conduct regular audits of general business waste and hazardous business waste disposal vendors on an annual basis.	The Company has established a dedicated email (zdt-contact@zdt-co.com) and a physical suggestion box for employees and the general public to provide feedback on environmental protection and environmental issues.
• Maintained the wastewater reuse rate at 50%. • Maintained the water reuse rate for the all plants above 41%. • Maintained the quality of the discharged water better than the preset target.	• Maintained he wastewater reuse rate at 50%. • Maintained the water reuse rate for the all plants above 41%. • Maintained the quality of the discharged water better than the preset target.	• Maintained the wastewater reuse rate at 50%. • Maintained the water reuse rate for the all plants above 41%. • Maintained the quality of the discharged water better than the preset target.	• Promote multiple water reuse projects and water-saving projects in the manufacturing processes. • Participate in the CDP Water Security Questionnaire and continuously strengthen water resource management. • Each wastewater treatment plant at the manufacturing campus is equipped with a professional water quality laboratory and the water quality in the wastewater treatment system is inspected on a daily basis. • Each of our main manufacturing site's wastewater effluent outlet is equipped with an online water quality/water volume monitoring device.	
• Obtain 250 million kWh of green electricity before 2024.	• Reduce Scope 1 and Scope 2 GHG emissions intensity by more than 40% (2013 as the base year).	• Continue to ensure that the company moves toward the net-zero by 2050 target.	• Implement GHG inventories annually to confirm the status of carbon emissions of the Company's subsidiaries. • Continuously increase the installation of solar photovoltaic power generation facilities and seek more collaborations with renewable energy companies. • Use internal carbon pricing as a decision-making consideration and basis for benefit assessments of energy-saving projects.	

GOVERNANCE

Ethical Management, Corporate Responsibility

1-1 Company Operations

Zhen Ding Tech. Group (hereinafter referred to as Zhen Ding or the Group) subsidiaries include Zhen Ding Technology Holding Limited (Taiwan Stock Exchange stock code: 4958), Avary Holding (Shenzhen) Co., Limited (Shenzhen Stock Exchange stock code: 002938), BoardTek Electronics Corp., and Leading Interconnect Semiconductor Technology (Shenzhen) Co., Ltd. Zhen Ding is mainly engaged in the research and development, manufacturing, and sales of flexible circuit boards (FPC) and modules, high-density interconnection (HDI), substrate-like PCB (SLP), Mini LED ultra-thin board, IC substrates, and multi-layer PCB. The products are widely used in computing, consumer electronics, network communication, automotive, high-performance computing, and medical sectors. We are a professional service company that provides one-stop purchase and comprehensive solutions.

With offices in over 20 locations across Taiwan, China, North America, Japan, Korea, Vietnam, and India, Zhen Ding provides real-time business and technical services to our global customers. As of the end of 2022, Zhen Ding Tech. Group and its subsidiaries have more than 39,941 employees in total.

The largest 1 **PCB** manufacturer in the world.

Sales volume in 2022 was
55.7 billion units of products.

Consolidated revenue in 2022 was NT$ 1,713.56 billion, setting another new record.

Cash dividends distributed to shareholders totaled NT$ 47.4 billion in 2022.

Head Office
Taoyuan, Taiwan
Year established
2006

Number of Employees
39,941 people

Capital
94.7 billion*

Primary Products of Zhen Ding

The main function of printed circuit board (PCB) is to connect various electronic components to form connections between predetermined circuits and provide transmission functions. PCBs are key components in the assembly of electronic components. They provide electrical connections for electronic components and are responsible for the transmission of digital and analog signals, power supply, and sending and receiving radio frequency and microwave signals for electronic devices. They are necessary equipment for most electronic devices and products and they are therefore referred to as the "mother of electronic products". 5G, Internet of Things, Internet of Vehicles, Industrial Internet of Things, and Artificial Intelligence are leading current trends and development for electronic products, while the development of PCBs is advancing toward properties of light-weight, thin, short, small, high-frequency, high speed, low pollution, low loss, low power consumption, multi-functional, precision, aesthetics, refinement, and intelligence. Product applications include but not limited to consumer electronics such as smartphones, smart watches, communication electronics, tablet computers, new energy vehicles, base stations, cloud servers, wireless communications, and smart home and smart city hardware products.

To ensure an enterprise can maintain sustainable operations and a long-lasting foundation, the company's mission and core values should serve as the key cornerstones. At Zhen Ding, we have become an industry leader though the pursuit of innovation and making changes in response to the current situation. In 2006, the Company's management defined "developing technologies for the betterment of human beings and protecting the environment for a greener earth" as the mission of Zhen Ding.

The Corporate Culture of ZDT:

A culture in which we "do not engage in things that render sleepless nights, we work hard and diligently, we take responsibility, we work and share resources as a team, and we gain if we contribute".

Integrity, Responsibility, Innovation, Excellence, and Altruism have inherently been the core value of Zhen Ding. We believe that only through ethical management can we achieve breakthroughs constantly as we pursue for excellence. We encourage every member of Zhen Ding to voluntarily take their own responsibilities and pursue excellence. By making a model example out of our management and raising awareness, we strive to internalize our corporate culture and core value in the day-to-day routines of Zhen Ding.

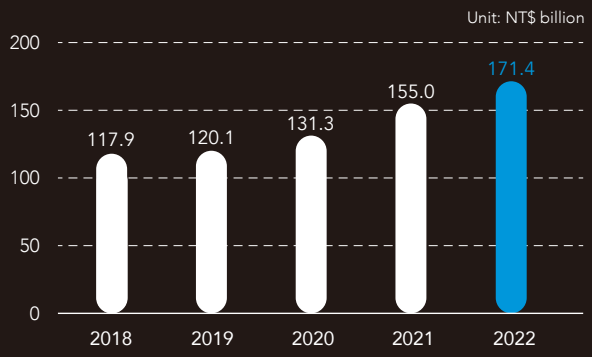
As the leader of the PCB industry, we are focused on enhancing "technologies, quality, customer service, and employee competency". At the same time, we are actively setting up sounder information systems and industrial IoT frameworks to become a smart factory. We hope to leverage our personal experiences and strengths to drive the development of industries relevant to our supply chain, in order to serve as a model of sustainable value.

1-2 Financial Performance

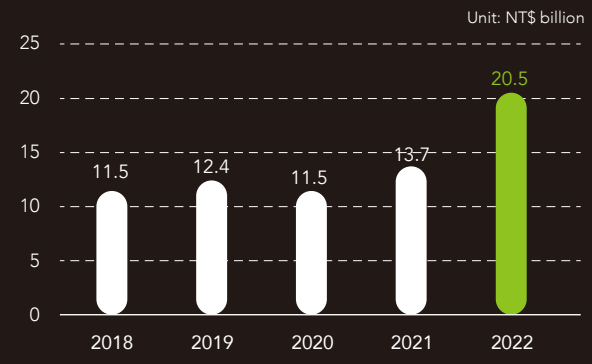
Zhen Ding adheres to the business strategy of "stable growth, restructuring, innovation and risk control", and continues to create long-term investment value for shareholders. In 2022, our annual revenue grew by 10.54% to NT$171.356 billion, and our net profit after tax was approximately NT$20.535 billion.

In the 2022 Shareholders' Meeting, the company approved the distribution of cash dividends for 2021 at NT$5 per share. In 2022, the company distributed NT$4.74 billion in cash dividend to holders of ordinary shares. Zhen Ding continues to maintain steady operation and profit. Between 2012 and 2022 the company has distributed NT$32.38 billion in cash dividend.

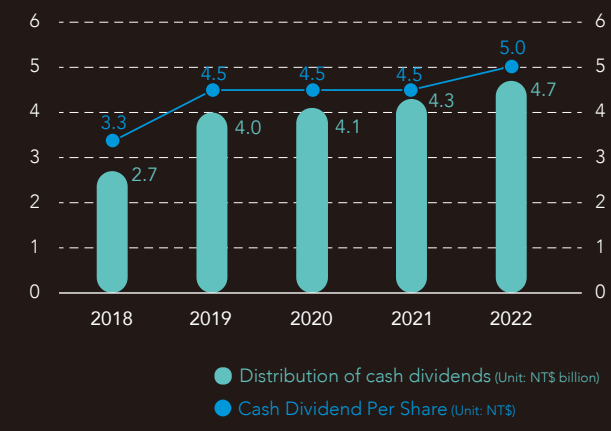
Global Revenue



Net profit after tax



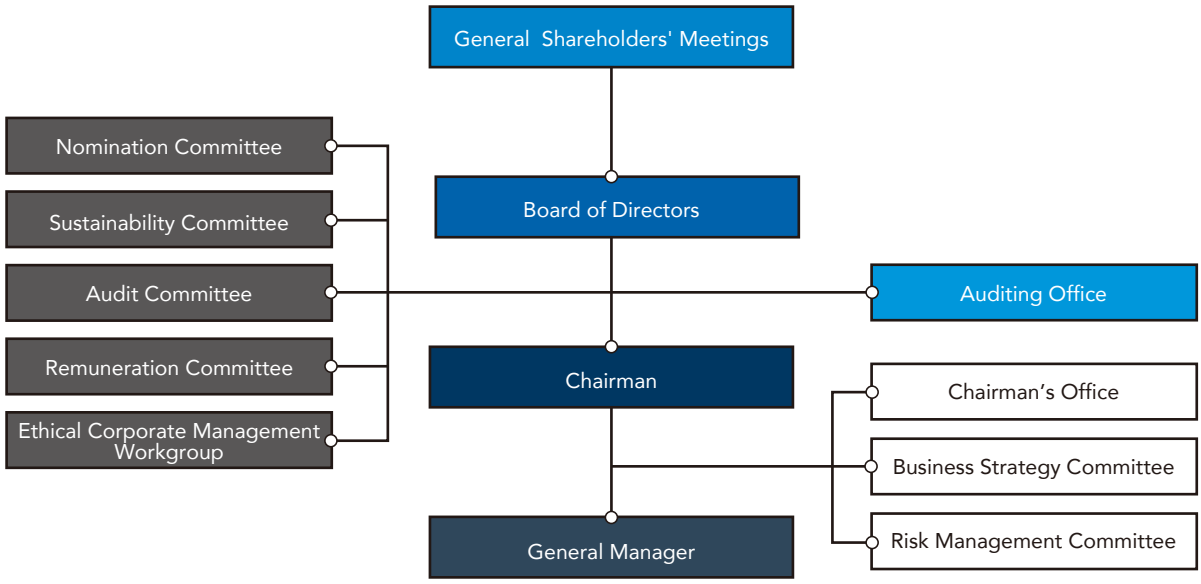
Cash dividends



1-3 Board of Directors Governance

The Board of Directors is the governing body in charge of promoting corporate governance. To improve the operational efficiency of the Board of Directors, the Company has set up an Audit Committee, Remuneration Committee, Nomination Committee, Sustainability Committee, and Ethical Corporate Management Workgroup to assist the Board to carry out its supervision responsibilities and to ensure that all motions are carefully discussed and submitted to the Board of Directors for report or resolution, so as to effectively exercise independent supervision and a check-and-balance management mechanism. If there is a conflict of interest with the director or the institution represented by the director, the director shall recuse him/herself, so that benefits are maximized for all stakeholders. In total, six board meetings were held in 2022 and were attended by all the directors (100% attendance rate). The ratio of all directors' remuneration to the company's net income after tax was 0.43% for 2022.

Corporate Governance Structure



Diverse Background and Expertise of the Board of Directors

Zhen Ding's Board of Directors is the highest decision-making body of the company and is responsible for overseeing the overall operation and management of the company. The Board of Directors consists of seven directors, of which three are independent directors and two are external directors. The Chairman does not serve as President. More than 70% of the directors are not managers. The term of office of two independent directors is under three years, while the independent directors cannot serve as the independent director for more than three public companies.

According to Zhen Ding's Corporate Governance Best Practice Principles, the composition of the Board of Directors is based on diversity, independence and professionalism, and the specific management objectives and achievements of the company's diversity policy are as follows:

Goal	Goal attained
Directors concurrently serving as the company's managers do not exceed one-third of the total number of the Board members.	Directors who are also company managers make up 29% in 2022.
Number of independent directors exceeding one-third.	Independent directors make up 43% in 2022.
Equipped with diversified industry experience, professional knowledge and skills.	For individual board members who have diversified professional experience and industry expertise, please refer to "Company website - Board Diversification and Industry Professional Background".

Enhancement of Roles and Powers of the Board of Directors

Functional Committees	Basic Composition	2022 Implementation Status	2022 Detailed Operations
Audit Committee	The Audit Committee of Zhen Ding is composed of three independent directors, including two financial experts. The Committee operates in accordance with the company's Audit Committee Charter and meets at least once a quarter.	In 2022, 4 meetings were held with 100% attendance rate. The Audit Committee has regular and adequate communication with internal auditors and accountants.	Please click on the link to visit the company website: 2022 Audit Committee Detailed Operations Communication Between Independent Directors and Accountants in 2022 Communication Between Independent Directors and Head of Internal Audit Division in 2022
Remuneration Committee	The Remuneration Committee of Zhen Ding is composed of two independent directors and one external experts. The Committee operates in accordance with the company's Remuneration Committee Charter and meets at least twice a year.	In 2022, 3 meetings were held with 100% attendance rate. The Remuneration Committee regularly reviews and evaluates the policies, systems, standards, and structures for performance evaluation and remuneration of directors, Audit Committee, and managers.	Please click on the link to visit the company website: 2022 Remuneration Committee Detailed Operations
Nomination Committee	The Nomination Committee of Zhen Ding was established by a resolution of the Board of Directors on December 28, 2021, composed of the Chairman of the Board of Directors as the convener and two independent directors. The Nomination Committee operates in accordance with the company's Nomination Committee Charter.	The Nomination Committee adopts a "Candidate Nomination System" and its main duties are to establish the criteria of diversity and independence in terms of professional knowledge, skills, and experience required of the members of the Board of Directors, to identify, review and nominate candidates for election as directors, and to submit its recommendations to the Board of Directors for resolution.	Please click on the link to visit the company website: 2022 Nomination Committee Detailed Operations
Sustainability Committee	The Sustainability Committee of Zhen Ding was established by a resolution of the Board of Directors on December 28, 2021, composed of the Chairman of the Board of Directors as the convener and two independent directors. The Sustainability Committee operates in accordance with the company's Sustainability Committee Charter.	The main responsibilities of the Committee include at least: I. Formulate corporate social responsibility, sustainable development direction and goals, and establish relevant management guidelines and specific promotion plans. II. Promote and implement the company's ethical corporate management and risk management. III. Track, review, and revise the implementation and effectiveness of corporate sustainable development.	Please click on the link to visit the company website: 2022 Sustainability Committee Detailed Operations

The company arranges continuing education courses for directors from time to time to continuously impart new knowledge to directors and improve their governing functions. In 2022, all board members completed a minimum of 6 credits of continuing education courses, and continuously enhanced their knowledge on ESG and sustainability by participating in events such as the 2022 Sustainable Net Zero Summit Forum. To continuously strengthen the functions of the Board of Directors and for reference and review purposes, the Company has established the "Board of Directors and Functional Committee Performance Evaluation Measures". In addition to conducting an annual performance evaluation of the Board of Directors and functional committees, an external professional independent organization will conduct an evaluation every three years. In January 2022, the Company had an external organization conduct the 2021 performance evaluation of the Board of Directors. In the first quarter of 2023, the self-assessment of the 2022 performance of the Board of Directors, individual directors, and each functional committee was completed. The overall performance evaluation results indicate effective operations. Board members are fully involved in the company's operational decisions, overall risk management, and succession planning for the top-level management team through various functional committees and management meetings.

For details on the results of the status of directors' continuing education and performance evaluation of the Board of Directors and functional committees, please refer to the "2022 Annual Report" and "2022 Performance Evaluation of the Board of Directors Report" on the Company's website.

Corporate Governance Officer

On May 7, 2021, Zhen Ding's Board of Directors approved the appointment of Tun Ling, a senior manager with extensive experience as treasurer of public companies, to serve as the head of corporate governance. Her main responsibilities include handling matters related to board and shareholders' meetings, preparing minutes of board and shareholders' meetings, assisting directors in their appointment and continuing education, providing information necessary for directors to perform their duties, and assisting directors in complying with laws and regulations.

Executive Compensation and Incentives

The company established a clear and effective reward and disciplinary system through the annual performance evaluation system. The company has established the "Continuing Service Incentive Bonus Distribution Method", which clearly specifies the applicable targets, percentage, length of time and return mechanism to ensure employment retention and employee encouragement. We also launched a key talent development program. Through regular senior management strategy meetings and large annual review meetings, it strengthens the performance link between senior management and the company, and provides reasonable compensation and bonuses as well as talent selection and promotion. The president of the company and the vice presidents of the Group with outstanding performance are also included for consideration as the potential successor of members of the Board of Directors.

The Board of Directors already has sound supervisory functions and management mechanisms. The company has integrated corporate sustainability with the ESG standard of "Environmental, Social, and Governance", so that the senior management team can take up the management responsibility of promoting corporate sustainability. The company has a Remuneration Committee that is responsible for assisting the Board to propose the company's overall remuneration policies, remunerations to directors (including independent directors) and managerial officers, and how remunerations are distributed. The compensation is effectively linked to the performance return mechanism of the Business Strategy Committee, and the company's revenue and profitability as indicators of change in compensation. Furthermore, ESG performance is also one of the assessment criteria. When the ESG goal is met, bonuses will be increased by a specified percentage. Zhen Ding did not hire another salary consultant in 2022.

1-4 Tax Governance

Tax policy

In response to the international situation, Zhen Ding fully complies with tax regulations to achieve sustainable corporate development, risk control, enhance shareholder value, and fulfill the Group's social responsibility.

Zhen Ding's Commitments

I. Comply with local tax laws and regulations in all operating regions and file tax returns in a timely manner.
II. Disclose tax information in our financial statements in accordance with regulations to ensure information transparency.
III. The Group's related transaction arrangements are based on the principles of transfer pricing reports and regular transactions, and are in line with the Base Erosion and Profit Shifting (BEPS) principles published by the Organization for Economic Cooperation and Development (OECD).
IV. Assess tax risks and consider the impact of tax leases in the face of important decisions and changes in the tax laws of the environment in which we operate.
V. We do not use tax havens or engage in tax planning for the purpose of tax evasion.
VI. We do not transfer profits generated to low-tax jurisdictions without commercial purposes.
VII. Establish a relationship of mutual trust and respect with tax authorities, communicate and explain tax issues in a timely manner, and maintain a harmonious interaction.
VIII. Support the government's tax policies that encourage innovation and promote economic growth.

Tax Governance

Zhen Ding has set up a tax planning unit, with the CFO as the highest level administrator. The day-to-day tax administration and management is delegated to the Comptroller, who is assisted by qualified and experienced tax professionals in fulfilling the tax obligations of Zhen Ding. In addition, we have a long-standing relationship with external tax consulting organizations to enhance our expertise through their professional services.

Tax Risk Management

Zhen Ding operates and expands its business worldwide while complying with the tax laws of each jurisdiction in which it operates. Any adverse changes in tax laws and regulations can increase a company's effective tax rate and adversely affect its results of operations. To effectively manage tax risks, Zhen Ding has incorporated tax risk management into its Enterprise Risk Management (ERM) program, which is described in more detail in the "1-6 Risk Management" section of the Report.

Effective Tax Rate Analysis

Zhen Ding's main operations are located in China. The statutory income tax rate in China is 25%, while the Group's effective tax rate and cash tax rate for 2022 was 12.50% and 12.41% respectively, which are not only lower than the statutory income tax rate, but also lower than the average effective tax rate of 23.5% and the average cash tax rate of 24.4% in the ICT industry. This is mainly due to the fact that most of the subsidiaries in China, where the Group's main operations are located, enjoy preferential tax rate of 15% for High and New Technology Enterprise (HNTE) and additional deduction for research and development expenses.

Total corporate income tax paid worldwide in 2022

NT$ 2.912 billion

1-5 Ethical Management

Business Ethics Policy and Standard

The company has formulated ethical corporate management policies that have been approved by the Board of Directors, which clearly stipulate that the company shall not accept any improper benefits or carry out any conducts that would be construed as a breach of trust or unlawful. The company also reviews, adjusts and revises the policies from time to time with reference to changes in external regulations and the implementation of internal supervision, in order to implement ethical management policies.

Rules Related to Ethical Management Approved by the Board of Directors

- Corporate Governance Best Practice Principles
- Sustainable Development Best Practice Principles
- Ethical Corporate Management Best Practice Principles
- Ethical Corporate Management Operating Procedures and Code of Conduct
- Code of Ethical Conduct
- Insider trading prevention management procedures
- Policy on Preventing Fraud and Corruption
- Procedures for Handling Material Insider Information

Dedicated Unit for Promotio

The Company's Human Resources Division, Legal Affairs Division, Investment Management Division jointly formed the "Ethical Corporate Management Work Group" under the Board of Directors. The Chairman's Office is responsible for the establishment, supervision, and execution of ethical corporate management policies and prevention solutions, as well as annual reports to the Board of Directors. The 2022 implementation results have been reported to the Board of Directors on March 13, 2023. The audit personnel also supervise the implementation of the policy in their daily audits and report to the Board of Directors if they find any irregularities or reports raised, as well as the follow-up review of improvement measures.

Implementation and Execution

Important rules, regulations, and procedures related to ethical management have been announced on the company's website and internal network for external parties or internal employees to view at any time. In the content of the standard contract signed by the company with the business transaction partners, they are also requested to comply with the terms of the ethical management policies. The Board of Directors and senior management have signed written statements to guarantee the active implementation of ethical management policies, and have set the following goals to be gradually implemented in the company's internal management and business activities:

- Anti-corruption training is provided. All of our employees have completed confidentiality and ethical education and training, and all of them have passed the examinations.
- All of our employees have completed ethical management education and training, and all of them have passed the examinations.
- Incorporate the policy of ethical management education and training into the employee's 2023 performance evaluation.
- Advocated the sunshine policy to over 200 suppliers and signed commitment statements with key suppliers.
- Conduct internal and external educational training with a target of 40,000 training hours and a target participation of 69,000 individuals.
- The Company had no significant violations of laws or ethical management.

Training, Education, and Promotion

To strengthen the promotion of ethical values, regular education and training sessions are conducted for employees. In 2022, various internal and external training programs were held on topics such as integrity management, including training for new employees, quality management, professional skills, management capabilities, integrity and compliance regula-

tions, ethical behavior, internal sensitive information, food safety and hygiene management, accounting systems, internal controls, significant information, and insider trading. The total duration of these training sessions amounted to 38,465 hours, with over 68,621 participants. The company conducts promotion through lightbox displays in the internal living areas. Two themes are selected each month and displayed four times per day, with each display lasting for 36 minutes. The number of viewers is calculated based on the number of people in the living area, and the annual number of views exceeds one million.

To ensure that all employees can internalize the concept of ethical management, the company has established the Code of Conduct, and set out the relevant ethical code of conduct in the "New Employee Guide" and the "Employee Handbook" to provide all employees with a guideline for their daily work. The employment contract signed by the employees also specifies the terms the employee must abide by after negotiations between labor and management, including: intellectual property right ownership, non-infringement guarantee, confidentiality regulations, external communication, information security, integrity and self-disciplinary clause, non-competition restriction, and avoidance of conflicts of interests, in order to ensure that all employees understand the legality of ethical practices and implement it properly.

Counterparty Evaluation

The Company evaluates the legal compliance and unethical conduct records of its agents, suppliers, customers, or other transaction counterparties before conducting business transactions to prevent transactions with companies that have records of unethical conduct. When entering into contracts with others, the company includes in such contracts terms requiring compliance with ethical management policies. In the event that the trading counterparties are involved in unethical conduct, the company may at any time terminate or rescind the contracts, ensuring the compliance of others with the company's ethical management policies. In 2022, promotion was enhanced in online and physical meetings, and 332 supplier exchange meetings were held to cover and emphasize ethical management principles. Zhen Ding Tech. Group advocates the Sunshine Policy of "fairness and impartiality, integrity and self-discipline, honesty and cooperation in building an environment that embraces honest and ethical purchasing", and emphasizes the prohibited behaviors the Company's website.

1. Prohibition of bribing Zhen Ding personnel
2. Prohibition of affiliated transactions in cooperation with Zhen Ding
3. Prohibition of using blacklisted vendors
4. Prohibition of transferring joint development projects with Zhen Ding to other customers without written consent
5. Prohibition of PCN/ECN management violations
6. Bypassing procurement is strictly prohibited for business matters
7. Prohibition of business fraud and violations of business codes of conduct
8. Prohibition of unfair competition and access to suppliers in violation
9. Prohibition of instigating or enticing Zhen Ding employees to resign

Conflicts of Interest Prevention

The company's "Code of Ethical Conduct" stipulates that the company's personnel should handle business in an objective and efficient manner, and avoid using their positions in the company to obtain improper gains for themselves, others, or other companies. The conflict of interest policy is to prevent conflicts of interest. In addition, the "Ethical Corporate Management Best Practice Principles" and "Ethical Corporate Management Operating Procedures and Code of Conduct" specify in detail how stakeholders should avoid conflicts of interest with respect to various proposals of the Board of Directors. When directors or managers engage in activities within the Company's business scope for themselves or others, they must obtain prior approval from the Shareholders' Meeting or the Board of Directors in accordance with legal requirements. In case of potential conflicts of interest, directors should disclose them to the board of directors in advance and abstain from participating in related discussions. Company managers can report through internal channels.

For disclosures of related party information, please refer to the Company's 2022 Annual Report: III. Section 2.1 Directors' Information; Section 9 Top 10 Shareholders according to shareholdings, including their relationships as related parties; Section 4.1 (4) List of Major Shareholders; Section 5.2 (4) (1) Suppliers with purchase amounts exceeding 10%; Section 5.2 (4) (2) Customers with sales amounts exceeding ten percent; Section 8. Corporate Sustainable Development. Please refer to the 2022 Consolidated Financial Statements: VIII. Related-party transactions and notes.

Risk Management and Audits

The Company established the risk management operating procedures and internal control system. The project personnel are responsible for monitoring and internally, the audit personnel develop an audit plan based on the assessment of risks related to unethical behavior. The audit plan includes details such as audit targets, scope, items, and frequency, which serve as a basis for checking compliance with the prevention measures. The audit results are reported to senior management and the dedicated unit responsible for integrity management. An audit report is prepared and submitted to the Board of Directors. In addition, in order to ensure the continuous and effective design and implementation of the system, the company conducts annual inspections and revisions to establish good corporate governance and risk control mechanisms as the basis for evaluating the effectiveness of the overall internal control system and issuing internal control system declarations.

The Company has also established a mechanism for assessing the risk of unethical conduct, collect information through interviews, email tracking by the information unit, and other methods, identify higher risks through regular analyses and evaluations, and assist in the audit mechanism of the internal audit unit, in order to stipulate measures against unethical behavior, such as bribery, providing illegal political contributions or gains, infringing intellectual property rights, and unfair competition.

Reporting Channels and Rewards and Penalties System

The Company has established a disciplinary and appeal system for violations of ethical management regulations, and has set up employee suggestion boxes, email (zdt-report@zdtco.com), online reporting system (www.zdtco.com/tw/contact/report), and an appeal hotline +886(0)3 383-5678 on the Company's factory premises and internal and external websites to encourage internal and external personnel to report unethical or improper behavior if they suspect or discover any such misconduct. The company has established a disciplinary system for violations of the ethical management regulations and the Code of Ethical Conduct. The company shall immediately disclose information regarding wrongful acts of personnel, managers or directors on the company's intranet site or the Market Observation Post System. The company also established a relevant complaint system to provide the violator with remedies.

Investigation Process and Protection Measures

The company has set up the standard operating procedures for reported matters and the need to keep records of accepted cases, investigation process, investigation results, and related documents. With respect to confirmed information, the company shall charge relevant units with the task of reviewing the internal control system and relevant procedures and proposing corrective measures to prevent recurrence. When material violations or concerns involving material damage to company come to their awareness upon investigation, the dedicated personnel or unit handling the whistle-blowing system shall immediately prepare a report and notify the independent directors in writing.

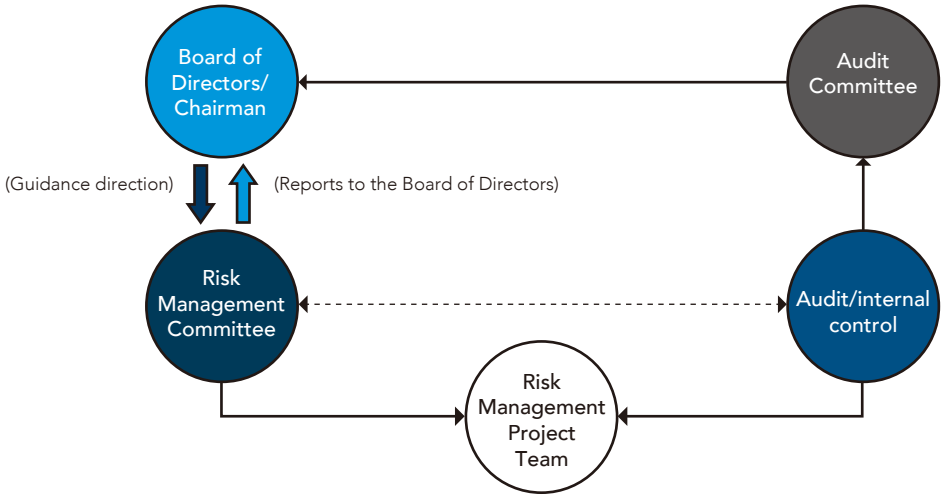
A confidential mechanism is in place to handle whistleblowing cases, allowing anonymous reports and issuing written statements to keep the identity of the whistleblower and the contents of the report confidential, in order to fully protect the whistleblower from being improperly disposed of as a result of raising a report. There were no major violations of ethical management in 2022.

1-6 Risk Management

Risk Management Policies

In order to reduce the possible operational risks, the "Risk Management Policy" was approved by the Zhen Ding Board of Directors on December 28, 2021 as a reference basis for the formulation of business strategies to ensure the long-term sustainable and stable development of the company's business and overall operations. In response to global political and economic development trends and changes, the Company upholds the principles of "long-term focus, continued developments, and becoming the best", and actively implements the policy of "prevention first, control at the source; total participation for total control" and the principle of "the supervisor is responsible". Zhen Ding defined risks according to its overall operating strategies and set up risk management mechanisms through internal and external environment changes for early identification, accurate measurement, effective supervision, and rigorous control. The Company aims to prevent possible losses within the tolerable risk range, in order to optimize resource allocation. The results of risk management actions are reported and explained to the Board of Directors at least once a year. The execution results in 2022 were reported to the Board of Directors on March 13, 2023, to ensure the long-term, sustainable and stable development of the Company's business and overall management.

Risk Management Organization



I. The Chief of Staff is the highest supervisor of risk management and is responsible for the operations of the risk management organization. The Chief of Staff is responsible for supervising the Group's risk identification procedures through R&D, manufacturing, sales, and participation of surrounding units. The front-line risk management personnel detects, identifies, evaluates, and formulates countermeasures for each risk, and regularly carry out reviews and supervision at risk management-related meetings. In case of different risks, the Chief of Staff may set up a response team according to different events and assign the responsible supervisor to coordinate the response.

   The top risk management officer (i.e. Chief of Staff) should be aware of the impact of different types of risks to the Group and ensure the effectiveness of risk management. His/her main responsibility is not only to pay attention to the risks borne by each business unit, but also to consider the effects of the aggregation of various risks from the overall perspective of the company and coordinate cross-departmental communication.

II. The Company has established the Risk Management Committee, which consists of the highest supervisors of each business unit. The Committee supervises improvements to risk controls and identifies and approves the prioritization of risk controls, and is responsible for reporting to the Board of Directors.

III. The Risk Management Project Team operates independently from other operational departments and is responsible for reviewing and assessing the risk management and implementation carried out by frontline personnel across various risks. They shall adopt actions corresponding to the risk category and establish crisis management procedures and conduct drills. The Risk Management Project Team is headed by a regional director as the frontline risk manager, whose main responsibilities include:

- Ensure that risk information is communicated in a timely and correct manner.
- Ensure the effective implementation of risk regulations within the relevant units.
- Depending on the external environment and internal strategy changes, determine the type of risk and recommend ways to deal with it.

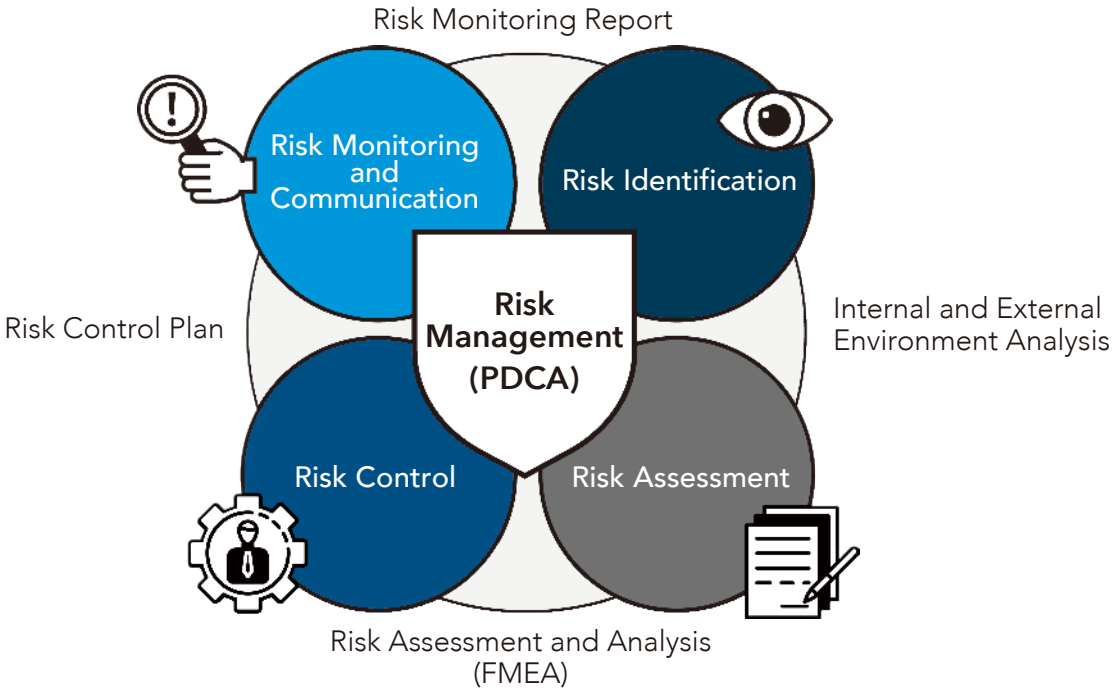
IV. The responsible personnel of the Risk Management Committee, in addition to participating in irregular internal and external risk management-related education and training, will fully implement risk management mindset education for employees and managers starting from 2023. This will be included as a performance evaluation criterion in the annual performance evaluation, in order to deepen risk awareness in daily life education and effectively enhance the promotion and implementation of risk management practices. The implementation status of education and training for personnel responsible for the main businesses in 2022 is as follows:

Unit: Number of people	0 to 25 hours of training	26 to 50 hours of training	51 to 100 hours of training	Over 100 hours of training
Non-Executive Director	5 people			
Responsible personnel	10 people	8 people	3 people	14 people

V. In the internal control system, audit unit is responsible for auditing the implementation and regularly reports on the company's changing risk environment, risk management priorities, risk assessment, and response measures in the audit committee meetings.

Risk Management Procedures

To improve the risk management function, the Group's risk management is carried out through (1) risk identification, (2) risk assessment, (3) risk control, and (4) risk monitoring and communication to clearly grasp the scope of each risk. Through PDCA (Plan, Do, Check, Act) management measures, we will continue to improve and manage the risk factors to reduce the chance and degree of risk loss, and take appropriate measures to efficiently implement risk management.



I. Risk Identification: The company performs risk identification based on the environmental, social, and corporate governance aspects of its operations, where 14 risk factors have been formulated based on the four major aspects defined in the risk management policy, and the management scope includes various risk items at different levels as follows:

Operational	1. Market Risks: Changes in market trends, changes in product demand, changes in raw material prices, customer and supply chain performance risks.
	2. Regional Risks: Review of the impact of changes in local political and economic conditions on the company's operations.
	3. Information Security Risks: Information security software and hardware setup, management, maintenance, and personnel education and promotion and other related matters of operation maintenance and management.
	4. Supply Chain Risks: The ability to check and respond to supply chain imbalances caused by domestic and foreign political and economic situations and environmental changes.
	5. Quality Process Risks: Prevention and review of operational issues in quality management of products, materials, manufacturing, packaging.
	6. Occupational Health and Safety Risks: Handling and response to workplace hazards including workplace injuries, fire, explosion, chemicals, and other environmental contamination.
	7. Human Resource Risks: Review of employment management, employee environment, and welfare issues.
	8. Intellectual Property Risks: Intellectual property risk and response measures, impacts of changes of domestic and foreign policies and laws on the company, and the response measures.
Strategic	9. Strategic Risks: Corporate development direction, positioning of products, prices and technologies, and the impact of supply chain operations on the company's operations.
	10. Business Ethics Risks: Review of compliance with laws and regulations and environmental/community responsibilities, protection of company information and property, prevention of bribery, money laundering, and unfair competition
Financial	11. Investment Risks: Assessment of the internal and external environment of each investment, review of efficiency and investment management.
	12. Financial and Tax Regulatory Risks: Review and response to changes in financial and tax policies in various regions and international financial situations that affect the company's interests.
Hazardous Events	13. Natural Disaster Risks: Prevention and response capabilities for typhoons, rainstorms, earthquakes, lightning, fires, explosions, epidemics, and infectious diseases (e.g.: COVID-19, SARS, etc.), bird flu, high temperature, heat wave.
	14. Environmental Risks: Impact of long-term natural environmental changes on the company and response: Carbon neutrality and climate change.

Please refer to the "Sustainability Focus - Sustainability Governance" section on the company website for the 2022 risk management control implementation plan and mitigation measures.

II. Risk Assessment: All subsidiaries of the Group comply with the "Strategic Risk Control Procedures". Each functional unit identifies the risk factors it may face, and may use Failure Mode and Effects Analysis (FMEA), or may develop its own identification and evaluation criteria to identify and evaluate the risk levels of different risk items and implement corresponding controls. Based on the risk evaluation, the three characteristic exponent of "severity, frequency, and difficulty of detection" are summarized to express the possibility of risk occurrence and its degree of influence, which are used as reference bases for the subsequent prioritization of risk control and the selection of response measures.

III. Risk Control: Risks related to the daily operations of each business unit shall be managed by the risk controls of each business unit. For important crisis incidents that are cross-departmental or cross-plant, cross-departmental or cross-plant risk assessment should be carried out. The Chief of Staff or a designated representative is responsible for coordinating and negotiating, in order to identify feasible strategies for preventing crisis incidents. The supervisor shall formulate crisis handling procedures and recovery plans according to the crisis incident.

IV. Risk Monitoring: For the 14 major risk management areas, regular rolling reviews and complete records of risk management execution results are kept to understand the effectiveness of risk management projects and related control operations. The Risk Management Committee reports and explains the implementation results to the Board of Directors every year. Furthermore, internal auditors review the risk management procedures and control implementation status on a regular and irregular basis and report to the Board of Directors depending on the level of risk at all levels as well.

Long-Term Emerging Risks

To comply with the principle of sustainable development and to fulfill our responsibility as a global citizen, we review the risk issues of the Group's operational impacts and challenges in accordance with the emerging risk profiles proposed by the World Economic Forum's "Global Risks Report", and continue to focus on two key risks in the medium and long term: Changes in the model and structure of the workforce and the climate crisis.

1. Changes in the Model and Structure of the Workforce

Affected by internal and external environmental factors, the group will face the following changes in employed workforce structure: 1. Possible increase in the number of employees on unpaid leave. 2. The Company will need to incur additional costs. 3. Increased frequency and probability of personnel changes. 4. Increasing demands for service and quality due to market competition. 5. Potential labor shortages may result in supply chain delays or disruptions, impacting the Company's operations. Corresponding strategic directions proposed:

- Improve employment conditions and support systems to enhance employee stability.
- Improve employee benefits, provide family member, child, and family care, and improve the work environment.
- Provide comprehensive education and training, increase employee development opportunities, strengthen the emotional connection between employees and the company, and maintain employee enthusiasm for work.
- Provide flexible work arrangements, including the planning and implementation of hybrid office policies.
- Enhance the production capacity and environment of smart manufacturing and intelligent production to reduce dependence on manpower.
- Establish retention policies and increase job rotation opportunities to improve employee retention rate.
- Regularly hold employee care forums/interviews to address specific employee needs.
- Provide flexible work models or VPN offices when appropriate.

Implementation in 2022

- Provided comprehensive education and training, increasing the average training hours per person from 48 hours in 2021 to 119 hours in 2022.
- Organized 5,405 cultural events with a total of 922,444 participants, enriching the lives of employees.
- Held 85 employee forums to understand employee needs and make timely improvements.
- Employee seniority allowance is introduced in the retention policy.
- Various campuses and plants provide multiple retention and incentive programs.
- Accelerate digital transformation programs and enhance the production capacity and environment of smart manufacturing and intelligent production to reduce dependence on manpower and manpower requirements.
- Develop diverse recruitment channels to meet manpower recruitment needs (such as new media/shared employees).
- Increase the flexibility of VPN offices for various departments.

2. Climate Crisis and Changes in the Natural Environment

Due to customer demand for carbon neutrality in products and the global trend of government net-zero emission policies, as well as the potential responses to extreme weather events such as flood prevention, water resources, lightning protection, strong winds, and rising temperatures, the availability of global energy resources poses a significant challenge to the operations of the Company. For businesses that require large amounts of water resources, issues related to water sources and flood prevention, among other natural disasters, will be significant challenges for the Company's future operations. To mitigate the impact on business operations, the following measures are being continuously monitored and addressed (for more details, please refer to Chapter 3 of the Report):

- Review the five key physical risks of climate change: Flood prevention, water resources, lightning protection, strong winds, and temperature are all analyzed and simulation tools are used to formulate responses, according to the natural environment of each campus.
- Expand and monitor based on the framework of carbon management.
- Started the phased development planning in conjunction with the data collection of the Group's digital transformation.
- Constantly track recommendations and developments of international organization.

Implementation in 2022

- Together with our strategic partners in the green supply chain, we promote the five major systems of IPE legal compliance, energy-saving technology exchange, eco-friendly material innovation, management system, and the selection of low-carbon raw materials.
- Continuously promote energy-saving and emission reduction measures, such as the promotion of permanent magnet motors, magnetic levitation chillers, full heat recovery chillers, and compressed air heat recovery. We have actively engaged with various green energy providers in different regions, setting up plans and cooperation models. By 2023, we aim to obtain nearly 100 million kWh of green energy and establish in-house solar power generation. Currently, we have installed 3MW of solar capacity, and we plan to increase it to 5.8MW by 2023.
- Increase the development and utilization of energy storage devices and establish a robust energy storage system. In 2022, we included 85 major suppliers in carbon reduction communication to plan and carry out cooperation projects for energy saving and carbon reduction. We continue to expand the efforts to other suppliers and promote the supply chain carbon reduction plan.

1-7 Regulatory Compliance

Compliance and Implementation

Zhen Ding has continuously improved its legal systems and compliance mechanisms ever since its establishment. It pays close attention to any changes made at the location of business operations, particularly with regards to governmental policy trends and regulatory amendments, in order to ensure that we abide by local laws and regulations. As of the publication date of the Report, Zhen Ding did not engage in any significant violations of laws (penalties exceeding NT$1 million). Zhen Ding was not involved in legal actions related to any violation of domestic or overseas anti-competitive behavior, anti-trust, and monopoly practices and their outcomes in 2022. As our business grows, we formulated the Code of Ethical Conduct, in which we made a promise to strictly adhere to standards relevant to fair trade, advertising and competition. We have set zero material violations as our long-term goal for 2025. In future, we will continue to deepen our anti-competitive management system to fulfill our compliance responsibilities.

Privacy and Personal Data Protection

Zhen Ding takes the protection of privacy and personal data seriously, and has formulated the "Privacy and Personal Data Protection Management Manual" to gradually establish a management system and improve management responsibilities at all levels. We strictly follow the privacy and personal data management policies and relevant laws and regulations to ensure the security of personal data of our employees, customers, suppliers, visitors and other personal data subjects, and to prevent disclosure and improper use of personal data. Zhen Ding continues to review the use of personal data. The Group has not used personal data for purposes other than the specified purposes in 2022. We systematically review and improve our privacy and personal data protection work and continue to implement privacy and personal data protection.

1-8 Information Security

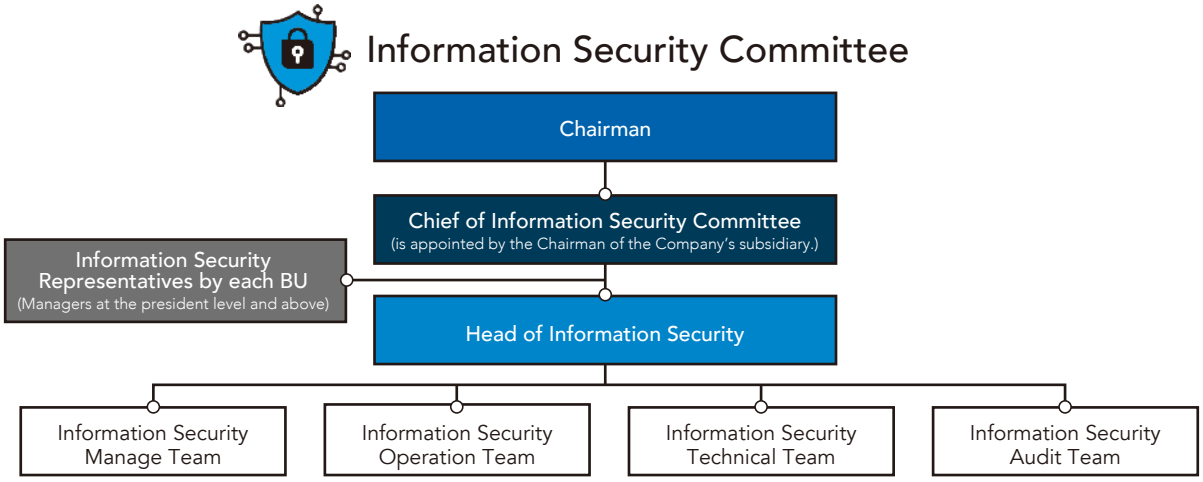
Zhen Ding adheres to customer requirements for information and communication technology (ICT) security management and has established the security management policy based on the international standard ISO/IEC 27001. The Company undergoes an annual review by an external verification organization and obtains a certificate of compliance to ensure the operation of its ICT security management. Zhen Ding is aimed at creating a secure and trusted information operating environment, protecting the Company's electronic data, systems, equipment, and network communication security. This approach ensures the integrity, authenticity, and accountability of the overall information assets.

Information Security Policy, Organization, and Goal

Zhen Ding has established "the Information Security Management Policy",based on confidentiality, integrity, and availability which are three principles of ICT security management. , In order to provide business continuous operation at information environment in entire group and establish appropriate management systems with standard procedures. The aim at achieving compliance with relevant regulatory and protection from intentional or accidental threats.

Zhen Ding has established an Information Technology Department, which is responsible for the long-term development goals of the group and the pursuit of excellence in digital transformation. It applies various information technologies and platforms, as well as external consulting manpower, to integrate various systems and achieve the goals of information transparency, operational collaboration, management efficiency, and precise decision-making. It provides high-quality services for the operational management and decision support of various units within the group, making the greatest contribution to the group in terms of quality improvement, efficiency enhancement, cost reduction, and inventory reduction.

In order to expand and implement ICT security management, in addition to the Information Technology Department, Zhen Ding officially established the Information Security Management Committee in 2021. The Committee is under the jurisdiction of the Chairman and holds weekly meetings to discuss information security matters. Quarterly meetings are also convened to communicate ICT security management policies, review strategies and directions, and adjust ICT security policies and management throughout the entire company. Through the Information Security Committee, each unit implements self-assessment and self-inspection of information and communication security. Weekly meetings are held with the officers and team members of each unit to communicate information security information and discuss the results of self-assessment and self-inspection of information security. The Chairman of the Information Security Committee is the highest supervisor of information security work in the Group. Each division has appointed representatives to serve as committee members to promote and implement ICT security policies. At the same time, the company's Board of Directors includes Chen-Fu Chien, an independent director with a professional background in information security, who is responsible for overseeing and guiding the Group's management strategies and planning objectives related to information security. With the goal of sustainable business operations, Zhen Ding establishes a secure and trustworthy information environment to ensure the security of computer data, systems, equipment, networks, and smooth operations.



Note: Please refer to the "Sustainability Focus - Sustainability Governance" section on the Company's website for the Information Security Management Policy and related external certifications of Zhen Ding.

Zhen Ding has set three key management objectives for information security to protect the security of company and customer trade secrets, manage data in a hierarchical manner, properly review and optimize the management measures for company products and customer information, set up a special security zone for customer secrets, and control access to networks, computers and personnel with authorization: 1. Information and Communication Equipment Security Management 2. Network and Antivirus Management 3. Employee Information Security Education and Training.

Information Security Implementation and Protection

ICT Equipment Security Management

The Company implements monitoring and control measures for information items carried by personnel in server rooms, production lines, and restricted areas. We also monitor and control networks, computers, operating systems, and applications in different units. The Company has established the "Procedure for Business Continuity Work Method" to classify and categorize systems, and to establish a business continuity management mechanism to ensure uninterrupted operations. Back up recovery drills are conducted once every 6 months to ensure the quick restoration of operations during security incidents or disasters. This will reduce risk and minimize the losses caused by incidents and disasters. In 2022, we conducted 9 backup drills, 1 major equipment switch and 2 backup data recovery tests were conducted in the Shenzhen, Huai'an and Qinhuangdao Campuses.

Network and Anti-Virus Management

To prevent network attacks and collect network trends, the company has set up firewalls, intrusion prevention systems, email security filtering systems, virus protection systems, and other security measures. We monitor the organization's network environment and system security status. In 2022, we blocked an average of over 58,000 attacks and 97,000 malicious emails per month, preventing malicious behavior from causing company losses. We regularly engage external information security experts to conduct penetration testing and social engineering exercises to strengthen our information security measures. It can help to reduce the impact of human or natural factors on the Company's operations and ensures sustainable business operations.

InfoSec Education and Training

187,532 hours of information security training courses were provided in 2022 to a total of 319,294 people. The Company places special emphasis on education and training for new employees to strengthen the concept of the importance of information security. The Company organizes information security education and training courses on the knowledge management platform. All new employees are required to complete the training within the specified timeframe. Additionally, two information security training courses are offered monthly. Regular social engineering drills are conducted for all employees, and information security knowledge is published in the company's monthly column to disseminate security regulations and concepts, continuously enhancing employees' awareness of security protection. Clearly stipulated a rewards and penalties system for information security projects in the Employee Handbook: "Anyone who installs, modifies, dismantles, damages or moves information processing equipment without permission, or downloads, stores, distributes, shares, installs, or uses software (including green software and free software) other than the standard configuration, or logs on to other people's computers without permission, will be punished by dismissal in severe cases".

Information Security Incident Notification Process

When an information security incident occurs, the Company's employees should report it to the Information Security Department in accordance with the "Process for Treatment of Information Security Event" of Zhen Ding, and the information security competent unit will determine, categorize, and classify the incident to take corresponding control measures and properly handle the information security incident within the most effective period.

From 2020 to 2022, Zhen Ding has not violated any information security-related laws and regulations, and has not experienced any ICT security incidents or complaints from customers for violation of their privacy or losing their data:

Information security incident management implementation in the past three years	2020	2021	2022
Total number of information security/cyber security incidents	0	0	0
Number of information security incidents affecting customers' personal information	0	0	0
Total number of customers affected by information security incidents	0	0	0
Total amount of fines related to information security/cyber security incidents	0	0	0

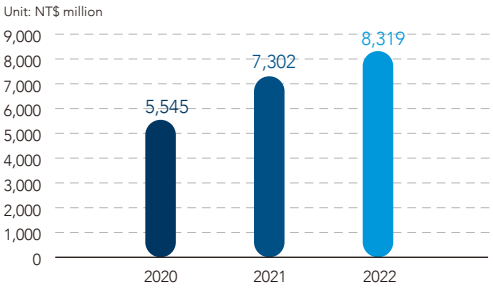
PARTNERS AND CUSTOMERS

Strategic Partners, Customer Satisfaction

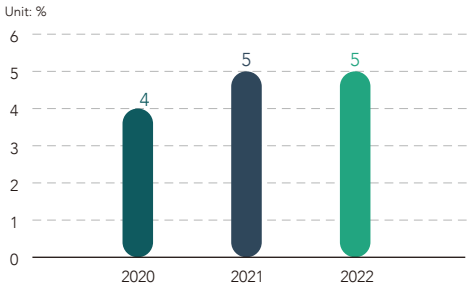
2-1 Innovation, Research and Development

Zhen Ding has been committed to long-term research and development, focusing on early-stage research and design verification of customer products. We highly value technological innovation and quality. By integrating innovative technology sharing platforms, promoting industry-academia research collaboration, and fostering R&D talents, we are establishing our future long-term core competitiveness and growth momentum, actively understanding future product trends, and conducting patent deployment, thereby improving the market competitiveness of PCB products and our sales performance. In 2022, the Zhen Ding invested approximately NT$8.3 billion in research and development, a significant increase of 14% compared to 2021, accounting for approximately 5% of its revenue in 2022. As of December 2022, there were 6,159 employees working in R&D, accounting for 15% of the total number of employees, an increase of 8% compared to 5,722 R&D employees at the end of 2021.

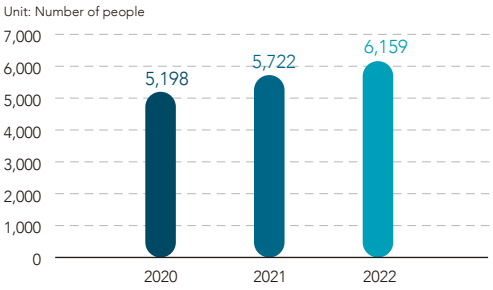
Research and Development Funding



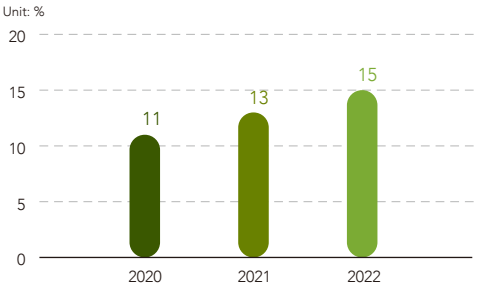
R&D Funding as a Percentage of Revenue



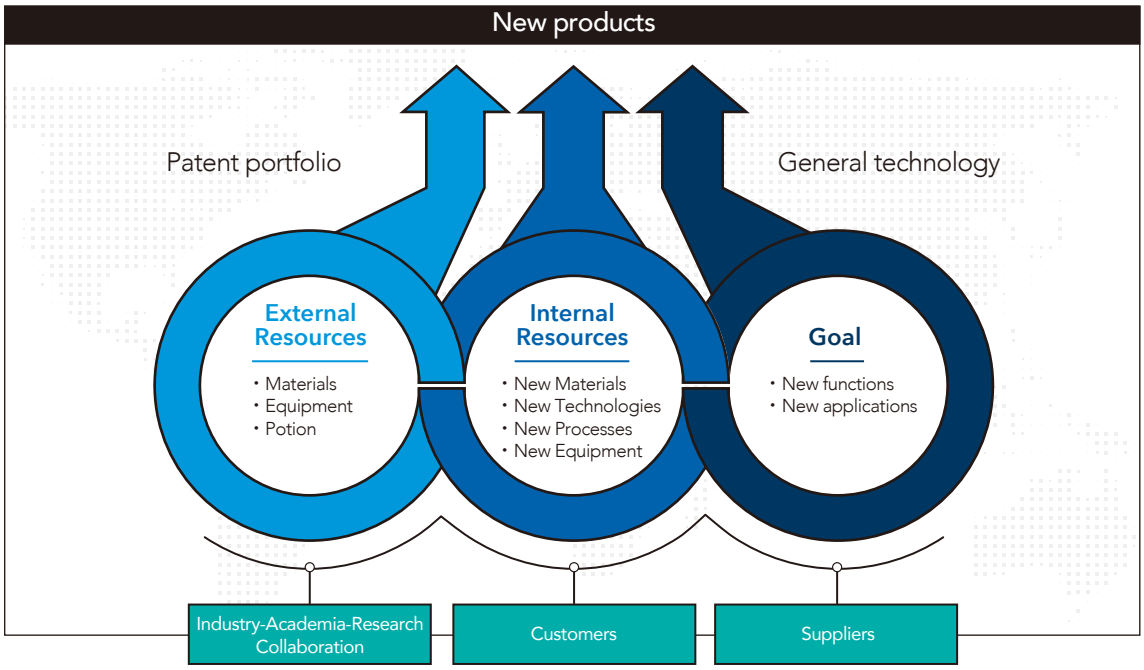
Research and Development Personnel



Ratio of R&D Personnel to the Total Number of Employees

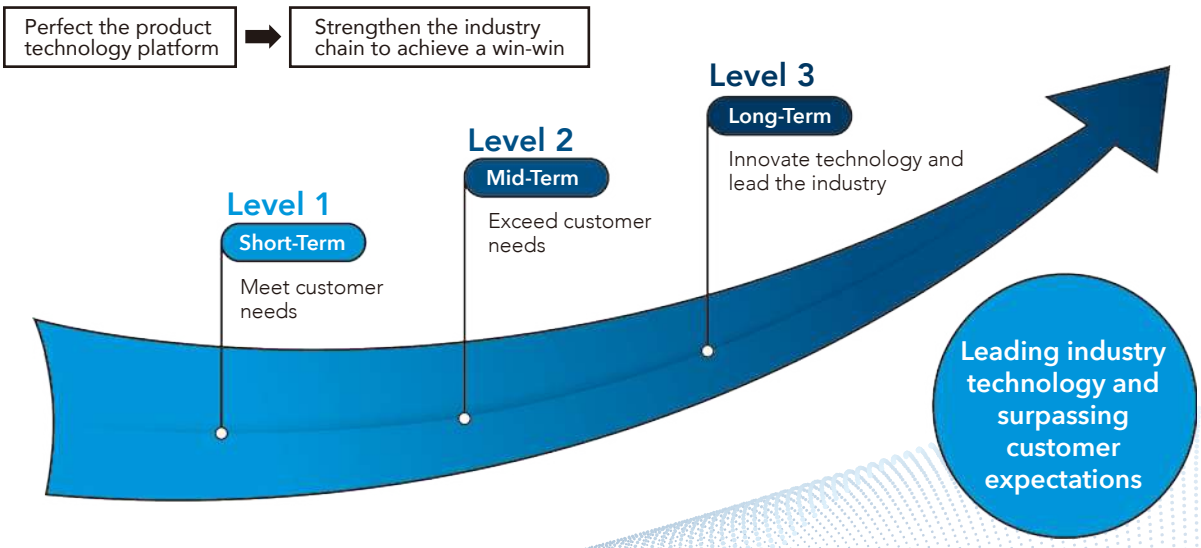


Zhen Ding focuses on R&D deployment and commits long-term resources to develop new products, processes, technologies, materials, and equipment. It actively collaborates with strategic partners to build a core R&D ecosystem, engaging external resources such as industry-academia-research collaborations, customers, and suppliers. Through this three-party collaboration, novel and universal technologies are developed. Additionally, Zhen Ding strategically protects intellectual property rights by patenting innovative, low-carbon, and decarbonization technologies and products. The newly developed applications and functionalities are introduced into customers' new products, thus exploring new market opportunities for customers.



Core R&D Ecosystem Chain

"Leading Industry Technologies and Exceeding Customer Expectations" has always been the vision of Zhen Ding's technology research and development. The company has set up a Business Strategy Committee at the management level to regularly plan the long-term strategy and direction of the company, and set up a R&D center for forward-looking technological development. Following the three key R&D strategic principles of "meeting customer needs," "exceeding customer expectations," and "leading the industry with innovative technology," we leverage the Company's short-term, medium-term, and long-term innovation capabilities to enhance product technology platforms and strengthen the industry chain for mutual success. We strive to provide customers with the best and diverse range of R&D projects, transforming advanced technology into commercially valuable products and creating more growth opportunities for the company.



Research and Development Phase	Goal	Strategy and Policy
2023	1.New research and development projects: 41 cases 2.Imitation projects: 238 cases 3.Industry-academia collaboration projects: 16 cases	**Advance Deployment & Timeliness:** Innovative thinking guides joint development with customers, enhancing the mainstream market One ZDT technology platform. **Co-Innovation:** Collaborative development within the industry chain to establish technological barriers and leverage win-win advantages. **Core Technology:** Industry-academia-research collaboration supports innovation-driven development, establishing core technologies and building profitability. **Investments in R&D:** Continuously invest in research and development-related funding.
2025	1.New research and development projects: 50 cases 2.Imitation projects: 261 cases 3.Fine circuit development L/S = 25/25 um AOI yield > 98%	
2030	1.New research and development projects: 60 cases 2.Fine circuit development L/S = 15/15 um AOI yield > 98%	

Note:1. New research and development projects include the development of cleaning technologies and the development of fine circuitry for L/S soft board products.
2. For more details on the "Specific Examples of Technological R&D Achievements" in 2022, please refer to the "Sustainability Focus - Innovation, Research and Developmen" section on the Company's website.

Technological R&D Achievements in 2022

The innovative technologies developed by Zhen Ding under the One ZDT architecture are as follows:

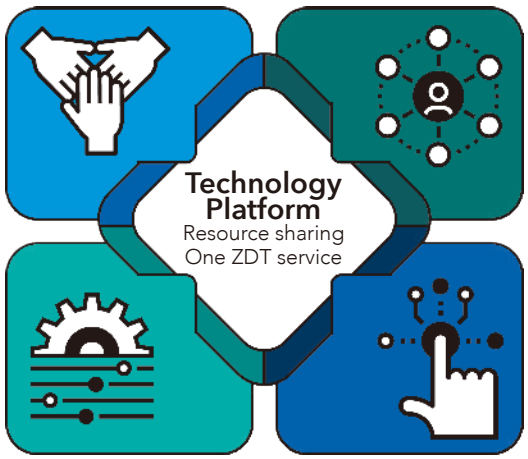
Item	Success stories
Technical development achievements	• Development of high-precision and high-density component packaging technology for system-level packaging. • Development of coreless communication module technology. • Development of PCB processes for ultra-thin miniLED backlight modules with thickness less than 0.2mm. • Research and development of cavity technology for radar technologies. • Industrialization of high-density interconnectivity board for automotive short-range radar controllers. • Development of high layer count and large-size SLP products. • Development of mass production of 4-nanometer embedded circuits for mobile phone chips.
Deployment of low-carbon and carbon reduction patents	Patent deployment for lightweight board materials, heat dissipation mechanisms, and palladium recycling technologies.

Innovative Technology Sharing Platforms

Integrate resources to create key independent technology advantages, and strive to be the industry leader

Three-Way Cooperation between Zhen Ding, Customers, Suppliers
- Customer service matching
- Integration of resources

Design, Simulation, and Solution Validation
- Product design
- Simulation and test validation



Industry-Academia-Research Collaboration
- Principle building
- Talent development
- Patent portfolio

Technology Development and Product Development
- Advanced technology development
- Product innovation advantages
- Key components and common technology establishment

The "Technology Platform" aims to provide customers with comprehensive services through the "One ZDT" solution. It offers end-to-end services ranging from collaboration with customers and suppliers, product and technology development, stack design, simulation and testing, to product reliability verification. In order to expand the depth and breadth of technology development, external resources are leveraged and integrated with internal resources to enhance the technological core of this platform. External resources, such as those from the industry, academia, and research, are utilized to build process principles and cultivate skilled talents, reducing the gap between theory and application and effectively introducing advanced technologies into industries. Collaboration with equipment and material suppliers is also conducted to jointly develop specific technologies and materials required for customer products. Internally, optimization of product development is achieved through design and simulation methods, providing product solutions. Through the use of virtual prototyping technology, the number of tests and verifications for new products can be significantly reduced. This allows for rapid optimization in product development, leading to more efficient new product development. In 2022, the R&D department conducted 259 cases of signal integrity simulation and optimization through the "High-Speed, High-Frequency Platform," representing a growth of approximately 21.6% compared to the previous year. The focus of customer needs in simulation and optimization projects was primarily on initial product designs such as customer antennas, transmission lines, connectors (USB/HDMI), cameras, and electric vehicle boards. Customers had requirements for product stack-up and material recommendations, and the development process involved optimizing product designs to minimize experimental design plans. Relevant technical support was provided through comparison with measurement data and other related techniques. In addition, the development of in-house process technologies and product reliability and verification processes were integrated to provide key proprietary technologies that meet the individual product characteristics required by customers. Through this platform, there were 21 industry-academia-research collaboration projects in 2022. We collaborated with 16 well-known universities in both Taiwan and China, including National Tsing Hua University, Yuan Ze University, Feng Chia University, Shenzhen University, and Southeast University. To maintain synchronicity with the technical capabilities of customers, R&D teams meet with key customers regularly to discuss technology blueprints and development progress, in order to continuously refine the functions of the shared platform and strengthen the development of core technology capabilities, driving the company and the overall supply chain to work together to quickly grasp industry trends and market opportunities.

Comprehensive Technology Solutions

Zhen Ding is one of the few large-scale professional manufacturers in the world that possesses the capabilities of PCB product design, development, manufacturing, and sales. We offer a wide range of high-quality PCB product lines that are widely used in communication electronics, consumer electronics, computer products, automotive industry, servers, and more. With our strong capabilities, we are able to provide comprehensive PCB products and services to different customers. We have built a comprehensive PCB One ZDT service platform, which enables us to engage in advance layout planning for next-generation products with our customers. The professional comprehensive services of One ZDT not only shortens the trial period from procurement to new product development by 6 to 12 months for customers, but also saves the development and investment cost of the whole supply chain by about 30%, and helps customers to develop end products with competitive advantages in the market.

Through the sharing of the "Technology Platforms" established by the Company, the R&D team and customers can maintain information exchanges and can simulate a full range of development processes, including advanced material development, RF simulation, structural design, manufacturing, processing equipment, and performance testing, according to the specific performance requirements of various products, helping customers to accurately evaluate the actual development results of various products and compare and analyze different specifications. By utilizing simulations, we can effectively shorten the R&D cycle and save on experimental costs. This allows us to quickly provide solutions that meet our customers' various needs and determine the development blueprint for next-generation products simultaneously. In 2022, we provided customized technical solutions to at least 20 customers.

The R&D team has also established a “Product and Technology Platform”. Through various project meetings, we share resources and learn the expertise about the process integration, process refinement, yield improvement, and production cycle time reduction of different PCB products. The five main axes of R&D innovation - new technologies, new products, new processes, new materials and new equipment, are explored through continuous mutual discussions and communica-

tion. At the same time, we have introduced advanced equipment from home and abroad, combined with our expertise in smart manufacturing, digital transformation, high-quality management, and global supply chain management to effectively improve the yield rate and economic scale efficiency at the mass production stage, which helps our customers launch high-end products and win market opportunities. Since the establishment of this platform, there were over a total of over 74,391 successful engineering innovation improvement projects developed as of the end of 2022, covering five major areas: 30,043 new processes, 4,254 new technologies, 13,363 new materials, and 26,731 new equipment, with a total improvement cost of NT$9.1 billion, an increase of 78% compared to 2021.

Innovation and Improvement Resource Input	2020	2021	2022
Engineering Innovation Improvement Projects (Unit: number of projects)	5,509	16,841	74,391
Total cost of innovation improvements (Unit: Million NTD)	1,712	5,138	9,053

Engineering Innovation Improvement Projects in 2022

Results Category	Engineering Innovation Improvement Projects	Total Number of Projects
New Processes	1,245 human factors improvement projects, 27,055 quality improvement projects, 416 process improvement projects, 228 production cycle shortening projects, 1,096 plant optimization projects	30,040
New Technologies	757 labor streamlining projects, 3,497 environmental improvement projects	4,254
New Materials	8,509 cost reduction projects and 4,854 safety improvement projects	13,363
New Equipment	6,916 efficiency improvement projects, 4,267 equipment upgrade projects, 15,548 additional equipment optimization projects	26,731

Cleaning Technology

1. Development and Planning of New Energy Technologies

Promote Green Manufacturing to Realize Low Carbon Emissions

To promote green manufacturing, Zhen Ding is committed to optimizing processes, equipment, and materials according to the carbon footprint assessment information. By doing so, we aim to enhance product value while achieving low carbon emissions. In terms of production processes, we are developing low-carbon process-related technologies. We are utilizing simulation techniques to replace traditional trial-and-error testing, which not only enables us to achieve low carbon emissions but also significantly enhances process efficiency. In terms of materials, we are collaborating with suppliers and partners in the industry chain to achieve circular economy benefits through practices such as redesigning, value addition through recycling, sharing economy, and industrial symbiosis. Additionally, we are actively establishing patent portfolios in relevant areas. Using the palladium recycling system as an example, in 2022, Zhen Ding recycled precious metals such as gold and palladium. Through exclusive technologies, we were able to extract 325kg of gold and 44kg of palladium, which were subsequently sold to raw material manufacturers. We have also filed several patent applications related to this technology. In terms of equipment, Zhen Ding selects energy-efficient and low-pollution equipment while promoting smart factories. Through real-time monitoring of the operation status of equipment in various plants, we aim to reduce waste of energy, raw materials, chemicals, and other resources, while enhancing overall manufacturing quality.

2. Cleaning Technology Performance

Manufacturing Products for Green and Energy-saving Applications to Enter a New Market

Compared to traditional direct backlighting, Mini LED backlighting offers advantages such as reduced optical distance (OD), smaller local dimming zones, higher color contrast, improved brightness uniformity, and energy efficien-

cy, all while maintaining a slim and lightweight design. Compared to OLED, Mini LED is more competitive in terms of cost and product lifespan. The Company is one of the few manufacturers in the industry which holds the technology for mini LED backlight ultra-thin circuit boards, and is currently deploying production capabilities in Huai'an Campus II. The first phase of the project has begun production in the end of 2020 and the second phase has been put into production in the second half of 2021. In 2022, Mini LED backlight panels became a new driver for the Company's revenue and profit growth. The Mini LED revenue as a percentage of total revenue was 4.2%

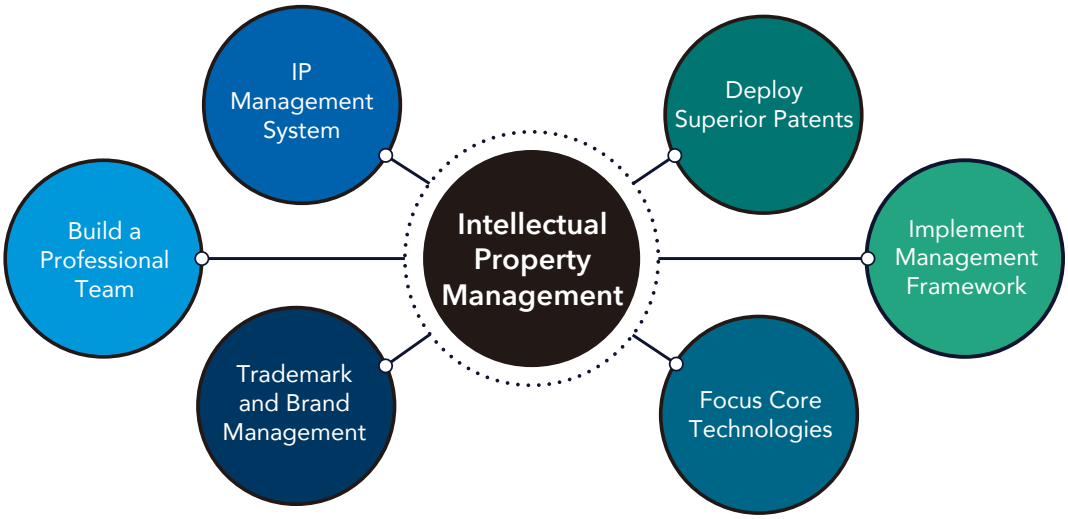
Electric vehicles have become the goal pursued by major car manufacturers in recent years. The main reason behind this trend is the inability to escape the strong environmental protection trend. In addition to meeting the requirements for reducing carbon emissions in the first stage, electric vehicles also have the potential for practical applications in the future Internet of Things era. With the rapid development of new energy and smart automobiles, the company has been increasing its investment and exploration in the field of automotive circuit boards. It aims to expand its product line and has successfully entered the market of new energy vehicles. The relevant products have obtained certifications and will be supplied to customers in a phased manner. In 2022, the Company achieved sales revenue of NT$6.8 billion from automotive, server, and other product-related boards. It is expected that these types of products will continue to experience rapid development in the future and become one of the important drivers of the Company's revenue growth.

Intellectual Property Management Plan

Enterprises are the subject of self-owned innovation and more importantly, the subject creating, managing, using, and protecting intellectual property rights. Improving how Zhen Ding manages its intellectual property rights enables the enterprise to reinforce its self-owned innovation capability. The intellectual property team of Zhen Ding's Legal Affairs Division is responsible for promoting self-owned intellectual property and legal services of science and technology, integrating resources for patent strategy planning to strengthen patent quality. It has formulated four major strategies for intellectual property management, including "Accumulation", "Focus", "Innovation", and "Enhancement":

1. Accumulation - Deploying Core Technology Intellectual Property: In the spirit of "patent comes first in technology development", Zhen Ding has been leading the Group's self-owned R&D and innovation, and we are actively deploying high-value intellectual property rights to strengthen the effective protection of core technologies.
2. Focus - Extracting Patent Analysis Value: We have built an industrial patent information platform to control the PCB patent technology positioning, align the Group's technology development direction, and deploy effective intellectual property rights in line with market development trends.
3. Innovation - Linking Innovative Services of Science and Technology: Link global patent databases to provide efficient and accurate industrial patent technology analysis, clarify patent strategy maps, and build patent portfolios to avoid potential technology risks.
4. Enhancement - Enhancing Quality and Efficient Operations: In order to strengthen the Group's industrial leadership, we have established a patent incentive system to encourage innovation and self-owned R&D, refine the quality of patent technologies, implement the patent technology achievements.

In accordance with Zhen Ding's operations policy and technology development plan, and in conjunction with the intellectual property strategy, we not only abide by laws and regulations, but also plan our patent deployment plan according to the intellectual property management policy requirements of each important production base, and strive to develop advanced technologies and build our own core technologies. Besides catching the future trends of the industry through long-term cooperation with world-class customers, and actively investing in R&D resources to deploy core technologies, the company's position on intellectual property rights protection policies is to actively deploy core technology intellectual property rights and strengthen its own R&D technical protection to ensure the competitive advantage of the company in this industry field. In addition, we have applied for company's logo as by trademarks overseas to meet the requirements of market and product expansion, and we will also apply for trademarks for important proprietary technologies to facilitate promotion and to build a brand image for our technology services.



Stable and capable industry development is the foundation for the company competitiveness to rely on its specific expertise to lead the industry in precision engineering, intelligent manufacturing, and customer trust. The company has established the system of "Project Development Control System", "Product Life Cycle Management System", "Engineering Change Control System", and "Product and Technology Platform" to conserve technical secrets in five major fields of new products, new technologies, new processes, new materials and new equipment. Especially the technical secrets those have competitive advantages of innovative research and development, leading technologies, excellent manufacturing, and customer trust.

The Company ensures the proper protection of its technical secrets through measures such as information security systems, agreements of intellectual property protection, education and awareness campaigns, document regulations, and systematic management. These measures are in place to safeguard the confidentiality of our technical secrets and comply with relevant trade secret protection laws, prohibiting unauthorized or improper acquisition, disclosure, or use of the Company's technical secrets by others.

To establish efficient intellectual property management, Zhen Ding has introduced an electronic operation system based on the existing intellectual property management system in accordance with the spirit of ISO standardization. In the meanwhile, we have created a digital intellectual property management platform, and collected information on the development of PCB-related technologies, and established a technical database.

Implementation status

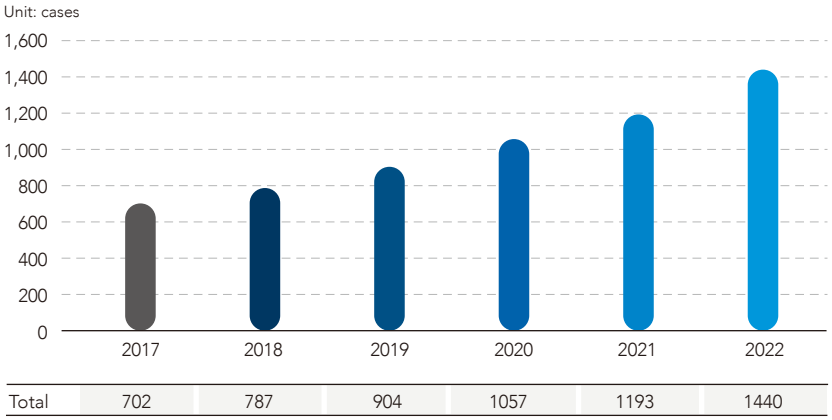
Zhen Ding implements technical investigations before the development of new products and new processes to avoid infringing on the third-party intellectual property rights. In the new technology development stage, it investigates market applications and advanced technology conditions, introduces risk assessments, and implements confidentiality management. The documents, equipment, and areas within confidential information of the company are controlled to avoid the risk of leakage. For the research and development results of self-owned core technologies, various intellectual property rights are actively deployed.

1. Management System Achievements

To comprehensively and effectively manage intellectual property such as patents, business secrets, the Company has established and implemented relevant regulations, including the "Intellectual Property Rights Management Manual", the "Procedures for Intellectual Property Rights Application ", the "Third-party Intellectual Property Rights Policies and Investigation Procedures ", and the "Confidentiality Management System".

2. Intellectual Property Achievements

Zhen Ding actively applies for patents in Taiwan, Mainland China, and the United States to strengthen its competitive advantages. In 2022, 365 patent applications were filed and 247 patents were granted. As of December 31, 2022, the company owned 1,440 valid patents. The Company expects to file 350 patent applications in 2023 to protect the results of our own research and development of advanced technologies. The annual implementation status and achievements have been reported to the Board of Directors on March 13, 2023.



	2017	2018	2019	2020	2021	2022
Total	702	787	904	1057	1193	1440

Updated as of December 31, 2022.

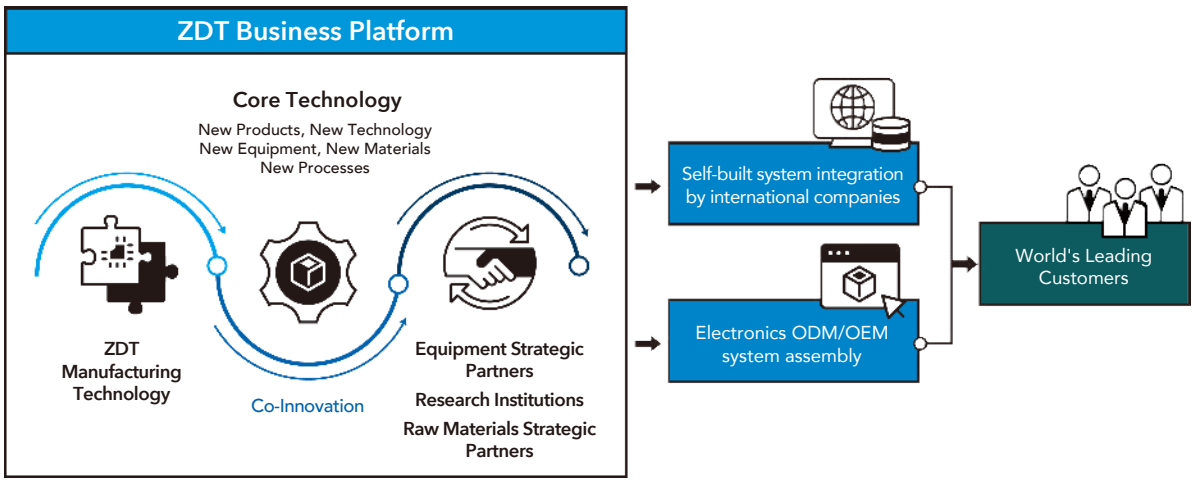
Certifications

The main legal entities of Zhen Ding in Mainland China have completed the implementation of the intellectual property management system standard and obtained certification in accordance with the requirements of the local intellectual property management policy. Please refer to the "Sustainability Focus - ESG Certification and Verification" section of the Company's website for the certifications obtained by each plant.

1. Qing Ding Precision Electronics (Huaian) Co., Ltd.: Obtained the certification of "Enterprise Intellectual Property Management GBT-29490" on June 18, 2020, and the certificate will be valid until June 17, 2023.
2. Avary Holding (Shenzhen) Co., Ltd.: Obtained the certification of "Enterprise Intellectual Property Management GBT-29490" on June 16, 2021, and the certificate will be valid until June 15, 2024.
3. Hong Qi Sheng Precision Electronics (Qinhuangdao) Co., Ltd.: Obtained the certification of "Enterprise Intellectual Property Management GBT-29490" on July 4, 2022, and the certificate will be valid until July 3, 2025.

2-2 Responsible Supply Chain

Zhen Ding PCB Business Platform is a stage on which Zhen Ding and its suppliers, professional agencies, and other strategic partners can grow together and share results. We firmly believe that business management is not a zero-sum game but it is about coexistence and joint prosperity with strategic partners. We hope to form alliances with strategic partners to innovate and develop core technologies (new products, new technologies, new equipment, new materials and new processes) and share the results. We also hope that our high-quality circuit boards can be widely adopted in products of end-customers for the benefit of consumers and society.



Green Procurement

Zhen Ding's supply chain can be divided into four categories, namely, raw materials, engineering, equipment, and molding suppliers, among which the number of raw materials suppliers is the highest, with 372 suppliers as of 2022. Based on monetary amount of purchases, 87.2% of our purchases were made from raw material and equipment suppliers.

Zhen Ding's key raw materials include flexible copper clad laminate (FCCL), copper clad laminate (CCL), polypropylene (PP), and potassium gold cyanide. The following table shows the percentage of purchase amount and usage in 2022:

Procurement amount of key materials	Flexible copper clad laminate (FCCL)	Copper clad laminate (CCL)	Polypropylene (PP)	Potassium gold cyanide	Other raw materials	Total
Percentage in 2022 (%)	17%	11%	9%	6%	57%	100%

Key material usage	Unit	2018	2019	2020	2021	2022
Flexible copper clad laminate (FCCL)	m^2	3,976,834	4,039,165	4,831,937	5,366,018	4,696,145
Copper clad laminate (CCL)	m^2	4,111,084	4,195,303	3,965,961	5,405,496	5,164,533
Polypropylene (PP)	m^2	11,142,987	11,059,428	11,070,888	15,382,360	12,830,786
Potassium gold cyanide	Kg	1,496	1,610	1,668	1,852	1,519

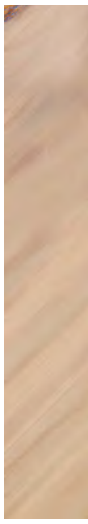
Note: Estimated usage based on procurement volume.

We adhere to the Zhen Ding Seven Greens principle, and with the assistance of the suppliers, we select quality raw materials that meet our quality requirements and are friendly to the environment. The key raw materials used by Zhen Ding include gold, palladium, and tin, involving potassium gold cyanide, palladium salt/palladium solution, copper powder/copper balls/copper foil, solder paste/tin balls, and copper foil contained in FCCL and CCL. The PCB industry as a whole is striving to find alternative materials or reduce the amount of rare metals used, and Zhen Ding is working hard to keep in close contact with related suppliers and pay attention to the future trend of related technology applications. However, due to quality considerations and the current level of industry technical standards, there are currently no other feasible alternative metals. Nevertheless, in order to increase the diversity of sources to ensure supply, and based on the company's philosophy of caring for the earth, Zhen Ding has been working with suppliers and customers to promote the use of recycled metals. The Company has also implemented the use of recycled solder paste, achieving a utilization rate of 90% for recycled solder paste. In the case of the introduction of recycled potassium gold cyanide, both major suppliers have obtained third-party certifications for the use of recycled raw materials (ISO14021 or UL2809). In 2022, formal production of products using recycled potassium gold cyanide has been implemented in some business units, while other units that have not yet implemented it are currently conducting tests or planning the testing phase. The total amount of potassium gold cyanide recycled in 2022 reached 42% of the total potassium gold cyanide usage. Our goal is to achieve a 60% usage rate of recycled potassium gold cyanide by 2025. Regarding the recycling of copper powder/balls, testing has been initiated and currently, three business units are collaborating with customers to conduct tests. It is expected to be officially implemented in 2023. Our goal is to achieve a 25% usage rate of recycled copper powder/balls by 2025. As for copper foils, some suppliers are already able to provide copper foils made from 100% recycled copper, while negotiations are ongoing with other suppliers to increase the usage of recycled copper materials, with some achieving a 70% usage rate. Regarding copper-clad laminates (CCL) related to copper foils, some parts have already adopted copper foils made from 100% recycled copper, accounting for 18% of the total. Efforts are ongoing to expand the usage rate through negotiations with customers and suppliers. Our goal is to achieve a 25% usage rate of recycled copper powder/balls by 2025.

Recycled material usage	2022		2025
	Overall usage	Usage ratio of recycled materials (%)	Usage ratio of recycled materials (%)
Solder paste	27,131 kg	90%	95%
Potassium gold cyanide	1,519 kg	42%	60%
Copper balls	1,212,800 kg	0%	25%
Copper powder	2,914,045 kg	1%	25%
Copper sulfate	673,217 kg	80%	95%
Copper foil	1,479,052 kg	18%	25%
CCL (copper foil)	5,265,378 m^2	4%	8%
Tray	58,046,259 PCS	10%	15%

In addition to the utilization of recycled materials for metal components mentioned above, adhering to the Zhen Ding Seven Greens principles, efforts are being made to implement environmentally friendly measures in other materials as well. Taking packaging trays as an example, this year we have collaborated with customers in the reuse of packaging trays. Used packaging trays are collected from customers, undergo thorough cleaning, and undergo quality confirmation before being reused. This approach reduces the consumption of material resources. The current utilization rate of recycled packaging trays is 10%, and our goal is to achieve a 15% utilization rate of recycled packaging trays by 2025.

Lastly, in terms of procurement sources, Zhen Ding's main production base is located in mainland China. To promote local industry cluster, boost regional economic development, and reduce CO_2 emissions caused by transportation, we choose to work with local suppliers as much as possible, except for some advanced chemicals and equipment, because the technology is in the hands of overseas suppliers. In 2022, 46.5% of the company's purchases were made from local suppliers, of which 91.8% and 91.0% were from local engineering, molding/contract suppliers, respectively.



Supply Chain Management

Zhen Ding has invariably adopted the strategy of "buying technologies, talents, markets, and products that are reasonably priced in the long run". We cultivate competitive and excellent suppliers. Through periodic auditing, guidance, and performance monitoring, we continuously improve the quality, price, delivery date, and service quality of suppliers to eventually achieve reciprocity and mutually beneficial outcomes. Zhen Ding establishes monitoring indicators relevant to supplier management:

Annual Target of Supplier Management	2022 target	Actual Performance in 2022	2025 Goals
Supplier Annual Audit Completion Rate	100%	100%	100%
Supplier Performance Achievement Rate	100%	100%	100%
Green Supply Chain Promotion Rate (note)	100%	100%	100%

Note: Green supply chain promotion rate of 100% refers to manufacturers in China.

Zhen Ding has established a complete supply chain management system and set up a department in charge of supplier management. By using the Supplier (Contractor) Management System, we systematically and comprehensively manage the quality, delivery, technical service, and prices of goods supplied. Zhen Ding also established the Supplier Social Responsibility Management Regulations, Supplier Conflict Minerals Management Regulations, and other regulatory documents, and regularly provide training to our internal procurement staff on issues such as integrity, honesty, and supplier social responsibility management. We extend our social responsibility ideals to the supply chain and establish partnerships with suppliers for joint management. We require companies to adhere and commit to such regulations and ensure that all of their operations meet the applicable environmental laws, labor laws, and international corporate social responsibility regulations. We have requested suppliers to provide a "Letter of Commitment" or sign the "Special Clauses of Procurement Orders", which are formulated according to international standards such as RBA. The documents cover ethical conduct, human rights, and environmental aspects, as well as provisions that state that agreements shall be terminated or canceled when suppliers violate corporate social responsibility policies to an extent that poses significant impact on the environment and society. In 2022, 100% of our suppliers have signed the documents, ensuring that all partner suppliers comply with the requirements.

To fulfill our responsibility to protect the global environment and promote the value chain of the industry to enhance the effectiveness of environmental protection actions, we have selected green supply chain partners through a questionnaire survey of suppliers at the end of 2021. We invited 599 people from 84 suppliers to attend a green supply chain seminar in 2022 to initiate the green supply chain environmental protection project. We assist suppliers to improve the environmental management of factory operations, establish and certify ISO management systems, and implement environmental protection projects such as water and electricity saving, waste reduction and carbon reduction to improve environmental performance and expand the influence and contribution of environmental protection.

Supplier Selection

Zhen Ding has established a complete set of applicable management regulations in order to continuously sustain a stable supply of materials that meet quality, environmental, delivery, technical support, and price requirements and to facilitate the completion of a comprehensive management system for suppliers. Competitive suppliers are selected by following the six major principles through material assessments with the assistance of professional audit teams. In 2022, new suppliers were selected according to the Supplier Selection Principles.

Supplier Selection Principles

1. **Principle of Screening:** Downsize the number of suppliers to include only those who are competitive.
2. **Principle of Resource Sharing:** Sharing of supplier resources among business groups.
3. **Principle of Rating:** Rating process should be transparent and take into consideration pricing, quality, support, and technical factors.
4. **Principle of Exclusion:** Suppliers that have incurred significant loss to or negatively impacted to the Company in the past are excluded.
5. **Principle of Competence:** Material market should be analyzed to select competitive suppliers.
6. **Principle of Second Source:** There should be an alternative supplier of a material.
7. **Principle of Justice:** Cooperate with suppliers with low risk at management system, labor, health and safety, environment, business ethics and so on.

Note: Apart from the above principles, priority is given to ISO 9001/ISO 14001/ISO 45001/QC 080000-certified suppliers.

Supplier Quality, Hazardous Substances, Social Responsibility Audit and Guidance

Based on the "Supplier Audit Operating Procedure," Zhen Ding conducts on-site audits of high-risk suppliers annually, using material risk level and annual evaluation level as criteria. In 2022, a total of 132 suppliers were selected for quality and hazardous substance audits, accounting for 53.2% of the existing suppliers. Among them, 43.2% (57 suppliers) passed the assessment, 55.3% (73 suppliers) passed with conditions, and 1.5% (2 suppliers) were identified as non-compliant. Suppliers who passed with conditions were required to improve certain aspects. A total of 1,379 deficiencies were identified (including 452 major deficiencies and 927 general deficiencies) and all were successfully addressed, with a completion rate of 100%. The main deficiencies included failure to comply with on-site management requirements, unclear material area division, and inadequate supply chain management. The two non-compliant suppliers were also guided to address the identified issues within the same year, and they ultimately passed the reassessment.

To ensure that suppliers manage and maintain their environmental, occupational health and safety activities, comply with customer and legal requirements related to social responsibility, and commit to continuous improvement and system enhancement, we completed the optimization of the supplier social responsibility risk assessment scoring criteria in 2022. We increased the severity rating to Red (non-compliant) for suppliers who had a significant environmental or social responsibility (SER) audit failure, experienced abnormal SER incidents, or employed workers below the age of 16. Additionally, we added eight "zero-tolerance" items related to violations of Zhen Ding's Supplier Code of Conduct to the supplier social responsibility audit form. Any non-compliance with these items during the audit will result in a direct upgrade to Red (non-compliant) status.

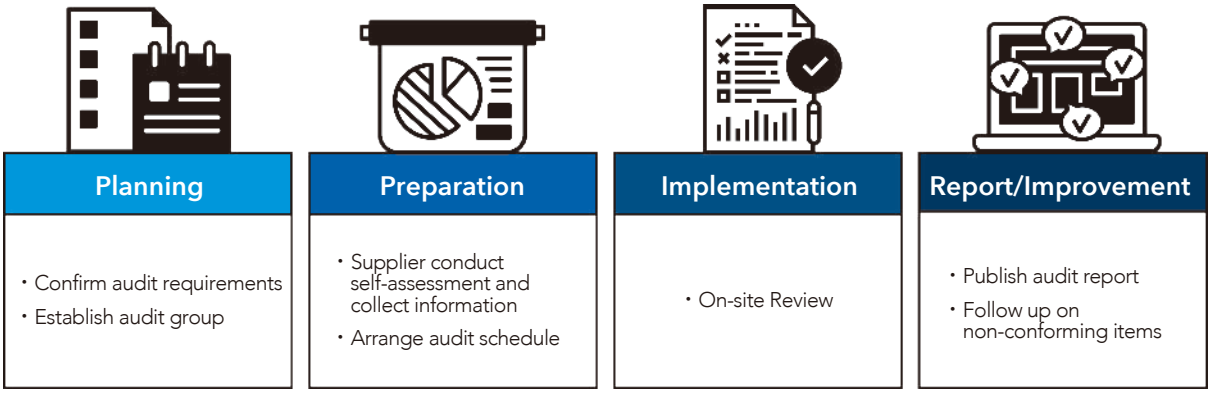
In 2022, we audited 47 suppliers onsite to evaluate their social and environmental responsibilities (SER), with reference to RBA audit items including labor, health and safety, environment, ethics, and management system. According to the evaluation results of 2022, 18, 28, and 1 suppliers obtained green, yellow, and red ratings, respectively, while 1 supplier did not pass the audit, accounting for 2.1% of the total(Note). In 2022, suppliers were encouraged to improve 310 deficiencies (91 major deficiencies and 219 general deficiencies), and there was an improvement completion rate of 100%. Low-scored items were primarily occupational health and safety and working hours. With respect to the potential negative impact, we have asked these suppliers to propose improvement plans. We continue to guide, engage, and interact with them to meet the requirements of Zhen Ding, downstream clients, and laws. Regarding the 1 supplier with a red rating, they have corrected their deficiencies under guidance, and passed the re-audit. There are no high-risk suppliers. In 2022, there were no instances where suppliers were rated as non-compliant (Red) based on the audit results, leading to a suspension of business transactions due to failed improvements.

Note: 1. The number of suppliers audited based on the number of production sites; there were a total of 248 companies (excluding electronic parts and customer accessories).
2. Total score=200; green=score > 180; yellow= 160 < score ≤ 180; and red=score ≤ 160. Green, yellow, and red mean that a supplier has passed, passed conditionally, and failed the audit, respectively.
3. Audit results are based on the initial audit result.
4. The criteria for identifying high-risk suppliers are those who have any of the following conditions:
A. SER abnormalities have occurred in the past 12 months (including media exposure), or SER abnormalities have occurred in the last three years but have not completed improvement.
B. A supplier who is currently being reported for ineligibility as a supplier due to SER-related issues, or who is no longer qualified as a supplier.
C. Supplier is found to be using conflict minerals from the DRC and neighboring countries.
D. Failure to improve SER deficiencies identified during on-site audits within the required timeframe.

In addition to the 2022 supplier social responsibility audit for a total of 47 suppliers, Zhen Ding encourages major suppliers to conduct inventory of GHG emissions, guide them on establishing ISO systems, and increase the green performance of suppliers, thereby enhancing the company's CSR impact.

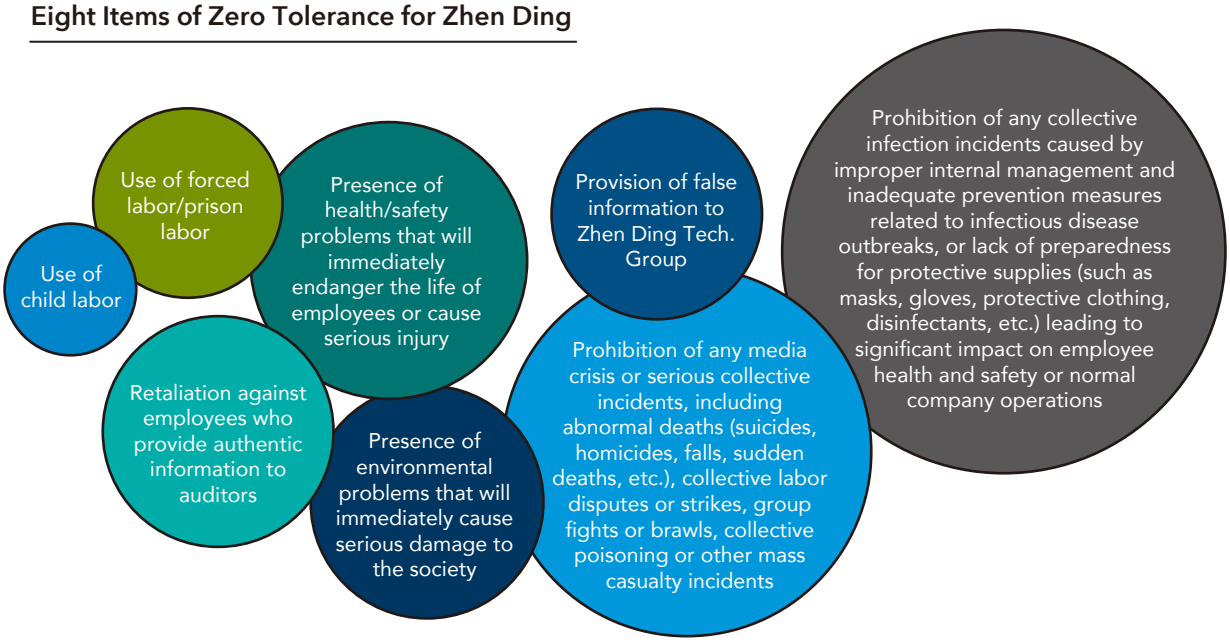
Supplier audit	Actual Performance in 2021	2022 target	Actual Performance in 2022	2025 Goals
Number of suppliers audited for quality and hazardous substance	128	130	132	140
Approval ratio	25.8%	/	43.2%	/
Conditional approval ratio	73.4%	/	55.3%	/
Disapproval ratio	0.8%	/	1.5%	/
Number of suppliers audited for environmental and social responsibilities	38	40	47	45
Approval ratio	34.2%	/	38.3%	/
Conditional approval ratio	52.6%	/	59.6%	/
Disapproval ratio	13.2%	/	2.1	/
Total number of suppliers audited	166	170	179	185

Audit Procedure



Global concerns over corporate environmental protection issues have spread from companies themselves to their respective supply chain. This trend suggests that companies should not only fulfill environmental responsibilities but also responsibly manage the danger that their supply chains pose to the environment, thereby minimizing the risks of supply chain. In addition to addressing product and environmental issues, Zhen Ding also raises suppliers' awareness and requirements of labor, ethical, health and safety, and environmental management systems in accordance with the Responsible Business Alliance Code of Conduct (RBA CoC) and SA 8000, which is an international standard that encourages social responsibility. Moreover, we also propose the eight items for which we have zero tolerance. For more details, please refer to the "Sustainability Focus - Responsible Supply Chain" section on our website.

Eight Items of Zero Tolerance for Zhen Ding



Supplier Education and Training

To strengthen suppliers' understanding of Zhen Ding's socially responsible behavior, environmental protection policy, and common quality tools (e.g., FM management, PPAP hypothesis verification, basic statistics, SPC, etc.), we set up a training program for suppliers at the beginning of each year. In 2022, four quality-related courses were offered to suppliers, with 74 suppliers and 307 participants.

Grievance Mechanism

Zhen Ding advocates "fairness and impartiality, integrity and self-discipline, honesty and cooperation in building an environment that embraces honest and ethical purchasing" to eliminate any conducts in violation of supply chain management principles. In addition to asking certified suppliers to sign a letter of commitment (which includes integrity requirement), we also inform suppliers of applicable requirements via email or at supplier conferences. We have set up a reporting channels for suppliers to use to file anonymous or registered reports on blackmails, briberies and other unethical business conducts: Company website - "Contact Us - Business Ethics" section, or email us at zdt-report@zdtco.com.

Conflict Minerals Management

Conflict minerals refer to minerals mined in areas of armed conflict or under conditions that violate human rights, specifically precious metal minerals mined by the Democratic Republic of the Congo and adjoining countries. Conflict minerals include gold (Au), tin (Sn), tantalum (Ta), tungsten (W), and Cobalt (Co) and are mainly used in electronic parts. In response to global control measures for conflict minerals, the Company has incorporated conflict minerals into its supplier management policies, and proposed policies, objectives and management practices to meet international trends and customer requirements. In 2022, Zhen Ding eliminated 30 smelters that did not pass or meet customer specifications, and monitored them at all times to ensure 100% compliance with regulations and customer requirements.

Conflict Mineral Management Policy

- The Company promises that the smelters from which it purchases 3TG and cobalt materials are Responsible Minerals Initiative (RMI) certified smelters or customer-approved smelters.

- The Company promises to follow the OECD due diligence guidelines to conduct due diligence on its supply chain.
- The Company promises to not directly or indirectly purchase conflict minerals that directly or indirectly finance armed conflict groups.
- The Company shall not purchase 3TG and cobalt from the Democratic Republic of the Congo and adjoining countries.
- Suppliers shall impose the same conflict mineral management requirements on their upstream suppliers.

Note: 1. 3TG refers to gold (Au), tin (Sn), tantalum (Ta), and tungsten (W).
2. RMI refers to the Responsible Minerals Initiative.

Conflict Mineral Management Objectives

The Company continues to promote supply chain improvement as required by laws and customers in order to eliminate the use of conflict minerals in its supply chain.

1. Supplier signing rate for commitment to using RMI-compliant smelters: 100%.
2. Supplier compliance rate for non-conflict mineral usage: 100%.
3. Compliance rate of using non-conflict minerals qualified suppliers for raw materials and products: 100%.

Conflict Mineral Management Practices

- Conduct investigation to trace conflict minerals in gold salts, electronic parts, tri-tin, and all products and materials in PCB that mainly contain gold, tantalum, tin, tungsten, cobalt, and mica. When applicable, we conduct investigations on special minerals requested by customers, such as nickel and zinc.
- Use the list of compliant smelters provided on the RBA website. If a smelter is not on the list, request for a response plan from the supplier.
- Require suppliers to impose the same conflict mineral management on their upstream suppliers.
- Require suppliers to sign a Declaration of Conflict-Free Minerals.

Management procedure for conflict minerals

Zhen Ding follows the five frameworks of the "Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas" developed by the Organization for Economic Cooperation and Development (OECD) to establish a management system. Through the due diligence process outlined in the framework, in addition to identifying and assessing supply chain risks, Zhen Ding also designs supplier conflict minerals audit forms. By conducting on-site and document audits, Zhen Ding provides guidance to suppliers in establishing management mechanisms that align with the OECD due diligence requirements.

Conflict Minerals Management System

Zhen Ding communicates its conflict minerals policy and requirements to suppliers through the Company's website. Suppliers are required to comply with Zhen Ding's conflict minerals policy and establish their own policy, which must be communicated to their next-tier suppliers. We also require suppliers to actively assess and verify their supply chains and encourage them to procure from smelters that have been certified as conflict-free by the Responsible Minerals Assurance Process (RMAP) or other equivalent independent third-party audits. This ensures that the minerals used in our products are sourced from reliable and conflict-free origins.

Zhen Ding is committed to the continuous implementation of conflict-free mineral sourcing throughout the supply chain and expanding supply chain due diligence efforts. In 2022, a total of 72 suppliers completed the Conflict Minerals Reporting Template (CMRT) survey. Additionally, we conducted surveys using the Cobalt Reporting Template (CRT) with 17 suppliers, achieving a 100% response rate.

Reasonable Country of Origin Inquiry (RCOI)

Every year, Zhen Ding conducts Reasonable Country of Origin Inquiries to identify and confirm the sources of 3TG minerals in electronic manufacturing service products. This is done to determine whether these minerals originate from conflict-affected areas. Our RCOI includes the following steps:

- Supplier investigations are conducted using the Conflict Minerals Reporting Template (CMRT) to identify the sources of 3TG minerals in the supply chain.
- Suppliers are required to sign a commitment letter, confirming their compliance with Zhen Ding's Conflict Minerals Policy and ensuring accurate and complete disclosure of the smelters in their supply chain.

In 2022, we surveyed over 400 suppliers, identifying 214 smelters based on the conducted surveys. All of our suppliers are conflict-free smelters and provide products that meet Zhen Ding's requirements. In addition to 3TG, we have expanded the scope of our surveys and actively conducted surveys on cobalt and mica suppliers. We also disclose the smelter sources to our customers. In 2022, a total of 17 suppliers were identified to be using cobalt, with 25 smelters identified. There were no suppliers identified to be using mica.

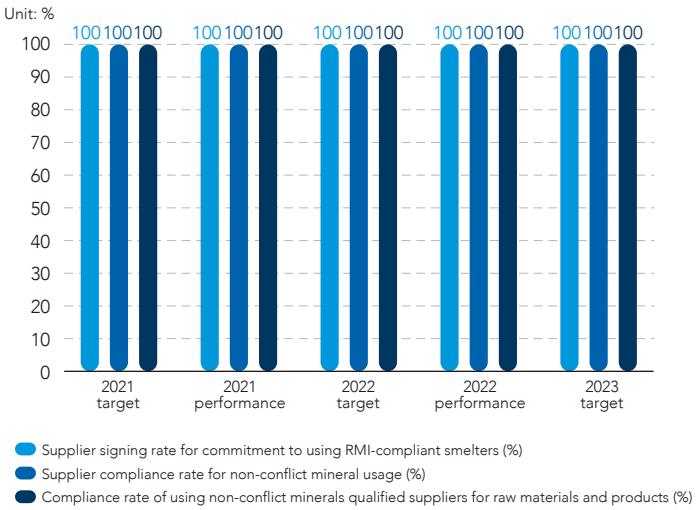
Due Diligence

Zhen Ding follows the guiding principles of the "Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas" developed by the Organization for Economic Cooperation and Development (OECD) to establish the due diligence framework. Through the due diligence system, we not only identify and assess supplier risks within our own supply chain, but also respond to and mitigate the identified risks. In accordance with the OECD Due Diligence Guide, we have designed a supplier conflict minerals audit form to guide and assist suppliers in establishing management systems that comply with the OECD Due Diligence Guide through on-site and document audits.

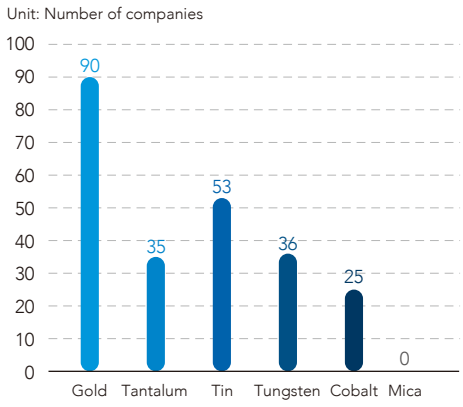
Independent Contractor Auditing and Public Disclosure

We conduct independent contractor audits annually to verify the accuracy of conflict minerals declarations and the effectiveness of due diligence processes.

3TG Mineral Procurement Supplier Audit



Number of Verified Non-conflict Mineral Compliant Smelters in 2022



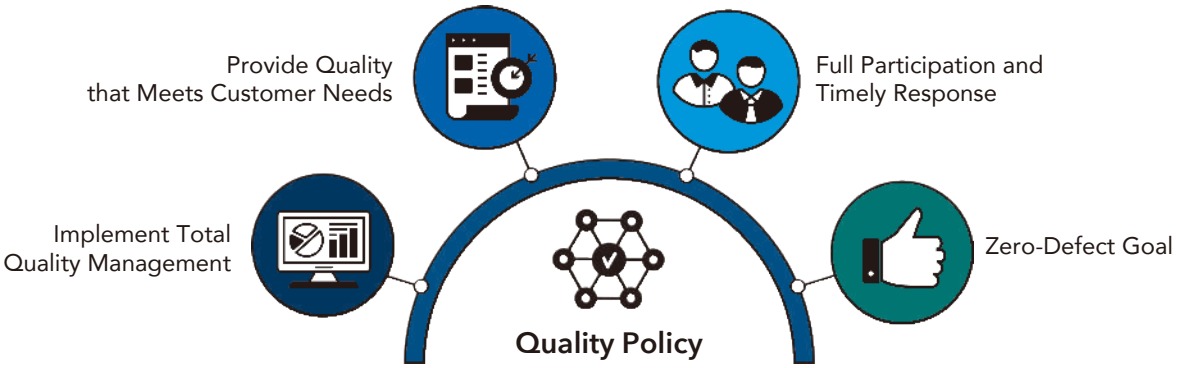
List of Smelters and Refineries Used in the Supply Chain for 3TG Minerals in 2022

Zhen Ding complies with the Responsible Minerals Initiative (RMI) to conduct supply chain mineral source investigations. All smelters and refineries disclosed in the list are smelters and refineries used in the supply chain of Zhen Ding. For the latest list of qualified smelters, please refer to the Responsible Minerals Initiative website.

2-3 Product liability

Company Quality Policy and Certification

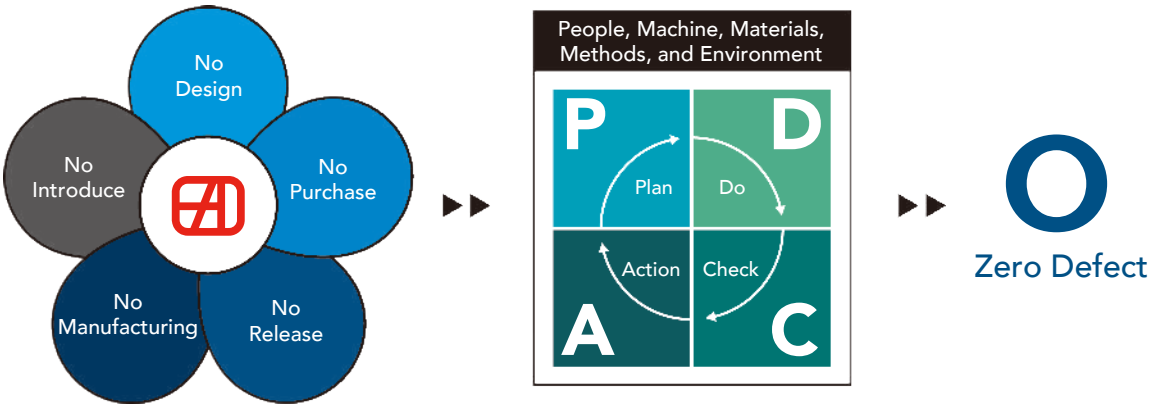
Quality is the first step toward value and respect and also the lifeline of a company's existence. The company has always persisted in implementing total quality management to provide customers with high-quality products and services. Since the establishment of the Company, we have passed ISO9001, IATF16949, ISO14001, QC080000, ISO50001, ISO45001, and UL/CQC certifications. Please refer to the "Sustainability Focus - ESG Certification and Verification" section on our website.



Product Development Process

The company develops products in five phases in order to effectively carry out product development tasks and ensure that products meet customer requirements and regulatory requirements on the quality and quantity of products developed.

The company also follows the principle of not designing, not purchasing, not introducing, not manufacturing, and not releasing in each step of managing product-related aspects (people, machine, materials, methods, and environment) and adopts the PDCA model for continual improvement to achieve zero-defects. To ensure the materials purchased and products shipped meet the requirements stipulated by customers and law, Zhen Ding has established a Physics Laboratory and Chemical Laboratory where product-related reliability tests, physical tests, chemical tests, and failure analysis can be conducted independently.



Hazardous Substance Management

Since 2008, production sites of Zhen Ding have passed the hazardous substance management system certification (IECQ QC080000). The objective of our hazardous substance control is "reducing or avoiding the use of hazardous substances to meet regulatory and customer requirements". We control the use of hazardous substances by following the principle of not designing, not purchasing, not introducing, not manufacturing, and not releasing hazardous substances. Testing devices such as X-ray fluorescence (XRF) spectrometer, inductively coupled plasma (ICP), gas chromatography–mass spectrometry (GC-MS), and ultraviolet–visible spectroscopy or ultraviolet–visible spectrophotometry (UV-VIS) are used to conduct scheduled tests in order to strengthen the management of hazardous substances in raw materials and products. Meanwhile, in compliance with customer requirements and regulatory requirements concerning applicable hazardous substances, we establish target indicators that need to be met when shipping out products, and constantly monitor the status of these indicators. In addition, we also establish a Green Product organization and established a "Green Product Management Platform" to continuously promote the management of hazardous substances.

Nowadays, the electronic technology industry is developing rapidly and consumers' awareness of environmental protection is rising, which has driven the increasingly stringent regulations on hazardous substances in products. Zhen Ding pays constant attention to international or local regulations and incorporates them into Zhen Ding's legal knowledge network for evaluation and integration, so that we can respond in a timely manner and reduce the risk of non-compliance.

In 2022, a total of 14 regulations related to hazardous substances were evaluated, primarily including the revisions to Annex III and Annex IV exemption clauses of the European Union Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS); the addition of the 26th and 27th batches of Substances of Very High Concern (SVHC) under the European Union Regulation on Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH); and the addition of two reduction substances under the Stockholm Convention on Persistent Organic Pollutants. In response to the updates in these regulations, Zhen Ding conducted immediate self-assessments of relevant suppliers, and the investigation results indicated that the materials used by Zhen Ding meet the requirements of these regulations.

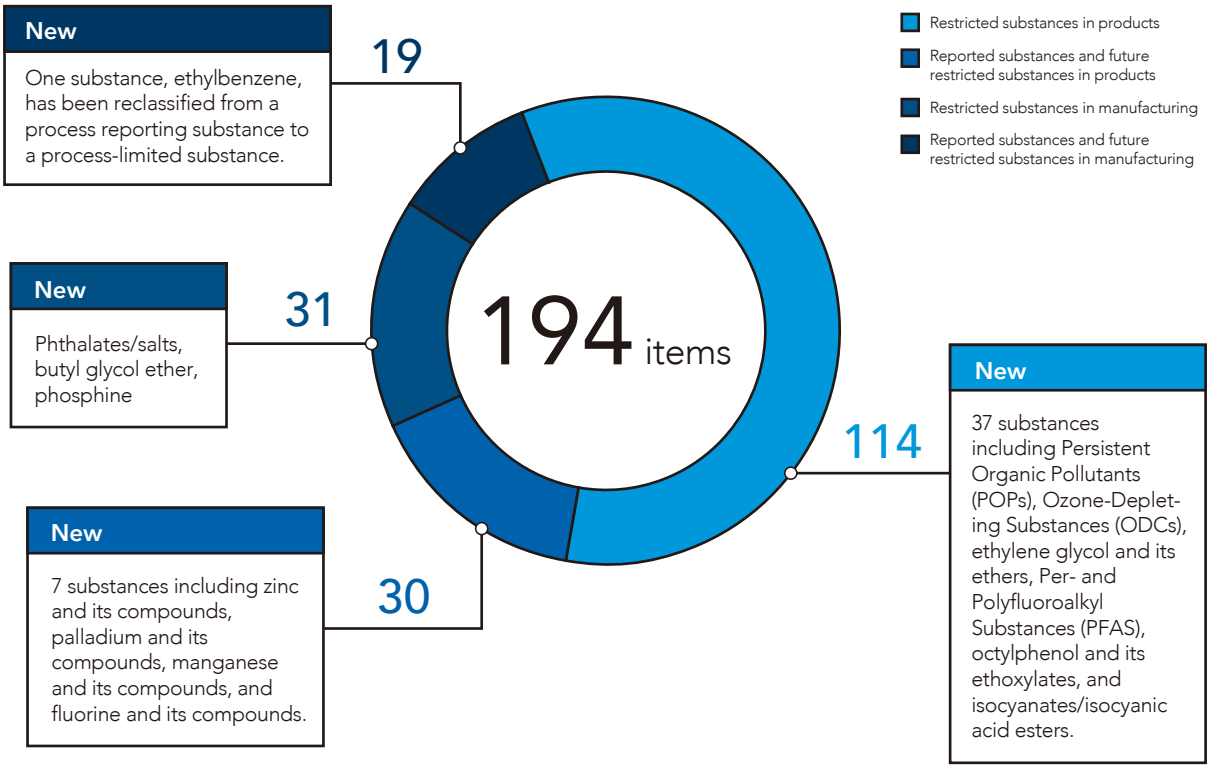
In 2022, 50 customer requirements were evaluated; 18 of them were new, and 32 were revised. We exchange and communicate our opinions regarding the appropriateness of customer requirements; for example, the feasibility of their technology is controlled with the strictest standards. We also update the company's documents on hazardous substance control. The documents contain 114 items of restricted substances in products, mainly collected from suppliers' test reports and material composition declaration forms for monitoring. There were 30 items of reported substances and future restricted substances in the products. If there are intentional additions or exceeding the control thresholds in the materials, they need to be declared through the declaration of hazardous substances form. There are 31 restricted substances in the manufacturing process, mainly for cleaning agents, degreasing agents, demolding agents; there are a total of 19 declared substances and future restricted substances in the manufacturing process, mainly for chemicals in the process other than cleaning agents, degreasing agents, and demolding agents. If a requirement cannot be met or replaced in a timely manner, in case of technical limitations, we will assess industry standards, and provide reasonable suggestions to customers.

Unit: Number of cases	New	Amendment
Hazardous substances legal compliance assessments in 2022	1	13
Hazardous substances customer requirement compliance assessments in 2022	18	32

Hazardous Substance Management Status in 2022

Management category	Item quantity	Category examples	Management category	Item quantity	Category examples
Restricted substances in products	114 items	RoHS 2.0 Chlorine and its compounds Bromine and its compounds Arsenic and its compounds Beryllium and its compounds Antimony and its compounds Asbestos and its compounds Appendix XVII of REACH Azo dyes, aromatic amines, and aniline derivatives Short-chain, medium-chain, and long-chain chlorinated paraffins Organotin compounds Perchlorate PFOA, PFOS, PFCA, and other perfluorinated organic compounds Polycyclic aromatic hydrocarbons (PAHs) Radioactive materials Musk compounds Persistent organic pollutants (POPs) Ozone-depleting substances (ODCs) Five TSCA substances	Restricted substances in manufacturing	31 items (Some substance restrictions apply only to cleaning agents, degreasing agents, and demolding agents)	Benzene Toluene Ethylbenzene Xylene Ethanolamine n-hexane n-heptane Dichloromethane Carbon tetrachloride Trichloroethylene Tetrachloroethylene Cyclohexane Cyclohexanone Methanol N-Methylpyrrolidone (NMP) n-Propyl bromide (nPB) Ozone-depleting substances (ODCs) Brominated organic solvents Chlorinated organic solvents Fluorinated greenhouse gases Phthalates/salts
Reported substances in products	30 items	Additive phosphorous flame retardant SDPA Endocrine disrupting chemicals (EDCs) Skin sensitizers EC62474 Substances Declaration List California Proposition 65 Chemicals List	Reported substances in manufacturing processes	19 items	Formaldehyde Hydrogen chloride

Controlled Substances in 2022



For companies to comply with the relevant regulations, manufacturers and suppliers must conduct multiple tests for different products, which would increase the economic burden on manufacturers and suppliers, and even adversely affect the free flow of products. The Material Declaration (IEC 62474) standard was developed by the International Electro technical Commission for the Environmental Standardization for Electrical and Electronic Products and Systems (IEC/TC 111). The Material Declaration specifies the conditions that must be met by manufacturers and suppliers for material declarations, the materials to be declared, and a standardized data exchange format to increase the acceptability of material declarations within the global supply chain. Zhen Ding incorporates the IEC 62474 Substance Declaration List into its management of hazardous substances, including both declared substances in products and future restricted substances. The control of hazardous chemicals aligns 100% with the substances listed in the IEC 62474 specification. Zhen Ding requires suppliers to provide a declaration if their products or materials contain any substances specified in the IEC 62474 list. Zhen Ding then shares the information regarding the presence of relevant substances with downstream customers as required, ensuring timely and accurate transmission of information on IEC 62474 declared substances throughout the supply chain. All products or materials provided by suppliers are 100% compliant with the substances specified in the IEC 62474 list.

In 2022, all products manufactured by Zhen Ding were 100% compliant with the EU RoHS standard, IEC 62474, and other applicable laws and regulations, as well as customer requirements, and its revenue was 100% of the total revenue. At the same time, Zhen Ding also complies with the requirements of regulations and standards such as REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals) in the European Union and California Proposition 65 in the United States to declare relevant substances in its products. This helps facilitate improvements in legislation related to hazardous substances, protect consumer rights, and fulfill its responsibilities toward human health and environmental protection.

Elimination of Chemical Products

Due to the strong toxicity of methanol, which can have significant effects on the nervous and hematological systems of the human body, Zhen Ding has taken measures to eliminate chemicals containing methanol.

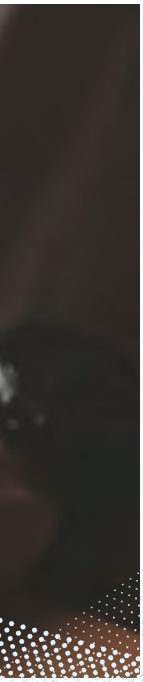
Life Cycle Assessment

Zhen Ding proposed the idea of "Seven Greens" practices in 2008, which include green innovation, green chain of supply, green production, green logistics, green services, green actions on recycle, and green existence. These practices provide a comprehensive guide for employees to carefully examine and analyze every aspects in production processes and activities of daily living and to engage in green practices such as saving energy, reducing consumption, reducing waste, and increasing efficiency. In 2022, Zhen Ding officially launched the ISO 14067 Product Carbon Footprint Inventory. We conducted product carbon footprint assessments for the group's PCB products, including FPC, RPCB, HDI, MSAP, Mini LED, CSP, and SMA. Through Life Cycle Assessment (LCA) and the utilization of big data software, product carbon footprint data calculations were carried out. Zhen Ding aims to obtain ISO 14067 certification for our suppliers by September 2023. By controlling product carbon footprints, the company aims to progressively reduce carbon emissions and work towards the global consensus of carbon neutrality by 2030 and achieve the goal of global net-zero emissions by 2050. In addition, Zhen Ding will begin planning the product environmental footprint inventory in 2024. We aim to enhance environmental impact indicators and gradually establish a more sustainable product management system, leading to efficiency improvements.

Continuous Improvement

The company is invariably committed to improving product quality, which is evident by its quality policy: "Implement total quality management to provide quality that meets customers' needs, and ensure total participation and a timely response to achieve the goal of zero defects". To realize the zero defect goal, the Company sets quality goals for each of its product category at the beginning of the year, and conducts daily, weekly, and monthly review meetings to analyze and review non-conforming items. Subsequently, a team is established to carry out projects for improving important items. In 2022, 100% of the Company's external quality systems passed evaluation.

The Company continues to engage in activities relevant to continuous improvement and hold conferences on a yearly basis, in order to comprehensively improve the environment where operators work, raise their quality awareness, improve product quality, increase production and work efficiency, save costs, and reduce wastage. Through conferences and bonuses, we inspire the spirit of "continuous improvement" among employees, boost cross-department cooperation, and strengthen employees' problem-solving and innovation skills, to in turn bolster the company's competitive advantage and achieve customer satisfaction.



2-4 Customer Service

Exceeding customer expectation is one of the strategic goals in Zhen Ding's development. We provide excellent customized manufacturing services, continue to upgrade our manufacturing facilities, and actively participate in the early research, development, and designing of customers' products so that customers will rely on our products and services. In addition, we attach importance to customer satisfaction ratings and protection of customers' confidential information. We hope to bolster our competitiveness through continuous improvement of product quality and service contents, thereby becoming customers' long-term strategic partners. For questions related to quality (including hazardous substances) and engineering, please visit the "Contact Us - Business Services" section on our company website, or email us at zdt-sales@zdtco.com.

Zhen Ding values the opinions of every one of our customers and establishes a multi-function team in charge of customer services. Whenever customers need anything, they can call us, send us letters, or inform us in any way, and each of our customer service personnel will immediately verify their needs. When customers complain of a quality problem, our customer service personnel will call on the department involved to cooperate and respond to customers' needs as quickly as possible, according to the "Eight Disciplines Problem Solving" (8D) method, in order to respond to customers' needs and feedback in the shortest possible time.

Customer Service Process

1	2	3	4	5	6	7	8
Customer feedback	Confirm the problem	Short-term strategy	Cause analysis	Long-Term strategy	Outcome confirmation	Standardization	Report to customer

Customer Service Process

Zhen Ding's main clients are major electronics system brands or main electronics OEM companies across the world. To meet customers' needs, we provide rapid design, development, sample production, and fast mass production services within a short time, to help customers to shorten product launch schedule and quickly seize market opportunities. We help customers by building a successful operation model of Time to Market + Time to Volume + Time to Money / Market Share.

To ensure that all mass-produced products satisfy the needs of customers, the company works closely with customers in the initial period of the product design phase, and continues to strengthen and refine our technology platform. We also leverage our expertise in R&D, thereby keeping abreast of market trends and business opportunities for new products.

The company provides customers with flexible and high-quality custom manufacturing services and the advantages of a multi-factory production base that closely meet customers' needs. We have created the comprehensive One ZDT service platform to meet the customers' goal of only needing to make a one-time purchase, thereby establishing a long-term partnership with customers.

Product Labeling

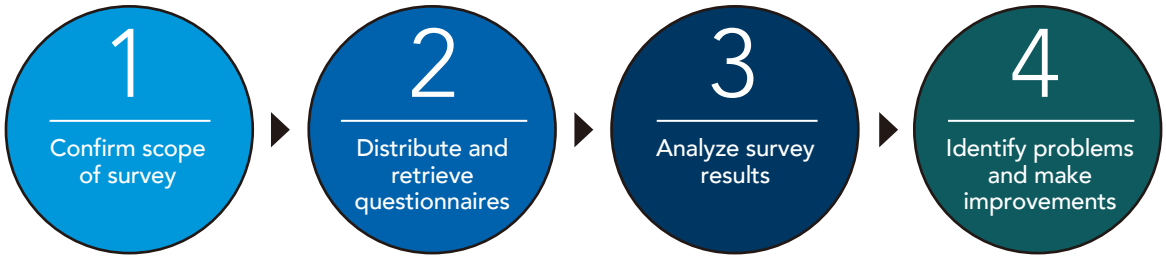
We manufacture printed circuit boards by strictly adhering to the production control and quality control processes and referring to information provided by customers on materials, electronic components, and design data. When shipping products, we voluntarily provide customers with information on the name of materials, ingredients, environmental testing reports (compliance with RoHS, HF, and REACH among other requirements), and safety regulations, we then label the outer box accordingly for customer identification. In 2022, the Company clearly labeled its products based on actual testing results and customer requirements.

Zhen Ding provides customers with product materials that are 100% compliant with the EU RoHS regulations and works together with supply chain partners to protect human health and ensure a sustainable environment.

Customer satisfaction

In order to continuously monitor, analyze, and understand how customers evaluate the company's product quality (including environmental requirements), delivery quality, engineering capability, services, and cost (price), we conduct customer satisfaction survey at least once every year. From the results, we analyze items with which customers are dissatisfied and adopt corrective and preventive actions accordingly as to achieve maximum customer satisfaction. The average score of the customer satisfaction survey in 2022 was 89.5%. In order to continuously improve the quality of service and competitiveness of products, the average score target of the customer satisfaction survey in 2023 has been set at 90%.

Customer Satisfaction Survey Process



Continuously Improve Customer Satisfaction from Three Directions

ENVIRONMENT

Environmental Protection for the Benefits of the Society

3-1 Environmental Sustainability

As a global leading PCB company, Zhen Ding realizes the risks of climate change and the potential impacts. We are also deeply aware of the importance of green environmental protection to corporate sustainable development. We believe that if we can play a leading innovator role in environmental protection and energy conservation, we can definitely encourage the entire industry to actively take green actions.

Zhen Ding's Environmental Policy

Prevent Pollution, Continue to Reduce Waste, Provide Environmentally Friendly Products, Protect the Earth by Saving Energy, and Be a Green Company.

For this reason, Zhen Ding established the Environment and Conservation Division as the unit dedicated to managing matters related to environmental protection and energy conservation. The Division is in charge of undertaking tasks involved in internal environmental project planning, adding values to resource benefits, practicing environmental management, and introducing innovative energy-saving technologies. Thus, as we engage in production and manufacturing, we can also maximize the effective of various energy and resources to reduce carbon emissions and waste generations, thereby propelling companies to become an excellent green company.

Zhen Ding aims to build a new environment-friendly PCB-conforming demonstration production site and become the promoter and model example of environmental sustainability.

Green Culture

Charles Shen, the Chairman of Zhen Ding, proposed the idea of "Seven Greens" practices in 2008, which include: green services, green production, green existence, green chain of supply, green innovation, green actions on recycle, and green logistics. These practices provide a comprehensive guide for employees to carefully examine and analyze every aspects in production processes and activities of daily living and to engage in green practices such as saving energy, reducing consumption, reducing waste, and increasing efficiency. We adopt the CAPDCA model and brainstorming methods to realize this green culture in day-to-day operations at work and slowly become a habit among all of our employees, thus creating a special green corporate culture that cultivates our most valuable intangible assets.

The professional management team of the Company's Environment and Conservation Division continues to promote various green vision projects with other units. In 2013, we set up "In-house Environmental Specialist", where they applied a series of optimal control measures, including energy saving, water saving, and waste emission reduction, to the three main stages of our manufacturing sites: source, process and end of process. The scope of these measures cover five major categories: 8S, energy saving, water saving, emissions, and waste management. We engage in environmental projects based on the characteristics of our industry; these projects are aimed at reducing manufacturing/production wastes at the source by using water sparingly and reducing the use of chemically treated water. By implementing detailed source management and introducing new green technologies, we clearly stipulate requirements for responsible departments and for developing key performance indicators that will reduce environmental impacts and achieve the objectives of energy performance improvement and green recycling. We pays considerable attention to the impact of climate change on our business operations. In addition to taking actions for energy conservation and carbon reduction, we expanded the scope of the following activities to achieve greenhouse gas reduction:

(1) We inventoried the greenhouse gas emissions of our major suppliers, guided them on establishing ISO systems, and increased the depth of suppliers' green management to enhance the company's green influence.

(2) We participated in the CDP "climate change" and "water security" evaluations. We announced our green development ideals and green performance as we learned about carbon and water management from world-class companies.

(3) Introduced TCFD management structure and management.

(4) Evaluate carbon reduction goals based on the SBTi methodology.

The main production sites of Zhen Ding in China have all passed the certification of environmental safety and health related management systems, and the certification rate is 100%, including: ISO 14001 Environmental Management System, ISO 14064-1 Greenhouse Gas Inventory, ISO 50001 Energy Management System, and Cleaner Production Audit in China. At the same time, we also follow the international development trend of environmental protection, introducing and certifying the latest international environmental management system standards, such as: UL2799 Zero Waste for Landfill and AWS International Water Stewardship Standard. Starting from 2021, the Boardtek Electronics Corporation was included, and the relevant ISO system certifications continued to be completed.

Note: On November 4, 2020, BoardTek Electronics Corp. officially became a 100% owned subsidiary of Zhen Ding.

Investment in Environmental Protection Measures

The rise in environmental awareness across sectors in recent years has promoted members of the society to scrutinize corporates' environmental efforts. China has implemented increasingly strict control over the emission of pollutants. In the foreseeable future, companies will find it difficult to expand production capacity without increasing total waste generation. To prepare for this trend, we actively develop advanced technologies that facilitate environmental protection through energy conservation, water conservation, emission reduction, and water recycling. Through these technologies, we hope to reduce the environmental impact of our operations and guide the industry toward sustainable development. In 2022, our environmental protection investment totaled NT$370 million.

Environmental protection investment amount in 2022: NT$370 million	
Amount invested in directly reducing environmental load: Includes pollution prevention, resource conservation, and the construction and maintenance costs of business waste storage facilities.	NT$304,164 thousand
Amount invested in indirectly reducing environmental load: Includes environmental protection education and training, environmental management system certification, environmental monitoring, procurement of environmental protection products, environmental protection and organization operation and management, and related research and development expenses.	NT$60,613 thousand
Investment amount in climate change response	NT$1,521 thousand

Note: The amounts in the table are the invested amounts and do not include operating costs.

Environmental Law Compliance

In recent years, environmental protection regulations have become stricter. PCB manufacturing is characterized by high water consumption and high concentrations of chemicals. Zhen Ding collects and treats the wastewater, waste and emissions generated during production in accordance with the law, optimizes the manufacturing process, and reduces environmental pollution. From time to time, we collect government regulations and policy requirements, analyze the operation compliance of each campus, and evaluate the compliance with regulations. In 2022, all the manufacturing campuses complied with the corresponding requirements and there were no incidents of non-compliance.

The Company has established an email (zdt-contact@zdtco.com) and a mailbox for employees and the general public to provide feedback on environmental protection and environmental issues. The collected feedbacks will be sent to various dedicated units and department head for appropriate handling. Our plants have established feasible environmental contingency plans that clearly describe the relevant requirements of department heads and fast-response mechanisms when the company encounters environmental emergencies. The company adopts information disclosure, digitization, and institutionalized strategies to strengthen Zhen Ding's focus on and management of environmental protection.

To improve employees' knowledge on environmental and energy laws, the company's subsidiaries have tasked the supervisors of environmental and human resources units with providing training and educational courses on environmental protection and energy conservation to employees. These courses cover: information on laws relevant to the environment such as air, water, waste, soil, and toxic and hazardous substances, procedures for reporting environmental activities, and practical training on auditing skills. The purpose of these courses is to implement a CAPDCA model in environmental management and increase personnel's experience and capabilities in environmental protection and energy conservation. Thus, employees could serve the company with greater expertise and ensure that the company meets environmental requirements. In addition, we constantly introduce high-performance equipment and technologies to recycle more wastewater without generating more wastes. We also continuously optimize processes and actively promote our Seven Greens culture, enhancing environmental protection and becoming a benchmark company in the industry.

3-2 Act on Climate Change

Climate change has become one of the biggest environmental challenges globally. The Paris Agreement, adopted during the United Nations Climate Summit in 2015, aims to limit the global temperature rise within this century to below 2°C and strives to further limit it to 1.5°C. During the same period, the United Nations introduced the "2030 Sustainable Development Goals (SDGs)", consisting of 17 goals for sustainable development. Among them, SDG 13 specifically focuses on climate action, highlighting the significance of addressing climate change as a crucial issue for global environmental protection. To respond to global initiatives in advance, such as the goal of limiting global warming to 1.5°C and the transition to net-zero, we are establishing a climate risk management mechanism and enhancing our resilience and adaptability. This will enable us to seize business development opportunities driven by these demands. As a key player in the global PCB industry, Zhen Ding plays an important role in the transition towards a low-carbon economy worldwide. We actively engage in efforts to address climate change.

Climate-related Policies and Goals

As Zhen Ding continues to develop and grow, we have been adhering to our business mission and implementing our environmental policy. Responding to climate change is our responsibility of being sustainable, our goal is to establish the "New Environment-Friendly PCB Demonstration Production Site" to become the promoter and demonstrator of environmental sustainability. We believe that only through the cooperation of industry organizations, associations, partners, industry and academia, and the whole society we can overcome the severe challenges brought by climate change.

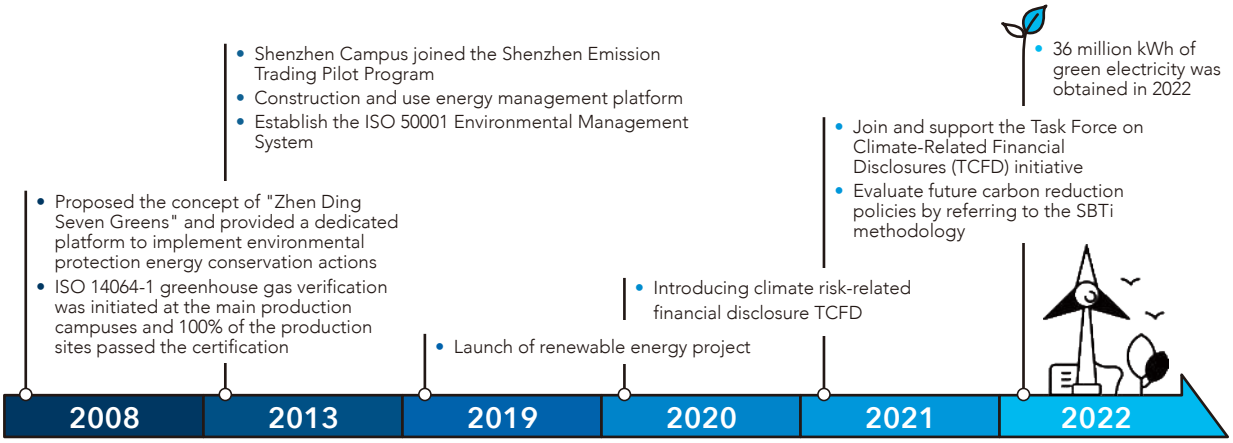
Zhen Ding began voluntarily implementing GHG inventories since 2007 to monitor the status of carbon emissions of the company's subsidiaries. We integrated local government requirements and our sustainable development strategies, formulated climate change management strategies and green development goals, and actively implemented various GHG emissions reduction programs. We have adopted greenhouse gas reduction strategies based on methodologies such as SBTi. We are evaluating various decarbonization scenarios and integrating the use of 100% renewable energy to achieve our net-zero emissions target by 2050.

Management	Main strategies	Goal
Promote Low-Carbon Green Manufacturing	• Conduct ISO 14064-1 inventory of Scopes 1, 2, and 3 GHG emissions and pass external verification. • Continue to implement various innovative energy conservation and emission reduction projects. • Actively participate in the CDP questionnaire. • Use clean/renewable energy. • Realizing low carbon manufacturing through energy conservation, green energy, and energy storage.	• Set the 2025 green sustainability carbon emission target based on our energy consumption: Reduce Scope 1 and Scope 2 GHG emissions per unit revenue by more than 40% (using 2013 as the base year). • 36 million kWh of green electricity was obtained in 2022. • 250 million kWh of green electricity is planned to be obtained from 2023 to 2024. • Expand project effectiveness and introduce new energy-saving and emission-reducing technologies (total heat recovery chillers, magnetic levitation blowers, permanent magnet motors, waste heat recovery from compressed air systems, energy-saving wire cutting machines, chemical reuse, and energy-saving harmonic testing of motors). • Promote green upgrade and reforms, as well as a circular economy (gold recycling and copper recycling), to accelerate our steps toward becoming an excellent green company. • Achieve net zero by 2050
Increase Energy Efficiency	• Continue to implement ISO 50001 Energy Management System	• Optimize electrical power systems systematically, constantly increase energy efficiency, and fulfill corporate social responsibilities by protecting the environment and saving energy.

Response to Climate Change

Climate Change Response Process

As more advanced manufacturing processes evolve, the product manufacturing process also becomes more complex. In addition, with companies continuing to develop and expand, electricity consumption continues to rise. In response to global climate change, Zhen Ding is actively exploring paths toward green developments.



Governance

Board of Directors	• Board of Directors oversees the risks and opportunities associated with climate risks and appoint a member of the Sustainable Development Committee to supervise climate risk management. • The Sustainable Development Committee is responsible for reviewing the implementation status of climate change-related issues and appoints a project manager to reports to the Board of Directors on the strategy and operational direction of climate change related issues, monitor risk events, review energy saving and carbon reduction targets and annual budgets, and the implementation outcomes of climate change-related issues. • Decide on major investment projects, such as green buildings.
Chairman	• Sustainability Committee convener. • Person in charge of climate risk management.
Sustainability Executive Council Sustainable Governance Implementation Team and Environment and Energy Conservation Implementation Team	• The Sustainable Governance Implementation Team and Environment and Energy Conservation Implementation Team are appointed as the groups responsible for managing climate risks. In order to assess and manage climate related risks and opportunities, the groups study international climate related trends, gain a deeper understanding of stakeholder needs, and plan strategies and implementation plans for climate related issues. • The Sustainable Governance Implementation Team and Environment and Energy Conservation Implementation Team review the implementation status of management plans to the Chairman on a quarterly basis for in-depth discussion and decision-making. • The Environment and Energy Conservation Implementation Team holds quarterly meetings on the Seven Greens, and it is responsible for promoting energy conservation projects at the manufacturing sites and reviewing the KPIs of each department to reduce greenhouse gas emissions and mitigate climate change.

Key Points of the Environmental Responsibility Issues Presented to the Sustainability Committee

Implementation results in 2022

- Annual stakeholder dialogue.
- Response to the United Nations SDGs:
  - Management policy, performance, and sustainable development goals of water resource efficiency and water resource management.
  - Management policy, performance, and sustainable development goals of recycling and waste management.
  - Management policy, performance, and sustainable development goals of climate change and greenhouse gas emissions.
- Proposal for adding international advocacy organizations.
- Use of renewable energy and implementation of solar energy projects.
- Green awards received.
- Green supply chain energy saving and carbon reduction plan.
- Promote green concepts, advance the Green Technology Paper Award, foster exchanges with faculty and students from universities, and actively join advanced environmental organizations, associations, and alliances.
- Climate change strategy sharing and suggestions, transformational and physical risk response and countermeasures.

Future Green Development Plans

- Planning for medium and long-term climate change response, strengthening climate risk assessment and physical risk prevention.
- Continue to develop renewable energy projects, expand scope of solar energy projects, and strive to continuously increase the ratio of green electricity usage.
- Continue to introduce and develop energy-saving and emission-reducing technologies and energy-saving equipment to achieve energy-saving and carbon-reducing performance, and improve energy utilization efficiency.
- Continue with resource conservation and recycling, develop waste reduction technologies, goals to achieve 100% recovery of precious metals, and evaluate recycling.
- Achieve a wastewater reuse rate of over 50% by 2025 to maintain our industry-leading position.
- Strengthen the green supply chain, continue to promote supplier risk assessment, promote environmental protection projects, and enhance the overall green value of the supply chain.

Note: Revised the target to 50% due to a comprehensive environmental benefit assessment. Based on the current best available technologies, further increasing the water reuse rate would require higher energy consumption and result in a significant increase in hazardous sludge, which is not entirely environmentally friendly.

Actively Participate in Environmental Organizations, Associations, and Alliances

The main environmental-related associations, organizations, and alliances in which Zhen Ding participates include: China Printed Circuit Association (CPCA), Guangdong Printed Circuit Association (GPCA), Shenzhen Printed Circuit Association (SPCA), Taiwan Printed Circuit Association (TPCA), Institute of Public and Environmental Affairs (IPE), CDP, Shenzhen Emissions Exchange, Ministry of Environmental Protection (China Environment News) of the People's Republic of China, Alliance for Water Stewardship (AWS), Responsible Business Alliance (RBA), and Task Force on Climate-Related Financial Disclosures (TCFD).

Risk Identification and Management

Zhen Ding references the Task Force on Climate-related Financial Disclosures (TCFD) list released by the Financial Stability Board (FSB) in 2017. We identified relevant risks and opportunities related to climate change and incorporated climate change risk considerations into our existing risk management framework to facilitate long-term monitoring and ensure effective climate governance outcomes.

Climate Risk Information and Response Strategies

Category	Climate related issues	Risks	Operational impact	Risk impact period (Short-, mid-, and long-term)	Likelihood of occurrence	Level of impact	Company's existing risk management measures	Possible derivative opportunities
Policies/ Regulations	Renewable Energy-Related Regulations	The national policies and regulations regarding the use of renewable energy and energy efficiency requirements for our production sites have been strengthened. In compliance with regulations, the replacement of old equipment or the mandatory purchase of a certain proportion of renewable energy may lead to potential challenges in the future. These challenges could include shortages in the supply of renewable energy in the market and an increase in energy prices.	Increase in operating costs Increased expenses	Short-Term	Low	High	1. Advance planning to adjust the energy structure and sign long-term cooperation agreements in advance with power supply companies on the market to ensure the supply of renewable energy. 2. Research renewable energy development projects and negotiate in advance for cooperation.	Actively participate in renewable energy programs, purchase green electricity, and increase the percentage of renewable energy usage to gain customer recognition and win market share.

Category	Climate related issues	Risks	Operational impact	Risk impact period (Short-, mid-, and long-term)	Likelihood of occurrence	Level of impact	Company's existing risk management measures	Possible derivative opportunities
Policies/ Regulations	Greenhouse Gas-Related Regulations	The Shenzhen Manufacturing Site is an market-controlled enterprise as it is a part of the Shenzhen Emission Trading Pilot Program. It is mandatory to participate in the inventory and carbon trading, and it has set up emission limits (emissions per unit of industrial value added). In the future, if the carbon quota does not meet usage requirements, carbon credits must be purchased, which may increase operating costs.	Increased expenses	Mid-Term	High	Medium	1. Continue to implement ISO 14064 verification, pass certification, and set reasonable carbon management goals. 2. Study the development trend and cooperate with international organizations to develop carbon management plans. 3. Actively participate in carbon trading markets.	Establish a viable carbon management system, control carbon management targets, reduce the cost of excessive carbon emissions, gain government policy support and incentives, meet the expectations of external stakeholders, gain customer recognition and implement good energy management in the market. Carbon can be transformed into the Company's carbon asset according to the existing market developments.
	Water Resources-Related Regulations	There are currently no regulations on water abstraction/ supply/use/recycling. At present, the competent authorities are encouraging enterprises to manage water resources voluntarily.	1. Increase in operating costs 2. Suspension of operations	Long-Term	Low	Medium	1. Develop water conservation measures, including wastewater reuse, machine shop reuse, process water conservation measures. 2. Implement advanced management systems, such as CWP and AWS. 3. Monitor and control water consumption targets, review regularly, no excessive consumption, and continuously improve water utilization efficiency.	We aim to enhance water resource management performance, strengthen resilience to climate change, promote water resource efficiency and diversification, reduce production costs, ensure business continuity, gain customer recognition, and increase customer trust.
	Energy Saving-Related Regulations (electricity restrictions)	Currently, there is no regulation on power saving or restrictions in Zhen Ding's industry, but in the future, we may face power shortage and restriction on production, such as restricting the time of electricity consumption for those with low unit energy production value.	1. Increase in operating costs 2. Suspension of operations	Long-Term	Low	Medium	1. Develop power saving measures, including energy saving in production equipment and automatic water and electricity shutdown according to work processes. 2. Use high-efficiency energy-saving equipment, such as permanent magnet motors and magnetic bearing chillers. 3. Promote energy management platforms to monitor equipment operating rates and automatically analyze energy consumption rationality. 4. Monitor and control power consumption targets, review regularly, and continuously improve power utilization efficiency.	Improve power efficiency, reduce production costs, develop energy storage applications, ensure business continuity, gain customer recognition, and win market share.
Market	Upstream - Material supply cut off	Due to various factors such as extreme weather conditions and market supply and demand, there is a shortage in the supply of upstream chemical raw materials. This shortage has resulted in price increases for raw materials and disruptions in transportation, leading to delays in the delivery of raw materials and subsequent production processes.	1. Increase in operating costs 2. Reduce revenue	Long-Term	High	Low	1. Establish a second source to prevent the risk of having only a single supplier, in order to ensure uninterrupted supply and improve price negotiation and services. 2. Provide the current pricing trend and the impact of material increase for the business to propose price increase to customers.	Be prepared with diversified sources of raw materials to reduce the risk of material interruption, and in times of tight supply, customers will favor manufacturers who can supply without fail.

Category	Climate related issues	Risks	Operational impact	Risk impact period (Short-, mid-, and long-term)	Likelihood of occurrence	Level of impact	Company's existing risk management measures	Possible derivative opportunities
Market	Upstream - Increase in raw material costs	Due to the response in the upstream supply chain toward global climate change, there has been an increase in investment in energy conservation and carbon reduction. As a result, the operating costs of the supply chain have increased, leading to an increase in the selling prices of their products. Different countries are investing in green energy development and regulations require the use of new energy vehicles, resulting in a significant increase in demand for copper and an imbalance between supply and demand, resulting in a significant increase in copper prices.	Increase in operating costs	Mid-Term	High	Medium	1. Establish a second source to prevent the risk of having only a single supplier, in order to ensure uninterrupted supply and improve price negotiation and services. 2. Provide the current pricing trend and the impact of material increase for the business to propose price increase to customers.	Be prepared with diversified sources of raw materials to reduce the risk of material interruption, and in times of tight supply, customers will favor manufacturers who can supply without fail.
	Downstream - Low carbon and environmental requirements for products	Increasingly stringent product environmental regulations, such as RoHS 2.0, REACH, and California Proposition 65, or specific customer's demand for environmentally friendly materials (e.g., halogen-free materials) that surpass regulations, resulting in more costs for products, in order to control the risk of exceeding harmful substance standard or to meet customers' expectations.	Increase in operating costs	Short-Term	High	Medium	1. Evaluate new or changed laws and regulations in accordance with ST-2B0-006 (compliance assessment management system for regulatory and other requirements), and make timely improvements to non-compliant items. 2. Strictly follow the "five no's" principle of hazardous substance control to eliminate the inflow and outflow of hazardous substances. 3. Improve the Company's level of inspection of hazardous substances and increase the items or frequency of inspection. 4. Introduce green circular manufacturing technology and recycled materials usage. 5. Develop low-carbon green products through low carbon and circular economy principles.	Reduce the amount of hazardous substances in our products to comply with most countries' environmental regulations. We engage in research and development of low-carbon green products to enhance our market competitiveness and establish long-term partnerships with our customers.
	Investment - ESG Ratings	Currently included as a constituent of the FTSE4-Good TIP Taiwan ESG Index and TWSE Taiwan Corporate Governance 100 Index. Failure to continuously improve ESG performance may affect the company's reputation, which in turn affects capital raising.	Not easy to raise capital	Short-Term	High	Low	1. Refine ESG practices (objectives and strategies, impact of implementation, effectiveness and sustainability, performance results and leadership). 2. Improve report quality (completeness, credibility, communication). 3. Enhance external disclosure channels (multi-media design and interactive functions, stakeholder communication and feedback channels, website sustainability section management, electronic version of reports).	Obtain third-party accreditation, so that investors can decide whether to invest (amount) or lend (interest rate) based on the Company's ESG performance to stabilize capital sources and stock prices.

Category	Climate related issues	Risks	Operational impact	Risk impact period (Short-, mid-, and long-term)	Likelihood of occurrence	Level of impact	Company's existing risk management measures	Possible derivative opportunities
Entities	Extreme high temperature/ drought	Extreme high temperature may cause heatstroke or food poisoning, equipment abnormalities, and the risk of spontaneous combustion of materials. Drought due to continued extreme high temperature may cause water demand failure for manufacturing process, living, and firefighting needs, which may affect the production.	1. Increase in operating costs 2. Suspension of operations	Long-Term	Low	Low	1. Notify all departments in a timely manner according to the weather forecast of the weather station, and supervise all departments to make emergency preparations. 2. Air conditioning temperature should be lowered, reduce the time of high-temperature operation, and health stations are well-prepared with medicine to prevent heatstroke. 3. The equipment department should increase the frequency of equipment and facility inspections and maintenance and prepares equipment for cool down. 4. Implement measures to address droughts, regularly inspect firefighting and daily water reservoirs to ensure an adequate water supply, and enhance the promotion of water conservation.	Strengthen response mechanisms to enhance the resilience of company operations.
	Extreme cold	May cause frostbite to personnel or food shortage, equipment abnormalities, freezing and bursting of firefighting and other fuel transportation lines.	1. Increase in operating costs 2. Suspension of operations	Long-Term	Medium	Low	1. Notify all departments in a timely manner according to the weather forecast of the weather station, and supervise all departments to make emergency preparations. 2. Air conditioning temperature should be raised, reduce the time of low-temperature operation, and health stations are well-prepared with medicine to prevent frostbite. 3. The employee dormitory department should prepare bedding against the cold to meet the needs of employees who are stranded and cannot return home. 4. The mechanical and electrical department should take measures to keep machines, equipment, and pipes warm.	
	Heavy rainfall and flooding	Floods affect employee attendance and wastewater treatment systems, and may cause disruptions in water and electricity supply, logistics and transportation, or supply chain disruptions, resulting in production stoppages or reductions and loss of resources.	1. Increase in operating costs 2. Suspension of operations	Long-Term	Medium	Low	1. We closely monitor weather forecasts and take immediate precautionary measures as soon as we receive warnings of heavy rain or severe weather conditions. Relevant departments are always prepared to ensure necessary protection measures are in place. 2. Activate contingency mechanism, prepare drainage pumps for E&M, conduct comprehensive inspection of the system, environmental workers should check the sewage pipes, different departments should check the drainage outlets, and contact government units for assistance if necessary. 3. Each manufacturing site has built flood prevention facilities, such as flood control stations, flood gates, flood pumps, flood barriers, etc.	No

Analysis of Physical Climate Risk Scenarios and Response

Zhen Ding uses Climate Central's Sea Level Rise Map to evaluate the rising sea level under different warming scenarios. Analysis of the topography, altitude, plant and ground drop, and other timing conditions of each manufacturing campus, and the overall risk assessment result of each operating manufacturing campus is low risk. Scenario Simulation scenario: Sea level rise due to rising temperature was simulated.

Results of Sea Level Rise Risk Analysis

Scenario Simulation	Risk Analysis Results of Manufacturing Campus			
	Shenzhen Campus	Huai'an Campus	Qinhuangdao Campus	BoardTek Campus
Temperature rise of 2°C and sea level rise of 4.7m	Low	Low	Low	Low
Temperature rise of 4°C and sea level rise of 8.9m	Low	Low	Low	Low

If there is a risk of seawater intrusion due to rising sea levels or other factors, it may lead to poor drainage and increase the probability of localized flooding. This could result in additional operational costs for managing water-related disasters. Although the risk of rising sea level is evaluated to be low for all production campuses of Zhen Ding, in order to cope with possible extreme weather and heavy rainfall, each manufacturing campus has built flood prevention facilities, such as flood control stations, flood gates, flood pumps, flood barriers and other facilities. In addition, Zhen Ding has also assessed the risk of water resources in the future climate scenario, please refer to "Water Resources Management" in this report for more details. Simulation of extreme weather, even though the plant buildings in the manufacturing campus do not accumulate water. To prevent the accumulation of water on the lowest road surface of the manufacturing campus, the aforementioned flood control facilities have been built in each campus.

Flood Prevention Measures and Planning for Each Campus

Manufacturing Campus	Risk Response					
	Flood wall	Installation of water pumps	Flood Gate for the main door	Sandbags	Flood barrier for the basement	Management measures
Shenzhen Campus	V	V	V	V	V	1. Daily inspection of rainwater drainage facilities (roof and underground). 2. Pay attention to rainfall forecast and open rain drainage valves immediately for heavy rainfall. 3. Monitor the water level of the river, whether there is a blockage, and promptly report to government units for assistance. 4. Flood pumps (connected to emergency electricity) should be tested regularly. In the event of a heavy rain, if the water level of the river rises and rainwater cannot be discharged, the valve of rainwater discharge should be closed, and the flood pump should be activated to pump water outside the fence. 5. Boardtek Electronics Corporation is located at the highest point of the Guanyin Industrial Park in Taoyuan, and the plant is 21 meters above sea level. Boardtek Electronics Corporation has never experienced flooding since its establishment, and a software prediction and analysis report from the Taiwan Science and Technology Center for Disaster Reduction indicates that even with a rainfall of 650mm within 24 hours, there is still no risk of flooding at Boardtek Electronics Corporation.
Huai'an Campus	V	V	V	V	V	
Qinhuangdao Campus	V	V	V	V	V	
BoardTek Campus	V	The evaluated risk is very low and the drainage facilities are sufficient.	The risk is very low, therefore sandbags are used as backup.	V	The risk is very low and the drainage facilities are sufficient.	

Energy management

The Shenzhen Campus completed the establishment of the ISO 50001 energy management system in 2013, and continues to improve the company's energy management and operation standards. All major plants in China have completed ISO 50001 energy management certification and operations, and 100% have obtained ISO 50001 energy management system certificate. In 2022, the company continued to its efforts on the ISO 50001 energy management system to reduce energy and resource use and consumption through various means, improve energy utilization efficiency, and actively launch energy saving and carbon reduction actions in each plant.

ISO 50001 energy management system's energy approaches: energy saving, emission reduction, greening, recycling, compliance, standardization, integration, and responsibility.

Under the standard operation of ISO 50001 energy management system, we continue to strengthen energy management to ensure:

- Compliance with legal and regulatory requirements and the implementation of national and regional energy conservation policy requirements.
- Proper investment of resources to ensure the completion of energy saving targets.
- Meet the energy needs of production and manufacturing, actively adopting technically sound and economically feasible solutions, and continuously improving energy efficieny performance.
- Avoid excessive energy usage, reduce energy consumption, and achieve low-carbon operations.
- Support the procurement of energy-efficient products and services, and accelerate the elimination of outdated equipment and technologies.
- Raise the awareness of all employees and fully implement energy management.

Energy Usage Analysis

In 2022, Zhen Ding's subsidiaries use purchased electricity as primarily source, which is followed by natural gas. Other sources of energy include purchased steam, purchased heat for winter heating, self-generated solar power, as well as gasoline and diesel for company vehicles and goods transportation in manufacturing campuses. The total energy consumption, was 6,209,379 GJ (including self-generated solar power). The proportion of purchased electricity (including green energy) was 82%, and the proportion of renewable energy usage was 2.2%. The energy intensity was 36.24 (GJ/NTD million) in 2022, decreased 11% compared to 2021. The major business locations of our subsidiaries consumed 1,414,113 MWh (5,090,807 GJ) of electricity (including externally purchased green electricity) in 2022, and power intensity was 8.25 MWh/million NTD (29.71 GJ/million NTD), which was a decrease of 10% compared to the previous year. Furthermore, in 2022, Zhen Ding has obtained 36,266 MWh of green energy, of which 29,910 MWh was from solar power and 6,316 MWh was from wind power. The significant decrease in energy intensity is mainly attributed to the implementation of various energy-saving measures and process optimization, such as the utilization of system heat recovery. We will continue to promote energy-saving and consumption reduction in our processes. We will also adjust and optimize our product portfolio, develop low-carbon and energy-efficient products, increase the proportion of renewable energy usage, and enhance revenue growth momentum to achieve our long-term goal of reducing energy intensity.

A solar energy system with a total area of 15,000m^2 has been constructed in 2022, generating an annual electricity output of 3,952 MWh and reducing carbon emissions by 2,780 tons. Zhen Ding is continuously increasing the construction area for solar power generation and is also seeking more renewable energy partners to plan deployment for the future to achieve maximum use of renewable energy in the Company and strive towards achieving carbon neutrality goals.

Note: Sources of equation for calculating energy intensity in gigajoules (GJ) and energy values
1. Energy intensity=Energy value × Energy Used ÷ Revenue.
2. Electricity energy value: 3,600 KJ/kWh; gasoline energy value of 43,070 KJ/Kg; diesel energy value of 42,652 KJ/Kg; natural gas energy value of 38,931KJ/m^3; externally purchased steam energy value: 2,768.86KJ/kg for Huai'an.

2022 Energy Consumption Overview

Category	Energy	Unit	Usage	Energy Intensity (GJ/NTD million)	Energy Ratio
Non-renewable energy	Purchased electricity	MWh	1,377,887		
		Gigajoules (GJ)	4,960,393	28.95	79.9%
	Gasoline	liter (L)	107,787		
		Gigajoules (GJ)	3,442	0.02	0.1%
	Diesel	liter (L)	85,661		
		Gigajoules (GJ)	3,381	0.02	0.1%
	Natural gas	cubic meter (m^3)	13,823,173		
		Gigajoules (GJ)	538,150	3.14	8.7%
	Purchased steam	Tons	152,052		
		Gigajoules (GJ)	421,010	2.46	6.8%
	Purchased heat power	Gigajoules (GJ)	138,361	0.81	2.2%
Renewable energy	Solar power (Self-generation for self-use)	MWh	3,952		
		Gigajoules (GJ)	14,228	0.08	0.2%
	Purchased electricity (Green electricity)	MWh	36,226		
		Gigajoules (GJ)	130,414	0.76	2.0%
Total				36.24	100%

Note: This disclosure traces the historical data to reveal the increase in the use of renewable energy.

Energy Consumption Status of Zhen Ding in the Past 5 Years

Category	Energy	Unit	2018	2019	2020	2021	2022
Non-renewable energy	Purchased electricity	MWh	910,892	989,495	1,126,831	1,423,830	1,377,887
	Gasoline	liter (L)	333,612	229,540	141,660	105,076	107,787
	Diesel	liter (L)	155,904	57,292	79,081	114,463	85,661
	Natural gas	cubic meter (m^3)	12,623,606	13,845,454	14,589,776	15,099,001	13,823,173
	Purchased steam	Tons	121,466	114,901	123,312	141,398	152,052
	Purchased heat power	Gigajoules (GJ)	121,826	124,045	141,977	179,057	138,361
Renewable energy	Solar power generation	MWh	/	/	1,469	2,370	3,952
	Purchased electricity (green energy)	MWh	/	/	/	/	36,226
Total		GJ	4,245,459	4,553,093	5,120,643	6,300,195	6,209,379

Note: This disclosure traces the historical data to reveal the increase in the use of renewable energy.

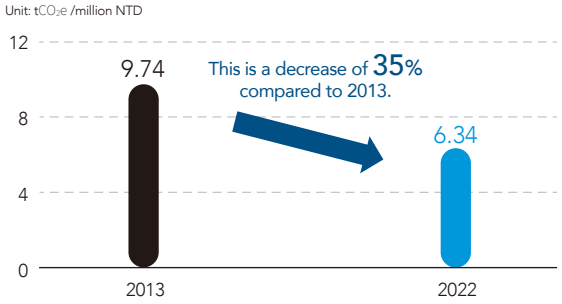
Energy Intensity of Zhen Ding in the Past 5 Years

Category	Energy	Unit	2018	2019	2020	2021	2022
Electricity	Purchased electricity	GJ/million NTD	27.81	29.67	30.90	33.06	28.95
	Solar power		/	/	0.04	0.06	0.08
	Purchased electricity (green energy)		/	/	/	/	0.76
Subtotal of electricity intensity			27.81	29.67	30.94	33.12	29.79
Non-electricity	Gasoline		0.09	0.06	0.03	0.02	0.02
	Diesel		0.05	0.02	0.02	0.03	0.02
	Natural gas		4.17	4.49	4.33	3.79	3.14
	Purchased steam		2.86	2.65	2.60	2.53	2.46
	Purchased heat power		1.03	1.03	1.08	1.16	0.81
Subtotal of non-electricity intensity			8.2	8.3	8.1	7.5	6.45

GHG Emissions

Therefore, since 2007, Zhen Ding has periodically conducted annual GHG verification in accordance with the ISO14064-1 standard, and obtained third-party verification certificates. The scope of verification includes our five major production campuses in areas where our subsidiaries are located.

In 2022, the combined Scope 1 and Scope 2 greenhouse gas emissions from Zhen Ding's major production locations was 1,086,026 metric tons of CO_2e, with a carbon intensity of 6.34 tons CO_2e/ million NTD. This represents a 35% decrease compared to 2013. In the future, we will expand solar power generation construction, develop renewable energy projects, purchase green energy, develop energy storage solutions, and reduce carbon emissions. Currently, Zhen Ding's Scope 3 greenhouse gas emissions inventory includes the five categories of upstream transportation and distribution, downstream transportation and distribution, waste management, business travel, and employee commutes. Zhen Ding plans to conduct education and training and relevant preparations for all categories of Scope 3 emissions in 2023 to 2024. Once completed, the inventory process will begin.



Note: 1. The greenhouse gas audit method is operational control.
2. Scope 1 and Scope 2 emission intensity in 2022 includes the Boardtek Electronics Corporation.

GHG Emission Status

Item	Unit	2018	2019	2020	2021	2022
Scope 1	tCO_2e	36,881	38,076	42,289	53,131	83,252
Scope 2	tCO_2e	678,134	694,596	849,479	1,041,369	1,002,774
Scope 3	tCO_2e	14,704	10,923	11,800	28,476	47,610
Total Scope 1 and Scope 2 amount	tCO_2e	715,015	732,672	891,768	1,094,500	1,086,026
Total Emissions	tCO_2e	729,719	743,595	903,568	1,122,976	1,133,636
Scope 1 and Scope 2 emission intensity	tCO_2e /million NTD	6.06	6.10	6.79	7.06	6.34
Percentage reduction targets for Scope 1 and Scope 2 carbon intensity (compared to 2013)	%	20	23	25	30	33
Actual percentage reduction of Scope 1 and Scope 2 carbon intensity (compared to 2013)	%	37	37	30	28	35

Note: 1. The greenhouse gas verification method is operational control. Covers the Shenzhen Campus, Qinhuangdao Campus, Huai'an Campus I, Huai'an Campus II, and BoardTek Campus. You can find the greenhouse gas verification certificates for each campus on the Zhen Ding official website at www.zdtco.com/en/csr/list/ESGData/ESGCertification The legal entity for the Shenzhen Campus is Avary Holding (Shenzhen) Co., Limited. The legal entities for Qinhuangdao Campus include Hong Qi Sheng Precision Electronics (Qinhuangdao) Co., Ltd. and Qi Ding Technology Qinhuangdao Co., Ltd. The legal entity for Huai'an Campus I is Hong Heng Sheng Electronical Technology (Huaian) Co., Ltd. The legal entities for Huai'an Campus II include Qing Ding Precision Electronics (Huaian) Co., Ltd. and Yu Ding Precision Electronics (Huaian) Co., Ltd. Lastly, the Boardtek Campus is represented by Boardtek Electronics Corporation.

2. Emission coefficient is calculated using the latest standards announced by local governments in China and Taiwan (electricity emission coefficient: Shenzhen 0.5271 kg CO_2e/kWh, Qinhuangdao 0.8843 kg CO_2e/kWh, Huai'an 0.7035 kg CO_2e/kWh, Taiwan 0.509 kg CO_2e/kWh).

3. The types of gases included in the calculation are: carbon dioxide, methane, nitrous oxide, chlorofluorocarbon, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride. The global warming potential (GWP) ratios used are based on the data from the IPCC 6th Assessment Report.

4. In 2013, the hardware infrastructures were complete, therefore, 2013 is used as the baseline for comparison with environmental data. Baseline year 2013: Scope 1 emissions were 35,282 tons CO_2e, Scope 2 emissions were 593,025 tons CO_2e, and Scope 3 emissions were 4,486 tons CO_2e. Scope 1&2 emissions intensity was 9.74 tons CO_2e/million NTD.

5. Emission intensity = Scope 1 and 2 carbon emissions ÷ Zhen Ding's consolidated revenue.

6. The carbon emission intensity reduction target for 2025 is 40% (based on the 2013 carbon emission intensity of 9.74 tons CO_2e/million NTD).

7. On November 4, 2020, BoardTek Electronics Corp. officially became a 100% owned subsidiary of Zhen Ding. It was included in the ESG Report since 2021. Scope 1 and Scope 2 emission intensity in 2021 is different from the data disclosed in the previous report. This report has been adjusted to include the Boardtek Campus.

Energy Conservation and Carbon Reduction

Zhen Ding is actively carrying out various energy management actions and responding to the calls of local governments while aligning with global sustainable development trends to actively reduce energy consumption. In 2022, through initiatives such as production process energy-saving projects, adopting advanced energy-saving equipment, and implementing solar power generation, Zhen Ding's subsidiaries collectively reduced carbon emissions by approximately 25,310 metric tons.

In addition, through the "Zhen Ding Seven Greens" platform, we organized training on energy saving management for all departments to raise the awareness of energy saving among company personnel. To ensure that the energy-saving measures really play a part in actual practice and to better implement energy control, the energy-saving personnel of each manufacturing campus regularly conduct energy-saving self-inspection, formulate the energy-saving audit plan according to the company's environmental protection and energy-saving management practice, conduct random inspection of each manufacturing campus, and coordinate with relevant units for joint audit and evaluation to ensure the implementation of energy-saving work and promote the enterprise energy-saving and carbon reduction activities.

Some Key Energy Saving Projects

Manufacturing campus	Item	Item descriptions	Energy conservation performance
Shenzhen Campus	Introduction of magnetic bearing chillers	Magnetic bearing chillers have the advantages of low friction, low noise, and long service life. Compared to traditional centrifugal chillers, they can achieve energy savings of over 30%. By replacing the equipment, energy consumption can be reduced.	Carbon reduction of 959 tons/year.
Qinhuangdao Campus	Introduction of water source heat pumps	Through the water source heat pump, the heat can be recycled from the air compressor and chillers, replacing the heat needed to create steam for the production water intake and air conditioning unit. The heat recycling can reduce the natural gas use of the boilers and carbon emissions.	Carbon reduction of 5,000 tons/year.
Huai'an Campus I	solar power generation	The first phase of solar power in Huai'an Campus I has installed approximately 4799m² of solar panels with a capacity of 1MW, which is for self-use.	Carbon reduction of 886 tons/year.
Huai'an Campus II	Air conditioning system energy-saving regulation	The Huai'an Campus II has a larger area and more plant buildings, resulting in a higher demand for air conditioning. By adjusting the air conditioning system, unnecessary energy consumption can be reduced.	Carbon reduction of 2,930 tons/year.
BoardTek Campus	Replacement of automatic drains	By installing electronic automatic drains on storage tanks and controlling the liquid level, automatic draining can be performed without wasting compressed air, thereby saving energy consumption of the air compressor.	Carbon reduction of 76 tons/year.

Carbon Management

Emission Trading

In October 2011, the National Development and Reform Commission of the People's Republic of China announced the Notice on Initiating Pilot Emissions Trading Programs, which approved Beijing, Shanghai, Tianjin, Chongqing, Hubei, Guangdong, and Shenzhen to initiate pilot emission trading programs. On June 18, 2013, Shenzhen was the first of the seven places to launch the Carbon Emission Trading Market. In response, Zhen Ding's manufacturing campus in Shenzhen undertook a series of energy-saving and carbon-reducing projects, which gained the recognition of the local government, rendering us one of the first companies in China to adopt the pilot emission trading program. In 2022, Zhen Ding's Shenzhen Campus was an active participant of the Shenzhen carbon emission trading system, trading around 10,000 tons of carbon, and we are also cooperating with the government to enhance our ability to manage carbon assets.

Internal Carbon Pricing

To further incentivize internal energy saving and carbon reduction efforts, Zhen Ding has implemented an internal carbon pricing mechanism, internalizing the external costs associated with greenhouse gas emissions. Currently, the main production facilities of Zhen Ding are located in China. Only the Shenzhen campus has initiated carbon trading. Taking into account the situation at each location, the Company adopts the carbon price in the Shenzhen carbon market as the internal carbon pricing reference. The price is set at RMB55 (approx. NT$237) per metric ton of carbon dioxide equivalent. When evaluating the investment benefits of energy saving and carbon reduction projects, the internal carbon pricing can be used to monetize the value of the environmental benefits of carbon reduction. It is then included in decision-making considerations, which will in turn help the implementation of energy saving projects and corporate sustainable developments.

3-3 Water Stewardship

The frequent occurrence of climate change and extreme weathers in recent year has put waters resources at risk of shortage and contamination. Therefore, one of the key focuses in corporate management is managing water resources effectively and improving water recycling technologies to prepare for the oncoming pressure on the water environment. Given our characteristics as a PCB industry, Zhen Ding has introduced a number of water-saving measures to our manufacturing and production processes to minimize the risks of water consumption through management at the source and optimization at the end. By engaging in technology innovation, we continue to increase wastewater recycling rate, and improve the efficiency of water resources.

Regarding water management, the Company sets annual targets for its water recycling rate. The targets are allocated to each departments through the Seven Greens culture. Meetings with relevant units are conducted each month and monthly, quarterly, and annual reviews are conducted to review the target achievement status and implement improvements. Water intensity was 0.0794 million liters/million revenue in 2022. Wastewater reuse rate was 50.5%, and overall water reuse rate in the plant was 41.6%.

Water Risk Identification and Response

Water Risk Assessment

I. Water Risk Filter AWS (a regional water crisis scoring tool of the World Wildlife Fund (WWF))

Each of Zhen Ding's key manufacturing campus in China conducts AWS system audit and certification every year. Annual water risk identification and assessment are carried out, and we use the Water Risk Filter AWS, a regional water crisis scoring tool of the World Wildlife Fund (WWF), to analyze the water risk in the regional watersheds, and all campuses have low risks and have no water-related impacts. Every year, we conduct questionnaire surveys with suppliers, customers, government agencies, shareholders, neighboring companies, residents, employees, and other stakeholders to understand the water concerns of each party, and then compile and formulate the Company's future directions for water resource management improvement. Every year, we collect the background information of the watershed to which each manufacturing campus belongs, compile the background report of the watershed, and analyze the water risks by combining the concerns of the relevant parties. None of the manufacturing campus fall within a water stress area.

II. Aqueduct Water Risk Atlas Assessment, a World Resources Institute (WRI) Tool

In addition, we use the WRI Aqueduct Water Risk Atlas water assessment tool to simulate and test the water stress of each campus by analyzing the baseline and the worst-case scenarios. The results of the simulation analysis are incorporated into the operational resilience strategy.

The Qinhuangdao Campus is located in the northern region of China, which generally experiences higher water usage pressures. Although the Qinhuangdao Campus is located in the northern region, it is situated in a coastal city in northern China. Its specific geographical location is near a river (water source). Additionally, there are three water sources in the surrounding area, ensuring a stable water supply. When conducting water resource assessments using WRI simulation software, the simulations are based on water usage pressures at the regional level, which may result in higher pressure values being reflected in the outcomes. However, in the assessment of the AWS watershed, which takes into account the surrounding watershed conditions of the industrial campus, the results show a low water resource stress level in the area. Since its establishment in 2008, the Qinhuangdao Campus has not encountered any water supply issues. More than 90% of the water used in the campus is sourced from surface water, primarily from rivers, with a low reliance on tap water.

Water Resources Situation of Each Manufacturing Campus in the WRI Baseline

Assessment category	Shenzhen Campus	Huai'an Campus	Qinhuangdao Campus	BoardTek Campus
Water pressure baseline	Low	Low	High	Low
Water depletion	Low	Low	Medium	Low

Note: 1. Baseline water pressure description: Water pressure baseline measures the ratio of total water withdrawal to available renewable surface water and groundwater supply. Withdrawals include domestic, industrial, irrigation, and livestock consumption and non-consumption uses. Available renewable water supply includes the impact of upstream water consumption users and large dams on downstream water availability. Higher values indicate greater competition among users.
2. Water depletion description: Water pressure baseline measures the ratio of total water consumption to available renewable surface water. Total water use includes domestic, industrial, irrigation, and livestock consumption. Available renewable water supply includes the impact of upstream water consumption users and large dams on downstream water availability. Higher values indicate a greater impact on local water supplies and reduced availability for downstream users. The water depletion is similar to water stress. However, instead of looking at total withdrawals (consumption plus non-consumption), only consumption withdrawals are used to calculate Water consumption baseline.

The results of the WRI assessment of water in the most severe scenario (SSP3 RCP8.5) for each manufacturing campus in 2030 are as follows.

Assessment category	Shenzhen Campus	Huai'an Campus	Qinhuangdao Campus	BoardTek Campus
Water stress	High	High	Very high	Medium to low
Water supply	100-300cm	100-300cm	3-10cm	100-300cm

Note: 1. Scenario Simulation: The "worst-case" scenario (SSP3 RCP8.5) represents a fragmented world with uneven economic development, higher population growth, lower GDP growth, and lower urbanization rates, all of which may affect water use. Global carbon emissions increase steadily, reaching about 1,370 ppm of CO_2 by 2100, with a global average temperature increase of 2.6-4.8°C relative to 1986-2005 levels.
2. Water stress description: Water stress is an indicator of water competition, informally defined as the ratio of human society's demand for water divided by the availability of water.
3. Description of water supply: The total blue water (renewable surface water) volume indicator represents the adequacy of water supply. A higher numerical value indicates a more abundant water supply.

Response to Water Risks

Zhen Ding actively improves the amount of wastewater reused after wastewater treatment and increases the water reuse rate year by year. We are also vigorously implementing water conservation projects in our machine shops and setting up KPI indicators for each product to regularly review their performance and improve water efficiency. At the same time, we are also implementing Alliance for Water Stewardship (AWS) projects. Not only do we manage our own water resources well, conserve water, improve the efficiency of water utilization, and meet the discharge standards for wastewater, but we also strive to protect the water resources of local watersheds and work together with relevant parties to improve the sustainable development and utilization of water resources in local watersheds. In addition, each of Zhen Ding's manufacturing campus are seeking multiple water supply sources, and has built emergency water tanks within the campus to ensure emergency water needs as a priority.

The water resource risk assessment in Qinhuangdao Campus classified the risks as high risk. To mitigate water stress in the campus, efforts have been made to improve water efficiency at the process level and increase water reuse at the end. Over the past two years, the wastewater reuse rate in Qinhuangdao Campus has consistently reached 50%, which is considered a leading level within the industry in terms of water reuse. In addition, more than 90% of the water used in Qinhuangdao Campus comes from raw water sources such as rivers, reducing reliance on tap water and alleviating water stress. In the coming 3 to 5 years, we will also promote the use of recycled water as one of the water sources to reduce water stress.

Water Supply and Risk Management in Each Campus

Manufacturing Campus		Supply source	Water source daily supply or reservoir capacity (10,000 m³/d)	Backup reserve capacity m³	Backup hours hrs	Risk management measures (if the water quality of the reservoir shows abnormalities due to flooding, the water purification plant tap water turbidity increases, the turbidity of municipal water increases and our plant has to use this as our water supply source.)
Shenzhen		Wuzhiba Water Plant, Songgang Water Supply Co., Ltd.	16	8,000	30.3	1. Dual reservoir water sources and dual tap water plants ensure a long-term stable water supply. 2. There is more than 30 hours of backup water reserves within the plant to cope with unexpected situations. 3. It can increase the internal water reuse rate, reducing fresh water consumption. 4. It can be treated by the recycled water system for process use (need expansion space) + water truck.
		Luotian Reservoir + Wuzhiba Water Plant	20.5			
Huai'an	I	Development zone water plant (Feihuang River)	20	4,000	20	1.1: Add PP cotton filter at the water supply end of Huai'an Campus I . 1.2: Huai'an Campus I has no direct supply of filtered water and soft water to the outside production line. In case of high turbidity of tap water, in addition to increasing the backwashing frequency, we can increase the replacement frequency of PP filter of RO security filter. 2.1: There are four tap water pools in Huai'an Campus II, which can be switched to alternate water inlet and outlet (such as pool #1 inlet in the morning and outlet in the afternoon, pool #2 outlet in the morning and inlet in the afternoon); increase the retention time of tap water and reduce turbidity. (6,000 tons of water can be treated daily). 2.2: The turbidity of filtered water can be reduced by increasing the frequency of rewashing or adding PP cotton filtration at the manufacturing or water supply end. (300 tons of water can be treated daily).
	II	Chengnan water plant (Huaishu River)	20	12,000	48	
	III (Note)	Beijin Road water plant (Huaishu River)	10	16,000	28	
Qinhuangdao		Taisheng Water Co. water plant (Taolinkou and Yanghe Reservoirs)	10	12,000	20.2	1. There are two raw water pools, normally serving as storage pools, when the turbidity of incoming water increases, add PAC chemical coagulation and sedimentation for emergency use. 2. Ultra filtration UF system is used to treat raw water with high turbidity during rainy season. 3. Increase the cleaning frequency and reduce the influent flux, the water quality will not be affected. 4. Contingency capacity for handling abnormally high concentration of raw water: 7000 tons/day. 5. Most of the industrial water comes from raw water (river water), reducing the reliance on tap water and water pressure. 6. Improve water conservation from the source (see "Water Saving Plans" in this chapter for details) and increase water reuse rate at the end (see "Water Recycling at the Manufacturing Campus" in the Appendix for details).
		Taolinkou Reservoir (raw water)	191			
BoardTek		Pingjen water purification plant	60	8,000	69.9	1. Utilize the raft foundation as backup water storage (1,700m³). 2. Preparation of water trucks and water transportation contingency plans in Longtan, with additional water supply from Yangmei and Pingzhen for emergency situations.
		Shimen Reservoir	148			

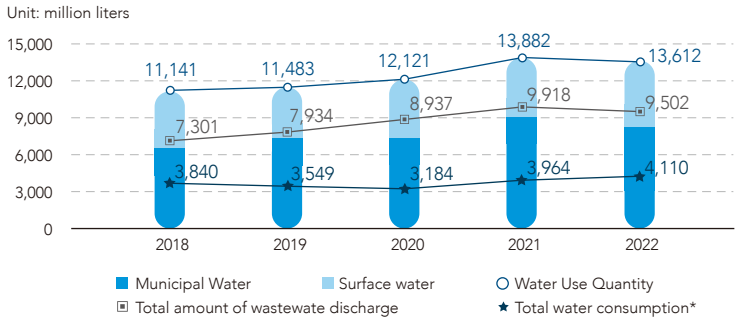
Note: Huai'an Campus III is still under construction and has not yet been activated.

Current Water Consumption Status

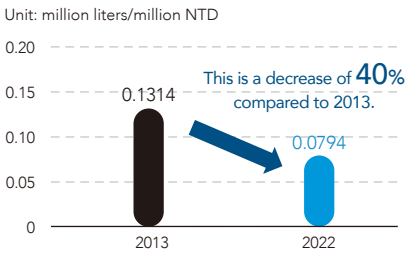
In 2022, the water intake of Zhen Ding and its major manufacturing campus was 13,612 million liters, including municipal water and underground water. Total water consumption was 4,110 million liters and the water consumption intensity was 0.0794 million liters/million NTD. Zhen Ding's manufacturing campuses have a sufficient supplies of water, which comes from water treatment plants. In addition, the manufacturing campuses are built with reservoirs so that when water shortage occurs, the backup water reserves can guarantee 20 to 60 hours of normal operation. The graph below shows the water usage over the years.

Note: Water intensity = Annual water intake volume (million liters)/Zhen Ding's annual consolidated revenue (million NTD).

Water Consumption Status



Water Intensity

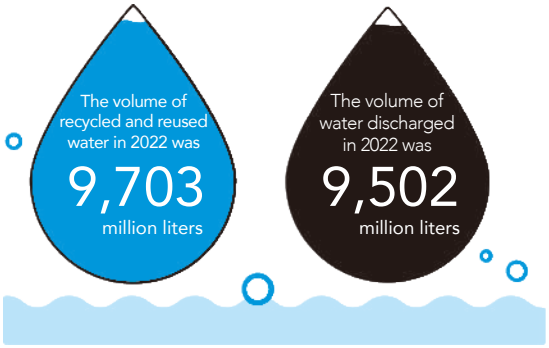


Note: 1. Total water consumption = Total water intake - total wastewater discharge.
2. The above water intake and wastewater discharge are all from freshwater (total dissolved solids ⍰ 1,000mg/L).
3. In addition to municipal water and surface water, Zhen Ding also utilizes rainwater, although the amount used is very low. Therefore, data regarding rainwater usage has not been collected or presented.
4. On November 4, 2020, BoardTek Electronics Corp. officially became a 100% owned subsidiary of Zhen Ding. It was included in the ESG Report since 2021.

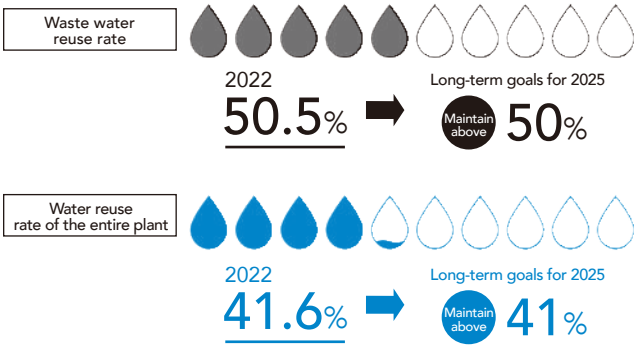
Water Reuse and Reduction

PCB industries require significant amounts of water for their production processes. To effectively reduce the environmental impact of the company, we have introduced high-performance water recycling equipment to process wastewater for use based on demands. Water is recycled for reuse in production, environmental cleaning, and irrigation. The company has engaged in multiple water recycling projects, such as recycling of high-concentration wastewater, and War Horse Water Saving Project (lower overflow rate). The amount of water recycled by manufacturing sites has surpassed the regulatory requirements of local governments. By practicing water-saving management and introducing water recycling technologies, the company has recycled roughly 9,703 million liters of water in 2022, which is a 50.5% of the water reuse rate. The table below shows the amount of water recycled by the Company and the water-saving plans it has implemented over the years.

Water Recycling and Reuse Status



Water Reuse Rate Status



Note: 1. Waste water reuse rate = Water recycled for reuse ÷ (Water recycled for reuse + Total wastewater discharge) ×100%.
2. Water recycling rate of the all plant = Water recycled for reuse ÷ (Water recycled for reuse + Total water use) × 100%.
3. The amount of recycled water above does not include the circulating water in the cooling tower.
4. Currently, Zhen Ding's wastewater reuse rate has exceeded 50%, leading the industry. Based on a comprehensive environmental cost-benefit analysis, further increasing the water reuse rate would require the use of more chemical agents, resulting in increased harmful sludge production and higher energy consumption, leading to higher carbon emissions. This approach may not be entirely environmentally friendly. Therefore, the long-term goal is revised to 50%. In the future, in addition to maintaining a water reuse rate of over 50%, each production site will also collaborate with local governments to promote the utilization of urban reclaimed water within the next 3 to 5 years. Enhancing regional comprehensive water resource utilization efficiency will be a priority.

Water Reuse in the Past 5 Years

	2018	2019	2020	2021	2022
Volume of recycled and reused water (million liters)	3,717	5,637	7,522	10,118	9,703
Waste water reuse rate (%)	33.4%	49.1%	45.8%	50.5%	50.5%
Water reuse rate of the all plant (%)	25.0%	32.7%	38.3%	42.2%	41.6%

Note: 1. Waste water reuse rate = Water recycled for reuse ÷ (Water recycled for reuse + Total wastewater discharge) ×100%.
2. Water reuse rate of the entire plant = Water recycled for reuse ÷ (Water recycled for reuse + Total water use) × 100%.
3. The amount of recycled water above does not include the circulating water in the cooling tower.

Water Reuse at the Manufacturing Campus

Manufacturing Park	Unit	2018	2019	2020	2021	2022
Shenzhen Campus	million liters	1,316	1,646	1,819	2,187	1,996
Huai'an Campus I	million liters	489	522	593	1,322	1,021
Huai'an Campus II	million liters	236	415	671	1,528	1,552
Qinhuangdao Campus	million liters	1,605	3,005	4,439	4,972	5,030
BoardTek Campus	million liters	N/A	N/A	N/A	109	104

Water Saving Plans

In 2022, all production campuses of Zhen Ding actively promoted water conservation projects, resulting in a cumulative water savings of over 970,000 tons for the year.

Some Major Water Saving Projects

Manufacturing Campus	Plan	Details	Performance
Shenzhen Campus	Reduce overflow	By adjusting the water flow to production lines without compromising production requirements, we can reduce overflow and minimize water usage while ensuring uninterrupted operations.	32,062 tons
Huai'an Campus I	RO water replacement	Replace the tap water required by the effluent tower with RO water to reduce tap water usage.	65,700 tons
Huai'an Campus II	Line level water recycling	Reuse used purified water in the product line.	18,599 tons
Qinhuangdao Campus	On-the-line water recycling	Increase water reuse rate at the line level to enhance the usage of recycled water and reduce the consumption of fresh water.	29,333 tons
BoardTek Campus	Use reused water in washing towers	Collect low conductivity cleaning water for reuse instead of using tap water in the washing towers to save on tap water consumption.	18,522 tons

Water Resource Management and Disclosure

Participation in CDP Water Program

CDP is a non-profit organization that operates a global disclosure system for investors, companies, cities, states, and regions to manage their environmental impacts. The global economy considers CDP as the gold standard for environmental reporting, as it possesses the most comprehensive and extensive dataset on corporate and city actions. CDP's water program drives businesses to disclose and reduce their environmental impacts by harnessing the power of investors and customers. Zhen Ding actively participates in the CDP water security questionnaire information disclosure. We received a B rating on the 2022 water security questionnaire, which is higher than the average in Asia and the industry. In future, we will continue to ramp up our efforts in water resource management and fulfill our duties and obligations in water resource management.

Alliance for Water Stewardship (AWS)

The AWS (Alliance for Water Stewardship) is a global partnership of businesses, non-governmental organizations, and the public sector. AWS members contribute to the sustainability of local water resources by adopting international water management standards, understanding watershed challenges, and seeking opportunities for improvement in response to those challenges - reducing water consumption, improving water use efficiency, and reducing the environmental impact of pollution discharges. In 2019, Zhen Ding Shenzhen campus completed the AWS Platinum certification ahead of industry peers. In 2022, all of Zhen Ding's manufacturing campuses in China passed the audit and continued to achieve AWS Platinum Certification.

Furthermore, we are committed to achieving sustainable water management and a transparent water disclosure system. Zhen Ding complies with relevant regulations every year to actively conduct one soil test and two groundwater tests in each campus every year and present the results to members of the public. For more information on the achievements and progress of implementing AWS water performance, please refer to the "Sustainability Focus Section - AWS Sustainable Water Management" section of on the Company's website.

Wastewater Discharge Management

Our strategy for wastewater management is: recycle and reuse, to reduce our consumption of and dependence on tap water. PCB production requires significant amounts of water, electricity, and chemicals. Moreover, the characteristics of wastewater generated from these processes and the procedures required to treat these wastewater are complicated. Therefore for each product manufacturing step and the characteristics of the pollutants it produces, we classify the source of effluents into more than 20 waste streams. Based on the characteristics of wastewater generated from different processes in the manufacturing campus, we have designed ten main treatment systems integrating high-efficiency equipment, multi-stage treatments, 3-dimensional designs for various processing units, and smart central control systems to monitor the sites and the quality of effluent.

Each wastewater treatment plant at the manufacturing campus is equipped with a professional water quality laboratory for designated personnel to review the water quality in the wastewater treatment system on a daily basis. Each of our main production operation of wastewater treatment and recycling facilities wastewater effluent outlet is equipped with an online water quality/water volume monitoring device. The data collected are linked to environmental protection agencies for comprehensive 24-hour monitoring. Ensure that all types of waste water comply with the legal standards.

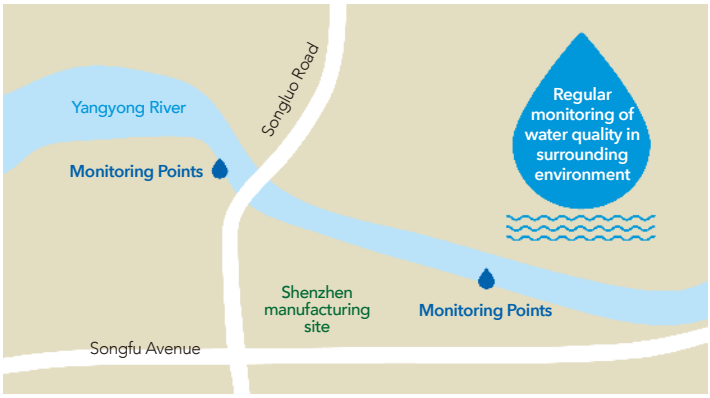
The wastewater discharged from each manufacturing campus have been treated and confirmed to have complied with the discharge standard before being discharged legally to the Maozhou River (Shenzhen), Qing'an River (Huai'an) and Tang River (Qinhuangdao) after treatment. The wastewater from the BoardTek campus enters the industrial park wastewater treatment plant to bring the water quality up to standards, and then it is discharged to the Taiwan Strait through a ditch. The quality of discharged wastewater from each manufacturing campus far surpasses the approved standards of local laws and regulations, and will not pose any threat to the environment of the local watershed or natural waterbodies. We also take the initiative to publish the vendor testing data of wastewater discharge on our official website every quarter. Please refer to the Appendix - Environmental Data for the details on the achievement of wastewater quality.

Wastewater quality achievement in each campus in 2022

Manufacturing Campus	Primary indicators for water quality	Unit	Status in 2022	Regulatory Standards	Zhen Ding Targets	Target Achievement
Shenzhen Campus	Hydrogen ion concentration (pH)	-	7.3	6-9	6-9	Superior to the preset target
	Chemical oxygen demand (COD)	mg/L	85	160	100	Superior to the preset target
	Copper (Cu)	mg/L	0.09	1.0	0.6	Superior to the preset target
Qinhuangdao Campus	Hydrogen ion concentration (pH)	-	7.4	6-9	6-9	Superior to the preset target
	Chemical oxygen demand (COD)	mg/L	170	400	300	Superior to the preset target
	Copper (Cu)	mg/L	0.08	0.5	0.4	Superior to the preset target

Manufacturing Campus	Primary indicators for water quality	Unit	Status in 2022	Regulatory Standards	Zhen Ding Targets	Target Achievement
Huai'an Campus I	Hydrogen ion concentration (pH)	-	7.3	6-9	6-9	Superior to the preset target
	Chemical oxygen demand (COD)	mg/L	247	400	350	Superior to the preset target
	Copper (Cu)	mg/L	0.41	2.0	1.5	Superior to the preset target
Huai'an Campus II	Hydrogen ion concentration (pH)	-	7.6	6-9	6-9	Superior to the preset target
	Chemical oxygen demand (COD)	mg/L	229	400	350	Superior to the preset target
	Copper (Cu)	mg/L	0.39	2.0	1.5	Superior to the preset target
BoardTek	Hydrogen ion concentration (pH)	-	7.9	6-9	6-9	Superior to the preset target
	Chemical oxygen demand (COD)	mg/L	208	560	450	Superior to the preset target
	Copper (Cu)	mg/L	0.7	1.5	1.2	Superior to the preset target

Zhen Ding insists on contributing to the environment and society. Apart from actively participating in community care, we have joined forces with the government, schools, and communities to co-host environmental awareness activities. With the ecological environment always on our mind, we voluntarily conduct periodic monitoring on the quality of water within a 1 km radius of our manufacturing campuses in China. The figure shows the Shenzhen campus. We assist the governmental departments in solving problems experienced by municipal wastewater treatment plants. While staying committed to enhancing the green performance of Zhen Ding, we continuously expand our power of influence to provide green ideal solutions to the government sector and play our part in social contribution.



3-4 Green Manufacturing

Clean Production Plans and Certification

Zhen Ding actively adopts Taiwan and China's clean production laws and clean production standards, and follow the "Cleaner Production Assessment System Guidelines for PCB Manufacturing" and the "Cleaner Production Promotion Law" to establish management standards for our manufacturing processes. In 2010, our subsidiaries began taking initiative to implement clean production review and introduce the Company's environmental management concept to manage emissions at the source and end. Our goal is to surpass the level one clean production standards. To date, we have launched multiple clean production initiatives for improving our manufacturing processes, to not only cut down the use of materials but also lower production costs, thereby bolstering the company's green competitiveness.

Process Improvement Plans and Performance

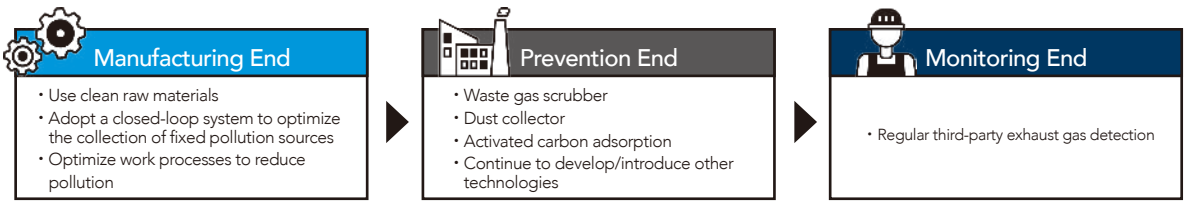
Manufacturing Park	Plan	Details	Performance
Shenzhen Campus	Electroplating processing optimization	By optimizing the electroplating process, the use of copper reduction wire in the process is reduced, resulting in energy savings.	57 tons of carbon reduction
	Compressed air pressure optimization	By optimizing the compressed air pressure in the workshop and continuously testing to find the appropriate pressure, energy consumption is reduced.	462 tons of carbon reduction
Huai'an Campus I	Wet process drying energy-saving optimization	By implementing water and energy-saving models in the drying process, water and electricity consumption can be reduced.	226 tons of carbon reduction
Huai'an Campus II	magnetic bearing chiller optimization	By optimizing the energy consumption of magnetic bearing chillers while ensuring that the water temperatures meet the production requirements, electricity consumption can be reduced.	837 tons of carbon reduction
Qinhuangdao Campus	Line coating machine optimization	By optimizing the line speed and pre-treatment exposure time parameters of the line coating machine, the production time of pre-treatment and coating can be reduced. This allows for efficient production while also shortening the equipment usage time.	386 tons of carbon reduction

Air Pollution Control

Air Pollution Treatment Mechanism and Emissions

Air pollutants emitted by Zhen Ding's subsidiaries primarily include nitrogen oxide (NOx), sulfur dioxide (SO_2), particulate matter (PM), and volatile organic compounds (VOCs), which are generated from our manufacturing processes. From the manufacturing end, we choose to use clean materials as alternatives to high volatile organic compounds, and adopt a closed-loop system to enhance the collection of fixed pollution sources. By installing scrubbers, dust collectors, and utilizing advanced technologies such as activated carbon adsorption, RCO, and photocatalytic oxidation, we aim to reduce the emission of air pollutants.

Every year, we regularly employ external institutions to conduct tests and continue to track various pollutant monitoring data to ensure that our gas emissions are compliant with law and kept within the emission standards.

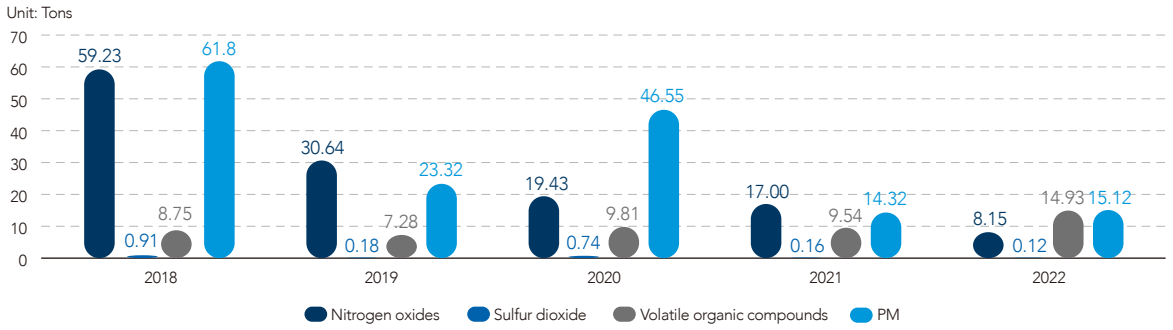


Status of Main Air Pollutant Emissions in 2022

Name of pollutant	Emissions (tons)	Air pollutant intensity* (kg/million NTD)
Nitrogen oxides	8.15	0.048
Sulfur dioxide	0.12	0.001
Volatile organic compounds	14.93	0.087
PM	15.12	0.088

*Note: Air pollutant intensity = Pollutant emissions (kg)／Zhen Ding's annual consolidated revenue (million NTD)

Emission of Main Air Pollutants



Achievement of Major Emission Targets*

Manufacturing Campus	Atmospheric Key Indicators	Unit	Status in 2022	Regulatory Standards/Targets	Zhen Ding Targets	Target Achievement
Shenzhen Campus	Volatile organic compounds	mg/m³	9.82	80	64	Superior to the preset target
	PM	mg/m³	12.6	120	96	Superior to the preset target
	Nitrogen oxides (furnaces)	mg/m³	74.81	150	120	Superior to the preset target
	Sulfur dioxide (furnaces)	mg/m³	7.25	50	40	Superior to the preset target
Qinhuangdao Campus	Volatile organic compounds	mg/m³	5.63	50	40	Superior to the preset target
	PM	mg/m³	6.9	120	96	Superior to the preset target
	Nitrogen oxides (furnaces)	mg/m³	12.91	30	25	Superior to the preset target
	Sulfur dioxide (furnaces)	mg/m³	0.68	10	8	Superior to the preset target
Huai'an Campus I	Volatile organic compounds	mg/m³	5.79	40	35	Superior to the preset target
	PM	mg/m³	7.9	120	96	Superior to the preset target
	Nitrogen oxides (furnaces)	mg/m³	18.94	50	40	Superior to the preset target
	Sulfur dioxide (furnaces)	mg/m³	Not detected	35	28	Superior to the preset target
Huai'an Campus II	Sulfur dioxide (furnaces)	mg/m³	Not detected	35	28	Superior to the preset target
	Volatile organic compounds	mg/m³	3.72	40	35	Superior to the preset target
	PM	mg/m³	4.47	120	96	Superior to the preset target
	Nitrogen oxides (furnaces)	mg/m³	27.45	50	40	Superior to the preset target

Manufacturing Campus	Atmospheric Key Indicators	Unit	Status in 2022	Regulatory Standards/Targets	Zhen Ding Targets	Target Achievement
BoardTek	Volatile organic compounds	mg/Nm³	15	N/A	60	Superior to the preset target
	PM	mg/Nm³	2	100	80	Superior to the preset target

*Note: The above indicator is an important regulatory indicator.

Waste Management

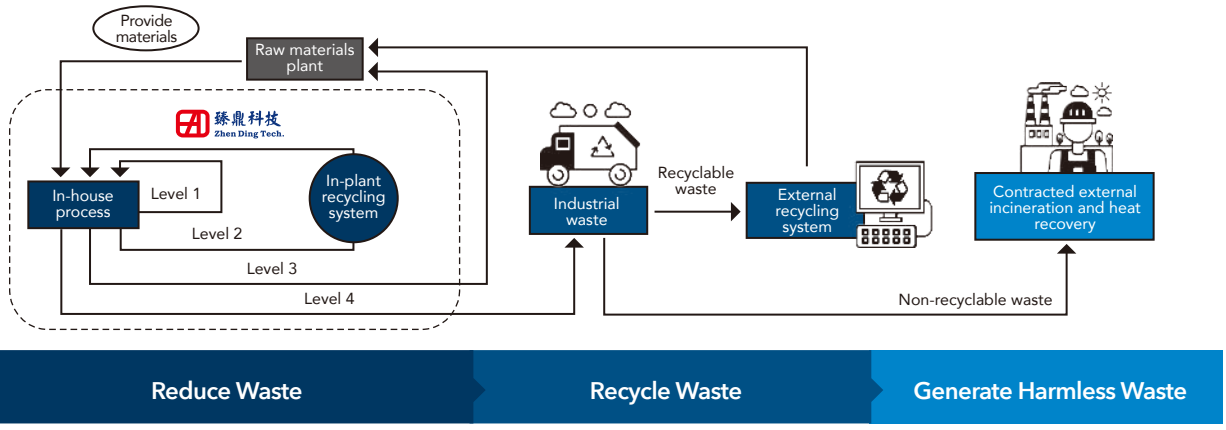
Zhen Ding's waste management implementation strategy is to reduce waste, recycle, and waste detoxification to the end, to achieve the goal of minimizing the harm caused by waste to the environment. With the concept of "green innovation, green chain of supply, green chain of supply", Zhen Ding optimizes the design, procurement, and production process to optimize the use of raw materials and achieve the maximum reduction from the source.

After the raw materials are put into the production process, four levels of recycling will be carried out, the first level - "direct reuse in the factory" and the second level - "reuse after recycling in the factory" are our first priority. For example, plating plate can be directly recycled, and the microetching solution produced by the production process can be reused after treatment by the recycling system in the factory. The third level - "reuse of raw materials by suppliers" and the fourth level - "reuse after external processing" are carried out externally to maximize the proportion of resources.

For the non-recyclable waste, in order to reduce environmental hazards, this waste is entrusted to qualified professional vendors for environmentally sound treatment - incineration for power generation or heat recovery. To promote different waste reduction technologies, Zhen Ding has specially established a panel of environmental experts to develop innovative resource recycling technologies that constantly add value to recycled wastes, thereby minimizing the amount of waste generated and its impact on the environment.

Please refer to the "Sustainability Focus - Resource Conservation and Recycling" section of the company's website for the specific results of the implementation of waste reduction technologies.

Three Ways Waste Management



At present, our waste is divided into two categories according to waste properties: general waste and hazardous waste, and two categories according to recycling properties: recyclable waste and non-recyclable waste. In 2022, the waste resource utilization rate reached 91%, successfully achieving the annual target of achieving a waste resource utilization rate of over 90% for the tenth consecutive year. The total amount of general industrial waste in important operational locations of our subsidiary companies in 2022 was 27,402 tons, with a general industrial waste resource utilization rate (recycling and reuse) of 93%. The total amount of hazardous industrial waste was 52,907 tons, with a hazardous industrial waste resource utilization rate of 91%. The hazardous industrial waste intensity was 0.31 tons/million NTD.

Waste removal status in the previous years	2018	2019	2020	2021	2022
Total amount of business waste removed	64,863	67,796	70,702	94,640	80,309
Sorting by Waste Attribute					
General corporate waste (Unit: Tons)	26,833	29,000	29,931	32,095	27,402
Hazardous corporate waste (Unit: Tons)	38,030	38,796	40,771	62,545	52,907
Sorting by Recyclability					
Percentage of recycling (Unit: %)	91%	94%	94%	93%	91%
Hazardous business waste intensity					
Reduction goal (Unit: Tons/million NTD)	0.42	0.41	0.40	0.39	0.38
Progress (Unit: Tons/million NTD)	0.32	0.32	0.31	0.40	0.31
Target Achievement	Superior to the set target	Superior to the set target	Superior to the set target	Failed to meet the set target value	Superior to the set target

Note: 1. Business wastes are disposed of by certified waste disposal companies.
2. General wastes are disposed of by recycling for reuse, recycling other active ingredients, and recycling for use as fertilizers or other purposes.
3. Intensity of hazardous waste = Total hazardous waste generated ÷ Zhen Ding's consolidated revenue.
4. Recycling ratio = Total amount of recycled waste ÷ total amount of business waste. The resource utilization rate is equivalent to the resource recycling rate, and it does not include the amount of waste that is incinerated (energy recovery).
5. Boardtek has been included in the ESG Report since 2021.
6. The main reason for the decrease in percentage of recycling in 2022 is: The increase in in-house waste reuse or optimized disposal in 2022 resulted in a decrease in the weight of waste that can be recycled through outsourcing, leading to a decrease in the percentage of recycling. In the future, the calculation method will be revised to comprehensively represent the status of recycling within the plant.

Status of waste removal in 2022

Type 1	Type 2	Waste classification	Waste removal		Recycling		Non-recycling (Tons)
			Tons	Weight (%)	Tons	Weight (%)	
Industrial waste	Non-hazardous waste	Others (non-metals)	2,454	9%	2,428	-	26
		Other metals	1,783	7%	1,783	-	0
		Waste wood	3,156	11%	3,156	-	0
		Waste paper	7,161	26%	7,161	-	0
		Waste copper	3,711	14%	3,711	-	0
		Waste plastics	6,103	22%	6,098	-	5
		Precious metals	252	1%	252	-	0
		General waste	2,782	10%	804	-	1,978
		Subtotal	27,402	100%	25,393	93%	2,009
	Hazardous waste	Sludge	22,889	43%	22,889	-	0
		Scrapped boards and scraps	3,597	7%	3,597	-	0
		Other recyclables	872	2%	872	-	0
		Waste liquid	20,387	38%	20,355	-	32
		Precious metals	323	1%	323	-	0
		Incineration	4,839	9%	0	-	4,839
		Subtotal	52,907	100%	48,036	91%	4,871
	Total industrial waste		80,309	100%	73,429	91%	6,880
Non-industrial waste	Daily kitchen waste		3,109	100%	2,174	70%	935
Total				100%	75,603	91%	7,815

Footnote: 1. The weight of waste generated includes only the actual weight of waste removed from the plant, but does not include the weight recycled in the plant.
2. The product recycling percentage is calculated as the ratio of recycled scrapped boards and scraps = amount of scrapped boards and scraps sold ÷ waste removal volume.
3. As a non-final product manufacturer, Zhen Ding's focus on product lifecycle management lies in the recycling and reuse of scrapped boards and scraps. The recycling process of resource recovery companies involves shredding the boards to recover metals such as gold and copper, and the remaining crushed materials are further processed into construction materials or fillers. In 2022, the total amount of scrapped boards and scraps for recycling reached 3,597 tons, achieving a recycling rate of 100%.

Handling of Recyclable Waste in 2022

Type	Waste recycling method	Inside the plant (tons)	Outside the plant (tons)	Total amount	
				Tons	Weight (%)
General Waste	Reused for original purpose	137	0	137	0.5%
	Recycling and reuse	0	27,567	27,567	99.5%
	Subtotal	137	27,567	27,704	100%
Hazardous Waste	Reused for original purpose	381	0	381	0.5%
	Recycling and reuse	31,657	48,036	79,693	99.5%
	Subtotal	32,038	48,036	80,074	100%

Footnote: 1. The weight of the recycled waste in the plant is estimated in advance because it is not transported out of the plant for valuation, so there is no accurate measuring instrument for valuation.
2. The weight of general waste reused in the plant is estimated according to the following principles: Based on the actual reuse quantity of the grade, multiplied by the estimated weight of each individual unit, and estimate the total reuse weight.
3. The weight of hazardous waste reused in the plant is estimated according to the following principles: the reuse of waste acid is estimated based on the amount of acid produced and the amount of new materials saved.
4. The weight of externally treated general waste includes the weight of kitchen waste that is disposed of through recycling and reuse.

Handling of Non-Recyclable Waste in 2022

Type	Name	Inside the plant (tons)	Outside the plant (tons)	Total amount (tons)	Waste (%)
General Waste	Incineration (energy recovery)	0	2,945	2,945	100%
	Landfill	0	0	0	0
	Subtotal	0	2,945	2,945	100%
Hazardous Waste	Incineration (energy recovery)	0	4,871	4,871	100%
	Landfill	0	0	0	0
	Subtotal	0	4,871	4,871	100%

Note: General waste includes domestic waste.

Total Waste Management Process

Due to the characteristics of the industry, hazardous wastes are generated during the production process of products, therefore we have established a special management system for hazardous waste - "Hazardous Waste Transfer Operation Regulations".

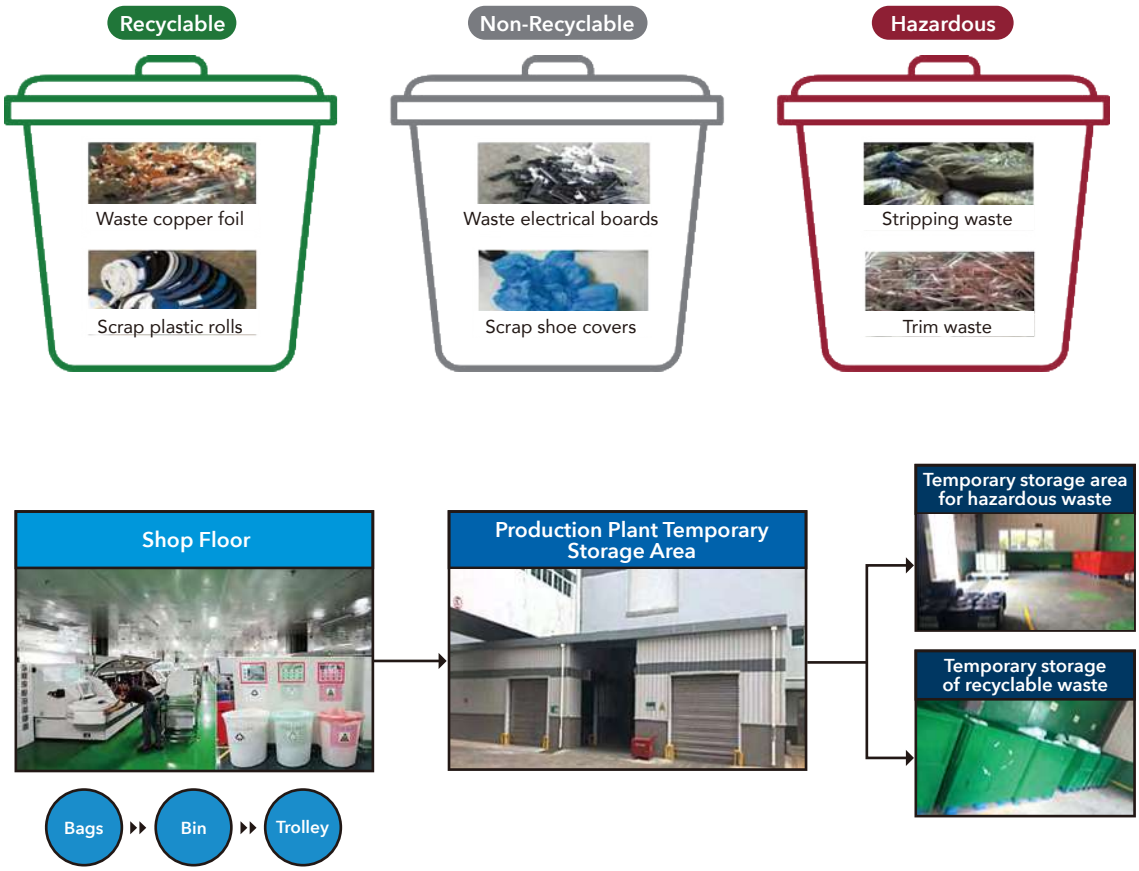
We have implemented a company-wide "Total Waste Management" program, in which all waste is strictly categorized from the source of production. All hazardous waste is packaged and stored separately in special containers, and stored in separate storage areas, with corresponding labels posted at the storage locations, which also include environmental and safety reminders. The warehouse where hazardous waste is placed is managed by a dedicated personnel who records the daily incoming and outgoing log of the waste. All warehouses are equipped with anti-corrosion and anti-permeation facilities, as well as emergency collection and ditching facilities. The warehouses are equipped with monitoring and control systems, all of which are connected to the control center for real-time monitoring and recording to ensure the safety of hazardous waste management. In accordance with the requirements of laws and regulations, as well as the aim and attitude of being responsible for the environment, the waste that cannot be recycled is handed over to professional contractors with legal qualifications for disposal.

In-Plant Management

I. Source Classification Management

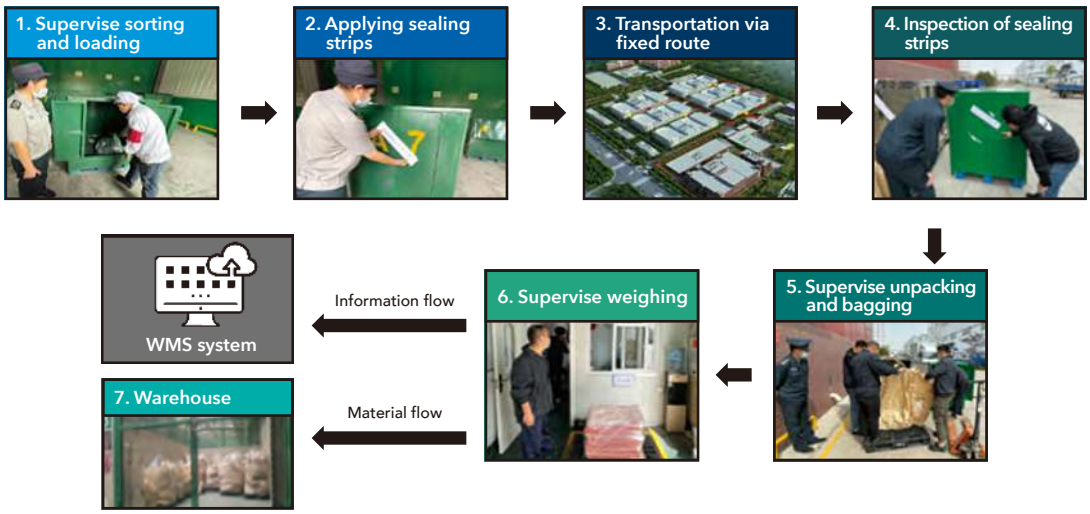
All waste is defined with classification standards and are strictly classified at the source of production. All employees are educated and trained to know how to classify and how to classify correctly. All the waste labels, garbage bags, garbage cans, and garbage trucks in the production line are separated into three main categories: recyclable (green), non-recyclable (white) and hazardous waste (red) to ensure color management of the waste throughout the entire process from generation, collection, transportation, and storage. We use separate packaging, separate storage, special containers, and storage in exclusive independent warehouses to enhance the recycling value of waste.

"Waste is divided into three main categories and color management is implemented"



II. In-plant Transfer and Storage Management

After the waste is dispatched out of the shop floor to the loading gate of the shop floor, the waste is sealed, and transported to the resource recycling center according to the fixed route. After checking the integrity of the seal by the resource recycling center, the waste is weighted and the data is automatically stored in the waste management system before entering the resource recycling warehouse, and the daily waste inventory is generated for management. After entering the warehouse, general waste and hazardous waste is stored individually, and the information online system (WMS) platform is adopted to record the incoming waste information daily. By scanning the QR code, it can instantly check the source, name, weight and other information of each batch of waste, to help complete the preparatory work before the transportation by external vendors.



III. External Management

In the process of waste transportation and disposal by the external vendor, we can also connect to the WMS platform for real-time checking of relevant data, to implement real-time online monitoring and recording. For the transportation and treatment process of hazardous waste, the appointed vendor follows the treatment standards stipulated in the Environmental Impact Assessment and the waste is transported by a GPS-equipped truck in accordance with the prescribed route, to monitor and ensure that the hazardous business waste is not misplaced during the transportation process. Zhen Ding conducts annual on-site audits and daily spot checks to confirm whether the treatment facilities are in normal operation, whether the hazardous business waste has entered the treatment facilities in accordance with the regulations, whether the inventory accounts meet the requirements, and whether the wastewater is discharged in accordance with the standards to ensure that the hazardous waste is safely utilized and safely disposed of without causing any impact on the environment. In 2022, Zhen Ding completed regular audits of 15 general waste vendors and 71 hazardous waste vendors. For more information on the introduction of the evaluation system on new waste vendors and the vendor management system, please refer to the "Sustainability Focus - Waste Vendor Management" section of the company's website.

3-5 Eco-Friendly Practices and Promotions

Green Building Energy Conservation

In addition to actively implementing energy-saving and carbon reduction measures, Zhen Ding also aims to reduce energy consumption in the construction and operation processes by constructing green building certified plants and buildings. Shenzhen Campus I, Qinhuangdao Hong Qi Sheng Precision Electronics, and Huai'an Campus II have all obtained the Green Factory Certification issued by the Ministry of Industry and Information Technology. In addition, Huai'an Campus I has also obtained the Green Factory Certification issued by the Jiangsu Provincial Government, and it is scheduled to undergo the certification process by the Ministry of Industry and Information Technology in 2023. All newly constructed parks of Zhen Ding are also built in accordance with the principles of green factories and green buildings.

Shenzhen Avaryholding headquaters Building, located in Shenzhen, is the headquarters building of Zhen Ding's subsidiary, Avary Holding (Shenzhen) Co., Limited. As a collaborative hub for research and development in the PCB industry, Avary Time Center is the first project in Bao'an District, Shenzhen, to receive the national three-star Green Building Design Label certification. The building incorporates various green building technologies, including efficient air conditioning, energy-saving lighting, soundproof floors, carbon monoxide monitoring system, carbon dioxide monitoring system, air purification system, BIM, optimized structural design, and carbon footprint calculation and analysis. Additionally, it implements eco-friendly measures such as permeable paving, rooftop greening, rainwater collection and utilization, and efficient irrigation to achieve the environmental benefits of a sponge city. Since its establishment, Avary Time Center has obtained the LEED Platinum certification, which is considered the "Oscar" of the green building industry. This certification has played a significant role in demonstrating and leading the development of green buildings in the Bao'an District of Shenzhen.

Protecting Biodiversity

Protecting biodiversity is one of the indicators declared by the United Nations for the 2030 Sustainable Development Goals (SDGs). All of Zhen Ding's production campuses are located in industrial zones and are not in globally or nationally recognized areas of significant biodiversity importance or sensitivity. The Company has obtained local environmental permits and has no impact on biodiversity. Future plans for the construction of new plants also do not consider or avoid setting up in areas of significant biodiversity importance or sensitivity.

In January 2022, Zhen Ding voluntarily signed a 3-year cooperation agreement with the Forestry Bureau of the Council of Agriculture, Executive Yuan, for the "Reforestation Project of Native Tropical Plants and Removal of Invasive Species in the Hengchun Peninsula". The aim is to restore the original tropical plant community and the rich ecological chain, and to protect the biodiversity of the Hengchun Peninsula. As of December 31, 2022, the Hengchun Peninsula project has completed the removal of invasive river tamarind and planting of approximately 30,000 native trees over an area of approximately 12 hectares. It is estimated that it can result in annual carbon reductions of 600 tons for the earth in the long term note.

Note: The calculation of carbon reduction is based on estimates from the European Environment Agency (EEA), which states that during the first 20 years of growth, each tree can absorb approximately 22 kg of carbon dioxide per year.

Low-Carbon Transportation

Transportation is an important part of “green logistics” in the Zhen Ding Seven Greens initiative. We prioritize the safety of our employees during their commute. Therefore, in areas with high traffic during commuting hours, we provide scheduled electric bus services. Additionally, we regularly review the consolidation rate of material loading each month to reduce exhaust emissions during goods transportation. In 2022, we were able to save more than 3.03 million liters of gasoline and diesel, representing a total reduction of about 6,876 tons of carbon emissions, by transporting materials together and offering employees green electric vehicles for commutes. In future, we will continue to improve cargo loading efficiency, increase modes of green transportation for employees, and offer more diverse options at reasonable times.

Promotion of Environmental Protection Ideas

Zhen Ding is committed to promoting environmental conservation and encourages professors and students from relevant academic institutions to engage in innovative research in green technology and environmental pollution prevention. We collaborate with the Ching-En Foundation to organize the Green Technology Research Paper Award to recognize academic excellence. Additionally, we aim to establish an industry platform to discover outstanding talents and leverage academic expertise. The Green Technology Research Paper Award, based on the company's business philosophy of "developing technologies for the betterment of human beings and protecting the environment for a greener earth", has been held eight times from 2013 to 2022. During this period, a total of 397 papers were submitted, and 81 individuals received awards (29 doctoral students and 52 master's students). Starting from 2020, the promotion of environmental protection concepts has been enhanced through the organization of forums, and the scope of paper submissions has been expanded to invite contributions from 542 relevant institutions across Taiwan. This ensures that the event is not only limited to awarding scholarships but also involves inviting experts from relevant fields in Taiwan to participate and exchange ideas.

From 2020 to 2022, the expanded scope of paper submissions includes the two main themes of "environmental technology" and "climate change and sustainable development". The topics covered in these themes include industrial environmental technology applications, air pollution monitoring and control technologies, water quality monitoring, water treatment and recycling technologies, resource recovery and reuse technologies, soil and groundwater investigation and remediation technologies, carbon neutrality, environmental social and corporate governance, energy efficiency, clean and innovative energy, sustainable energy and water resource management, water resources en-

gineering technologies, and other topics related to ecological conservation and sustainable development. In 2020, 2021, and 2022, there were a total of 54, 84, and 74 submissions, respectively, for the master's and doctoral thesis categories, amounting to 212 submissions overall. These submissions were evaluated by a panel of expert scholars based on the four criteria of relevance to the topic, innovation, future application value, and accuracy and rigor. Ultimately, 12 outstanding papers were selected each year, with 4 winners from the doctoral category and 8 winners from the master's category.

The Green Technology Forum and Award Ceremony was held at National Cheng Kung University from 2020 to 2022. During the three years, the forum invited 7 experts to deliver 8 speeches. In 2020, Deputy Director-General of Taiwan Environmental Protection Administration, Hung-De Tsai (former), gave a speech on the development and transformation of environmental protection in Taiwan. Professor Hsin-Cheng Yeh from National Taiwan Normal University delivered a speech on sustainable development and climate change education, and Professor Zu-En Zhang from National Cheng Kung University gave a speech on innovative breakthroughs in resource recycling. In 2021, Director-General of Taiwan Environmental Protection Administration, Tzi-Chin Chang, gave a speech on responding to and prospects of climate change. Professor Hsin-Cheng Yeh from National Taiwan Normal University delivered a speech on the critical role of the environment in interdisciplinary thinking for corporate sustainability, and Vice President of National Cheng Kung University, Chun-Chang Lee, gave a speech on toxic reduction in petrochemical industrial areas based on health risk assessment using the example of Dashe-Renwu. In 2022, Director of Waste Management Division, Taiwan Environmental Protection Administration, Ying-Ying Lai, gave a speech on resource circulation and zero waste, and Professor Yang Gu from NTNU delivered a speech on the development trends of global net-zero investments. The event recognized outstanding master's and doctoral theses in the fields of "environmental technology" and "climate change and sustainable development." It also invited experts from industry, government, and academia to conduct exchanges, stimulating innovative thinking in green environmental technology and sustainable development of the planet.

Environmental Protection Month Events

Since 2007, the Company has held 15 annual environmental conservation and energy-saving month events. Between April 22 (Earth Day) and June 5 (World Environment Day) each year, we cooperate with various local governments, elementary and middle schools, and environmental organizations to hold more than 147 educational green promotion activities. Participants include company employees, the general public, government agencies, schools, and environmental groups. Due to the impact of the pandemic, the number of participants in this year's events decreased compared to the previous year, with a total of 16,780 participants in 2022. Through various internal and external awareness activities, we attempt to raise people's environmental awareness and take actions to realize Zhen Ding's unique new green value. For information on the environmental activities held at each manufacturing campus during the 2022 Environmental Protection and Energy-saving Month, please refer to the "Sustainability Focus - Environmental Protection and Energy Conservation Month" section on our website.

WORKPLACE

Employee Care, Talent Development

4-1 Human Rights Protection

Human Rights Policies and Regulations

Zhen Ding strictly abides by Taiwan's Labor Standard Act and the laws and regulations of People's Republic of China, including the "Labor Law/Employment Contracts Law/Social Insurance Law" and "Provisions on the Prohibition of Using Child Labor". With respect for internationally recognized labor human rights principles, the company constructs a human resource management system that collectively applies to Taoyuan, Shenzhen, Huai'an, Qinghuangdao, and India to protect the legal rights of all employees. In addition to self-discipline, Zhen Ding also voluntarily complies with and regularly collects information on, assesses the social laws of competent authorities and customer requirements to ensure the legitimacy and appropriateness of these laws and requirements.

Zhen Ding supports international human rights standards. In compliance with the basic human rights principles such as the "United Nations Universal Declaration of Human Rights", the "United Nations Global Compact", the "United Nations Guiding Principles on Business and Human Rights", and the "Responsible Business Alliance Code of Conduct", as well as the laws and regulations of each location where we operate worldwide, we have established the "Statement of Human Rights Policy of Zhen Ding Tech. Group" to protect the rights and interests of our employees.

Human Rights Risk Assessment

To ensure the basic labor and human rights and workplace safety of our employees, as well as to comply with the laws and regulations of each operating location, the company established a Social and Environmental Responsibility (SER) Committee in 2017, whose management responsibilities cover labor, health and safety, environment, code of ethical conducts, and management systems. The SER Committee clearly defines the mission of the Committee and its members' duties and responsibilities, formulates relevant policies and performance targets, tracks implementation plans, and conducts regular evaluations and reviews. To thoroughly implement the requirements of the Code of Conduct for the Electronics Industry and to review the compliance of internal systems with the latest Responsible Business Alliance (RBA), Zhen Ding formally joined the RBA as a member on May 24, 2021. At the same time, we conduct the Self-Assessment Questionnaire (SAQ) through the official website of RBA Online every year to avoid potential risks. In 2022, the SAQ scores of the manufacturing campus in Shenzhen, Huai'an, Qinhuangdao, and Boardtek were all at the low risk level. Zhen Ding also accepts the RBA "Validated Assessment Program" (VAP) from third-party organizations entrusted by customers every 2 years to further identify sustainable improvements through external audits.

SAQ and VAP assessment results of each campus

	Shenzhen Campus	Qinhuangdao Campus	Huai'an Campus I	Huai'an Campus II	BoardTek Campus
2022 SAQ	94.1	93.3	94.7	95.3	90.7
2021/2022 VAP	2021: 187.1	2021: 170.4	2022: 174.2	2022: 160.9	N/A (note)
Risk Assessment	Low risk	Low risk	Low risk	Low risk	Low risk

Note: 1. SAQ rating: The scoring is out of 100; a score of ≥85 is classified as low risk, a score of ≥65 and <85 is classified as moderate risk, and a score of <65 is classified as high risk. The BoardTek Campus did not conduct a VAP rating for customer requirements in 2022, therefore only a SAQ rating was conducted.
2. VAP rating: A score of ≥200 is classified as Platinum level, indicating that all deficiencies have been corrected and the facility operates according to customer requirements; a score of ≥180 is classified as Gold level, indicating the completion of priority and major deficiency corrections; a score of ≥160 is classified as Silver level, indicating the completion of priority deficiency corrections.

In addition to the assessment of the company through the RBA third-party organization, the company also took the initiative to join the international non-profit organization Business for Social Responsibility (BSR) and became a BSR member in 2021. We proactively conducted internal human rights assessment of the company to help learn social responsibility practices, identify potential risks, improve mitigation and remediation measures, and further ensure the protection of employees' labor human rights.

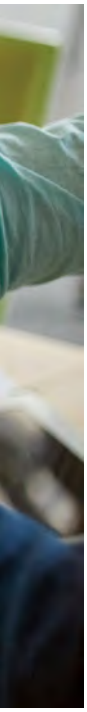
For suppliers, Zhen Ding follows the basic rule that the RBA Code of Conduct applies to suppliers, and requires that suppliers sign written commitments to management assurance. We have also stipulated RBA management standards. Regarding the RBA-based investigation and assessment tools for human rights, the scope of assessment includes: restriction on child labor, protection of human rights, prohibition of discrimination, fair treatment, legal working hours, wages and benefits, ethical standards, and environmental management. The goal is to find out which items may cause material risks in the supply chain. We conduct an investigation at least once every three years.

Human Rights Concerns and Practices

In compliance with the RBA Code of Conduct and internationally recognized labor human rights principles, Zhen Ding conducts internal human rights assessments and formulate internal management policies through the BSR organization. In 2022, an internal human rights due diligence investigation was conducted by the Company to assess human rights risks and potential impacts. In the future, investigations will continue to be conducted regularly according to the PDCA procedures. By assessing and identifying human rights risks, potential impacts or violations through human rights due diligence investigations, and evaluating the effectiveness of human rights governance, the Company will review its human rights policy statement, regulations or procedures, and ensure the implementation of human rights protection is more comprehensive. Through various impact assessment mechanisms, including the adoption of RBA risk assessments, human rights risks are identified. Among them, "working hour management" and "responsible mineral sourcing" are identified as the most significant human rights issues. Appropriate mitigation and remediation measures are then formulated to address these issues. For the identification of other human rights risks and an explanation of the due diligence process, please refer to the Zhen Ding Human Rights Due Diligence Report.

Human Rights Risk Mitigation and Remediation Measures

Target	Material Human Rights Issues	Mitigation Measures	Remedial Measures
Employees	Occupational health and safety and environment	1. Each manufacturing campus implements the ISO 45001 Occupational Health and Safety Management System. Zhen Ding's occupational health and safety policy and system is established in accordance with RBA and relevant occupational health and safety laws and regulations. 2. Multiple training and education channels. 3. The Company conducts monthly safety committee meetings to review any safety anomalies that occur within the Company. Each plant holds monthly meetings to analyze and discuss the causes and improvement measures for safety anomalies that occurred within the respective plant during that month. 4. Regular occupational risk factor tests for employee workplaces.	1. Formulated handling measures for occupational injury and accident reporting and investigations. 2. Regular drills and exercises are conducted, and the results and outcomes of these exercises are summarized and reviewed. 3. Appropriate and legally compliant labor protection equipment is provided to employees in various work environments. 4. Enhance the promotion and regulations regarding the wearing of personal protective equipment (PPE) by on-site employees, and ensure that site management personnel conduct regular inspections of employees' PPE usage. 5. Conduct regular occupational health checkups for employees working in hazardous positions.
	Work hour management Freedom of choice for selecting an occupation Sexual harassment Remuneration and benefits Forced labor Discrimination, diversity, and tolerance Personal freedom and safety	Zhen Ding complies with the "United Nations Universal Declaration of Human Rights", the "United Nations Global Compact", the "United Nations Guiding Principles on Business and Human Rights", and the "Responsible Business Alliance Code of Conduct", as well as the laws and regulations of each location where we operate worldwide. We regularly review the implementation of the "Statement of Human Rights Policy of Zhen Ding Tech. Group" to protect the rights and interests of our employees. **[Work hour management]** According to the "Process for Working Time and Employee Overtime" and requirements of the RBA, the Company strictly controls the working hours system and its implementation. **[Freedom to choose occupation]** The "Process for Humanistic Management" SOP is formulated to ensure that all employees work voluntarily. **[Sexual harassment]** Formulated the "Prevention of Sexual Harassment and Discrimination Management Regulations" to prevent sexual harassment. Annual regular training assessments at all levels and monthly on-site audits through random visits or telephone interviews. **[Wages and benefits]** The Company provides a remuneration management system that is externally competitive and internally reasonable. In addition to paying monthly salary, the Company also gives out various types of monetary rewards, including year-end performance bonuses, bonuses for continuous services, employee bonus, and monetary rewards for innovative research and development and for proposing improvement ideas. **[Forced labor]** Established the "Process for Humanistic Management" SOP. Conduct annual training on the prohibition of forced labor/human trafficking for recruiters and employees. Set up an working hour early warning function in the attendance system to review and control employees' working hours on a daily basis. Annual regular training assessments at all levels and monthly on-site audits through random visits or telephone interviews. **[Non-discrimination, diversity, and tolerance]** The Company respects diversity and inclusion, and strictly abides by equal treatment. We are committed to creating and providing equal work opportunities without discrimination regardless of nationality, race, ethnicity, skin color, age, gender, gender identity, disability, pregnancy status, marital status, religion, political affiliation, and union status. **[Personal freedom and safety]** Formulated the ""Process for Humanistic Management" and "Process for Employee's Safety Operation Management" to ensure the freedom of movement and safety of employees during operations.	1. Zhen Ding stipulated the [Statement of Human Rights Policy]. 2. Periodically review and revise various management measures each year to continuously improve the systems and procedures. 3. Conduct internal and external audits each year, including customer audits and RBA VAP audits, and implement optimizations and improvements accordingly. 4. The Company uses a personnel system for card swiping and monitoring working hours, and sends out prompt reminders to prevent any issues through the alert system. 5. Pay employees' remuneration in accordance with all remuneration-related laws, including minimum wage and overtime pay. 6. To keep the Company's general salary offers competitive, we plan and review remuneration policies of the Company's manufacturing campuses according to changes in the external economic environment. We also draft salary adjustment plans as needed by reviewing the salary survey reports provided by professional consulting companies and measuring the salary levels of the local market of each manufacturing campus. 7. The Company has established multiple communication channels, allowing employees to file complaints through these channels at any time. Feedback is promptly investigated and addressed based on the reported situations. 8. The Company follows the "Employee Handbook" and relevant company rules to handle it in accordance with the law.
Supplier/ contractor	Occupational health and safety	1. Established the "Procedure for Supplier Social Responsibility Management" to identify the risk levels of suppliers and conduct audits and implement controls based on the risk levels. This approach aims to mitigate SER risks associated with suppliers. 2. Sign the "Health and Safety Commitment Letter" with suppliers to inform them of the Company's occupational health management requirements.	1. Conduct supplier audits and track improvements every year. 2. Conduct supplier education and training.



Target	Material Human Rights Issues	Mitigation Measures	Remedial Measures
Supplier/ contractor	Work hour management Freedom of choice for selecting an occupation Remuneration and benefits	1. To address human rights risks in the supply chain, the Company conducts annual audits of its suppliers to prevent the occurrence of risks. 2. By providing education and training to suppliers, the Company instills the importance of labor rights and instructs them on practical implementation methods, helping to mitigate human rights risks in advance.	1. Conduct irregular random audits and RBA SAQ ratings on suppliers. 2. Require suppliers to implement improvement measures for human rights risks and continuously track the level of improvement. 3. Suppliers are required to provide compensation measures such as "counseling" or "policy modifications" for employees who have suffered human rights violations.
	Responsible procurement of minerals	1. Suppliers are required to sign a commitment letter, confirming their compliance with Zhen Ding's Conflict Minerals Policy and ensuring accurate and complete disclosure of the smelters in their supply chain. 2. Supplier investigations are conducted using the Conflict Minerals Reporting Template (CMRT) to identify the sources of 3TG minerals in the supply chain.	1. An annual supplier audit plan is executed to conduct audits on conflict minerals within the supply chain. 2. Conduct Reasonable Country of Origin Inquiry and due diligence for suitable conflict mineral suppliers. 3. Disclose information related to conflict minerals management on the company website every year.
Customers	Data privacy and security	1. In accordance with the Taiwan Personal Data Protection Act and relevant personal data protection regulations applicable in other operational regions, Zhen Ding ensures compliance operations for its employees and collaborating vendors. Together, they are committed to maintaining the security of personal data to safeguard the rights and interests of customers and other individuals whose personal data is involved. 2. To ensure the security of business partners such as customers and operational-related information assets, a "Information Security Management Policy" is established as a basis for management. 3. For Zhen Ding employees and suppliers who engage in transactions with customers, their awareness of relevant privacy, personal data protection, and information security regulations is strengthened through the dissemination of compliance management guidelines and training, thereby enhancing their understanding of and compliance with applicable regulations.	1. Zhen Ding conducts annual information security audits and internal reviews to ensure that our information systems and network environments comply with security implementation standards. The Company strictly enforces information security policies and customer privacy protection measures to safeguard the confidentiality of business secrets and customer data, preventing any unauthorized disclosure. 2. If, through investigation, it is found that Zhen Ding employees or suppliers are indeed involved in violations of privacy rights and personal data protection policies, or violations of applicable privacy rights and personal data protection regulations, immediate review and improvement measures will be implemented to enhance management practices. AT the same time, the Company will communicate with customers to assess compensation measures on a case-by-case basis. 3. Individuals involved in misconduct or violations will be disciplined in accordance with applicable disciplinary regulations.
Communities	Water Resource Management Air pollution and noise	[Water resource management] Each of Zhen Ding's key manufacturing campus in China conducts AWS system audit and certification every year. Annual water risk identification and assessment are carried out, and we use the Water Risk Filter AWS, a regional water crisis scoring system of the World Wildlife Fund (WWF), to analyze the water risk in the regional watersheds, and all campuses have low risks and have no water-related impacts. In addition, we use the WRI Aqueduct Water Risk Atlas water assessment tool to simulate and test the water stress of each campus by analyzing the baseline and the worst-case scenarios. The results of the simulation analysis are incorporated into the operational resilience strategy. [Air pollution] Zhen Ding introduces innovative technologies integrated with waste gas scrubber, dust collector, and activated carbon to reduce the emission of air pollutants. Every year, we regularly conduct or outsource tests and continue to track various pollutant monitoring data to ensure that our gas emissions are compliant with law and kept within the emission standards. [Noise] Zhen Ding conducts plant area noise monitoring according to the laws and regulations of the location of each plant.	[Water resource management] Zhen Ding actively improves the amount of wastewater reused after wastewater treatment and increases the water reuse rate year by year. In addition, each of Zhen Ding's manufacturing campus is striving for more water supply from outside, and has built emergency water tanks within the campuses to ensure emergency water needs as a priority. Simultaneously, an emergency water supply is also in place, ensuring multiple sources of water. [Air pollution] Zhen Ding implements atmospheric pollution reduction and prevention through the three aspects of manufacturing, prevention, and detection. On the manufacturing end, clean raw materials, intensive collection of pollution sources, and optimization of processes are employed to reduce the generation of air pollutants. In the prevention aspect, scrubbers, dust collectors, activated carbon adsorption, and continuous development/ introduction of other technologies are utilized for the treatment of end-of-pipe pollutants. Lastly, in the detection aspect, regular outsourced testing is conducted to ensure compliance with the emission standards for atmospheric pollutants. [Noise] Zhen Ding identifies the sources of noise and implements improvements for specific sources of noise. Soundproofing facilities are installed to achieve noise reduction.

Human Rights Protection Promotion and Training

To mitigate human rights risks and ensure that the work environment, labor health and safety, and compliance with relevant laws and regulations are maintained during the work process, the company conducts human rights protection-related training and promotion for employees in accordance with the concept corporate social responsibility. The training and promotion are mainly conducted through online and offline courses, announcements, communication channels, posters, SER policy card promotion, and promotion meetings. In 2022, the total number of training hours for human rights protection exceeded 600,000 hours, and 100% of employees have completed human rights-related training. Zhen Ding will continue to promote related education and training to raise awareness on human rights protection.

Human Rights Protection Training Practices

- Provide employees with awareness on compliance with relevant laws and regulations: The content includes prohibition of forced labor, prohibition of human trafficking, prohibition of child labor, equal pay for equal work, anti-discrimination, anti-harassment, management of working hours, wages and benefits, freedom of association, humane treatment, communication channels, occupational safety, and management systems.
- Implementation of promotion through communication channels: assist employees in resolving issues in work and life, and create a harmonious working environment where they are happy to communicate with each other.
- Provide complete occupational safety training: we provide different safety training for different workplace situations, such as new employee safety training, fire-fighting training, emergency first aid training, and on-the-job safety training.

Communication and Complaint Channels

Zhen Ding values the opinions and rights of employees and advocates that everyone has the right to participate in the management of the company on an equal footing. All employees are welcome to give their opinions and suggestions on the management of the company or to complain about the unreasonable aspects of the company and its management level. In 2022, in order to better understand the needs of grassroots employees and listen to what they have to say, Zhen Ding has upgraded the existing communication channels such as employee communication hotline, mailboxes, suggestion boxes, and employee service centers, as well as promoted diversified channels through online, offline, and multi-media methods. The online promotion channels include the internal communication app (Team+), the Ding Sheng E-learning APP, the Ding Ding Daming Applet, and company website announcements. The offline promotion channels include new employee orientation, SER cards, promotional boards in living areas, workshops, restaurants, and dormitory entrances, and other posters. The multimedia promotion channels include LED screens in living areas, display screens and broadcasting systems in workshops and public areas of the dormitories. In addition to a number of channels for employee feedback, the identity of the complainants is kept confidential, and the complaint records are kept by dedicated personnel. The complaints are handled and responded to immediately to effectively increase employee satisfaction.

Zhen Ding believes that the successful fulfillment of the company's operation targets relies on employees' dedication and contributions. A harmonious relationship between labor and management is therefore necessary to achieve solidarity among employees. We uphold the ideals of caring for employees and creating mutual prosperity. Our policies are designed to benefit employees and simultaneously create a positive work environment, so that both employers and employees can advance toward the common goal of pursing growth for the company. For this reason, the company's internal control system and management regulations specify the duties and interest of all employees. To protect the rights and interests of our employees, we also specify Work Rules in the Employee Handbook, which is made known to new employees and also available to employees at all times on the human resource digital platform.

Communication Channels

Employee Feedback Communication Channels

Employee Welfare Committee and Labor Unions

Zhen Ding has established an Employee Welfare Committee to implement various welfare activities. Manufacturing campus in Taiwan convene labor-management meetings each quarter according to the law, to facilitate bidirectional communication and coordination on the Company's recent and future policies to reach a consensus. In addition, the Company has established Management Rules for Employees to Seek Consultation and File a Complaint. Our employees can also use the Company's employee opinion box, digital platform, and other grievance channels to provide suggestions and feedback to the Human Resources Department or senior managers in order to ensure unrestricted communication.

The manufacturing campuses in China have established labor unions to protect the rights of employees and provide a variety of benefits. The labor union stipulates that all workers, regardless of ethnicity, race, gender, occupation, religious belief, and education level, can apply for membership through the employees' own will and approval by the grassroots trade union committees. In 2022, the percentage of employees covered by collective bargaining is 92.6% in each manufacturing campus in China.

4-2 Employee Diversity and Inclusiveness

Diversified Talents

Zhen Ding believes that "talent" is the key to corporate development. Therefore, the company always insists on upholding the core values of "Integrity, Responsibility, Innovation, Excellence, and Altruism" and actively develops a diverse, inclusive, and friendly workplace, as well as a system of recruiting, cultivating, hiring, and retaining talents. From cooperative education to the development of various expertise, general knowledge, management, and talents, we offer comprehensive and diversified training and fostering programs to make our employees competent enough to grow and develop together with the company. As of the end of 2022, the total number of formal employees in the Company is 25,464 males and 13,901 females. The number of non-formal (contracted) employees is 154 males and 422 females. All employees of the Company are full-time employees. The Company has employed 204 persons with disabilities. The most common types of non-employee workers in the Company are construction workers and non-regular project contract workers, such as equipment maintenance, renovation projects, and some regular contract workers such as security guards, cleaners, restaurant and landscaping workers. The work of non-employee workers is planned and executed differently according to different projects. In 2022, their total work hours were around 10,883 man-hours.

Note: The calculation of the number of non-employee workers is estimated based on the total work hours, expressed in person-years (assuming 250 working days and 8 work hours per day in 2022).

Personnel Distribution

Type	Group	Male		Female		Subtotal of groups and the ratio	
		Number of people	Percentage (%)	Number of people	Percentage (%)	Total	Percentage (%)
Position	Management	3,366	85.6	564	14.4	3,930	9.9
	Technicians	8,623	55.3	6,967	44.7	15,590	39.0
	All other employees	13,629	66.7	6,792	33.3	20,421	51.1
Total							39,941

Note 1: All employed staff members are full-time and permanent employees, with no part-time or contingent employees without guaranteed hours. "Management" is defined as all levels of management personnel. "Technicians" is defined as the technical staff of each unit's grassroots operation.
Note 2: The number of employees is based on the data as of the last day of the reporting period (December 31, 2022).

Type	Group	Male		Female		Subtotal of groups and the ratio	
		Number of people	Percentage (%)	Number of people	Percentage (%)	Total	Percentage (%)
Nationality	China	24,007	93.71	12,989	90.69	36,996	92.63
	Taiwan	1,362	5.32	935	6.53	2,297	5.75
	India	212	0.83	367	2.56	579	1.45
	Philippines	18	0.07	21	0.15	39	0.10
	Vietnam	10	0.04	5	0.03	15	0.04
	Other	9	0.03	6	0.04	15	0.03
Total		25,618	100	14,323	100	39,941	100

Note: Other nationalities include Japan, North Korea, Korea, Malaysia, Pakistan, New Zealand, and Germany.

Type	Group	Male		Female		Subtotal of groups and the ratio	
		Number of people	Percentage (%)	Number of people	Percentage (%)	Total	Percentage (%)
Age	Age 20 and below	576	2.3	358	2.5	934	2.3
	21~30 years old	11,740	45.8	5,333	37.2	17,073	42.8
	31~40 years old	10,888	42.5	6,477	45.2	17,365	43.5
	41~50 years old	2,205	8.6	2,070	14.5	4,275	10.7
	51 and above	209	0.8	85	0.6	294	0.7
Total		25,618	100	14,323	100	39,941	100

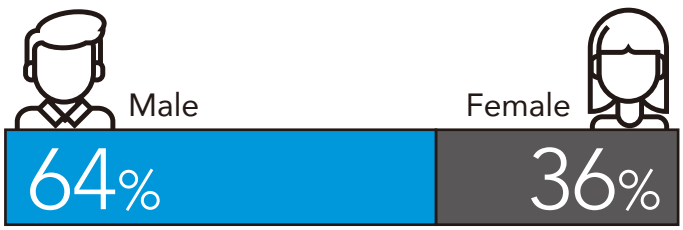
Type	Group	Male		Female		Subtotal of groups and the ratio	
		Number of people	Percentage (%)	Number of people	Percentage (%)	Total	Percentage (%)
Education	Masters and PhD	291	1.1	158	1.1	449	1.1
	Bachelor	4,550	17.8	2,083	14.5	6,633	16.6
	College	7,659	29.9	2,923	20.4	10,582	26.5
	High School (inclusive) and below	13,118	51.2	9,159	64.0	22,277	55.8
Total		25,618	100	14,323	100	39,941	100

Female Workers

Zhen Ding values diversity and inclusion and pays attention to issues related to female employees. In order to enable more female employees to stay in the Company for the long term, pursue career growth, and continuously realize their personal value, the following benefits are provided:

- Maternity benefits: A subsidy of NT$500 thousand for the third child, NT$1 million for the fourth child, and NT$2 million for the fifth child.
- Flexible work hours: To support female employees during the nursing period and enable them to balance work and family, they are allowed to leave work 1 hour earlier each day. This provides them with more time to spend with their children, fostering stronger parent-child relationships.
- Congratulatory leave for newborns: In addition to the statutory maternity leave, an extra day of paid leave is provided to congratulate the mother.
- Congratulatory gift for newborns: When female employees return to work after childbirth, they can receive a gift from the Company to express our best wishes to the female employee and newborn baby.

Ratio of male and female employees



4-3 Talent Recruitment and Retention

Attracting Talent

We recruit talented employees with an open and tolerant attitude and provide equal employment opportunities and the right to choose a career. During the recruitment process, there is no differentiation in overall compensation and benefits based on gender, age, nationality, race, gender identity, religion, marital status, disability, or political stance. Zhen Ding practices equal pay for equal work. We comply with local laws and regulations, "Statement of Human Rights Policy of Zhen Ding Tech. Group", and the RBA Code of Conduct. We protect and respect human rights and will never use child labor. The company also prohibits forced labor and human trafficking. We formulate our recruitment strategies according to the status of each plant and adopt diverse recruitment channels. These include: campus recruitment, employee referral programs, industry-academia technology collaboration programs, head-hunters, and online job announcements on social media platforms.

To avoid subjective judgments, we use scientific evaluation tools comprehensively to confirm the suitability of new employees. Apart from dedicated personnel from the human resource department who interviews the candidates to get an understanding of their basic information and personal traits, immediate supervisors also take part in in-depth interviews to talk about skills and experiences. All new employees are selected through a consistent and impartial process. When it comes to talent selection, we look for three qualities in new hires: sense of responsibility, the determination to be better, and ambition. In addition to objective indicators such as work experience, educational background, and professional skills, employee commitment to work is also valued. We hope that through this process, we can recruit talents who are an effective and agreeable team player.

Statistics of new employees based on region, gender, and age

Type	Group	China	Taiwan	India	Other overseas offices	Total
Male	Age 30 and below	43%	26%	11%	-	40%
	30~50 years old	27%	31%	3%	38%	27%
	50 and above	-	2%	-	-	-
Female	Age 30 and below	15%	21%	79%	50%	18%
	30~50 years old	15%	19%	7%	12%	15%
	50 and above	-	1%	-	-	-
Total		100%	100%	100%	100%	100%

Retaining Talent

Key talents are the core human resource asset of the company. The company creates conditions for key talents to build the best stage for them to give full play to their expertise, allowing them to showcase their outstanding management talents and professional skills. This will stimulate their strengths, release their potentials, guide them to merge into an ocean of wisdom, coalesce into a formidable force to be reckoned with, which will create lasting momentum for the company's development, thus driving operational growth. To enhance the stability of key talents and increase care and support for them and their spouses, the Company provides key talents with medical group insurance. Additionally, family members of key employees can participate in the company group insurance at a lower premium (with subsidies provided by the Company). In 2022, the retention rate for key talents reached 93.8%.

Note: Key Retention Rate = (Total number of employees with Grade 4 or above as of December 31, 2021, with two consecutive years' performance of Rating A or above, and still employed as of December 31, 2022) ÷ (Total number of employees with Grade 4 or above as of December 31, 2021, with two consecutive years' performance of Rating A or above)

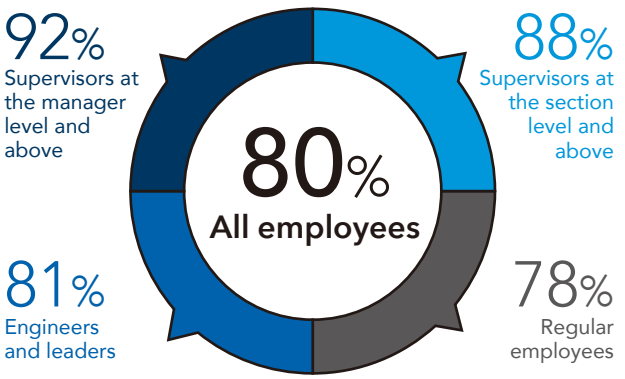
Statistics of resigned employees based on region, gender, and age

Type	Group	China	Taiwan	India	Other overseas offices	Total
Male	Age 30 and below	9.4%	13.1%	5.8%	-	9.5%
	30~50 years old	5.5%	4.8%	3.8%	0.5%	5.4%
	50 and above	0.2%	3.2%	-	1.5%	2.3%
Female	Age 30 and below	7.7%	12.3%	21.3%	-	8.6%
	30~50 years old	4.5%	4.7%	19.6%	-	4.5%
	50 and above	1.1%	2.8%	-	-	2.7%
Total		6.8%	6.4%	14.4%	0.5%	6.8%

Note: Annual average turnover rate per month = Average number of resigned employees per month in the year/average number of incumbents at the end of each month of the year.

Engagement Survey

As the company grows year by year, the company's talent attraction and retention and culture review are increasingly important to ensure that the organization's energy keeps up with the development needs. Based on the results of the engagement survey, we continue to adjust the organizational efficiency, convey the company's transformation direction through physical and online activities, and reinforce positive behavior development with career planning. Employees are the most important asset of the company, and effective utilization of human capital can create value. The company conducts an internal engagement survey every two years. In 2021, there were 33,034 participants and 73% coverage in order to understand the level of commitment of employees to the company and their work. The next survey will be conducted in 2023. The survey results show that the average engagement rate of the employees is 80%. The employee engagement survey helps us to effectively understand and collect employee opinions as a strategic tool for attracting and retaining talent, and to strengthen the fit between the company and our employees.



Training and Development

Zhen Ding believes that the right talent and the right personality will enable employees to help the company create higher value. We are committed to learning development and talent development, so that employees in both management and technical positions can properly develop according to their personal characteristics and expertise, and employees can find corresponding training programs at each stage of development to meet their growth needs. To strengthen the management ability of supervisors at all levels, we have introduced a large number of corresponding courses according to different levels to encourage employees to learn independently and grow together with the company. Talent is the most valuable asset of the company, and the growth of the company is related to the learning and development of employees. Therefore, the training system of Zhen Ding is centered on the strategic development of the company and we aim to become a learning organization, actively promoting self-learning and on-the-job training for employees. Internal training courses proceed as follows:

Encourage multi-skilled workers and establish a talent cultivation system.

Focus on on-the-job training and planning of job development map to develop future talents.

In response to the rapid changes in the global environment and to satisfy the different needs of manufacturing units and customers, Zhen Ding established a talent training system and designed education and training contents for corresponding job levels and departments to effectively integrate internal resources while systematically fostering all types of professionals required for organizational operations and development. To this end, in 2022, Zhen Ding formulated a learning plan for our employees and encouraged them to choose learning resources and learning methods according to their needs. Various management courses were introduced to address the core competencies of supervisors at different levels, providing solid and systematic training on management functions for supervisors at all levels, with an average satisfaction rating of over 96 points.

Respect gender equality and provide equality education and training

In terms of gender equality in training, we follow the principle of gender equality and provide specialized training for all levels and job functions. The total number of employees who received the required training in 2022 was 64,592, with 22,587 female employees trained, accounting for 35%. Courses related to other professional fields and quality management, such as AI applications and quality control, are open to all employees, and participation in training is based on individual needs.

In 2022, the average learning hours per employee was 60 hours [total learning hours / average annual workforce (average number of employees at the end of month)], and the total annual training expenses exceeded NT$31.92 million. Developing corresponding management courses for different levels:

Management courses

- **Senior level:** Dragon Class -Mini MBA + High Performance Managers
- **Mid-level:** Tiger Class - Excel + High Performance Managers
- **Section level:** Jaguar Class + Cool Leadership
- **Group level:** Fox Class
- **Acting group leader:** Sharpening the sword and feeding the horse

Professional courses

- Manufacturing/quality/IE/technology/ digital transformation
- Micro-lesson development (internal lecturers)
- 3N+ New Employee Crash Course

General education courses

Labor policy/environmental policy/ integrity and information security/ industrial safety/legal knowledge and language/SER

Promote independent learning and E-Learning learning platforms.

Provide multiple learning channels to encourage employees to learn on their own to enhance their potential

Due to the impact of the COVID-19 pandemic, Zhen Ding began to systematically introduce the online learning platform "Ding Sheng E-Learning App" in August 2020, officially opening a new chapter of digital learning. However, due to the continuous spread and uncertainties of the pandemic, ZDT comprehensively strengthened the promotion and use of Ding Sheng E-Learning APP in 2022, and planned various learning and development projects in accordance with organizational needs. Through the use and promotion of the internal learning platform, and the hybrid teaching method that combines the online and offline, ZDT encourages employees to use their spare time to study. The Company also adopts the method of promoting learning through examinations to strengthen employees' learning efficiency and cultivate independent study habits.

At the same time, to encourage employees' active participation, we welcome employees to contribute their knowledge and upload and share courses, with an internal course development rate of nearly 78.4% in 2022. Up to now, most of our employees have become accustomed to the use and learning through the Ding Sheng E-Learning APP learning platform. In 2022, a total of 6,778 internally developed courses were made available on the platform for employees. In 2022, the usage rate of the platform was 98.8%, and the learning rate reached 85.6%.

4-4 A Happy Workplace

Remuneration Policy and Performance

Remuneration Policy

Zhen Ding provides a remuneration management system that is competitive externally and reasonable internally to retain high-caliber professionals. We also review the overall remuneration and stipulation strategy to ensure that the company is sufficiently competitive in the market.

In addition to paying a monthly salary, the company also provides various types of monetary rewards as a form of encouragement to boost morale when needed and retain well-performing employees. These rewards include year-end performance bonuses, bonuses for continuous services, employee bonus, and monetary rewards for innovative research and development and for proposing improvement ideas. At the same time, depending on the annual profit situation, a certain percentage of the annual profit is allocated as employee performance bonus.

To keep the company's general salary offers competitive, the Human Resources Department plans and reviews remuneration policies of the company's manufacturing campus according to changes in the external economic environment. We also draft salary adjustment plans as needed by referring to the minimum wage policies of local governments, reviewing the salary survey reports provided by professional consulting companies, and measuring the salary levels of the local market of each manufacturing campus. In addition, employees' individual job performance is accounted for when adjusting their salary.

The company determines the salary of new employees by considering the employees' educational background, work experience, and competency (years of seniority and level of expertise) without discrimination on the basis of gender, age, nationality, race, religion, gender identity, marital status, disabilities, and political affiliation. In general, employees working at our manufacturing campuses earn a salary that is higher than the minimum stipulated by the local government.

Minimum pay for entry-level workers as a percentage of local minimum wage

Region / Gender	Taiwan Campus		China Campus		
	Taoyuan	BoardTek	Shenzhen	Qinhuangdao	Huai'an
Male	100%	100%	100%	100%	101%
Female	119%	100%	100%	100%	101%

Note: 1. As Taoyuan does not have entry-level employees, the salary percentage is based on the minimum wage of engineers/managers.
2. The minimum salary standard comes from the local provisions regarding minimum wage.

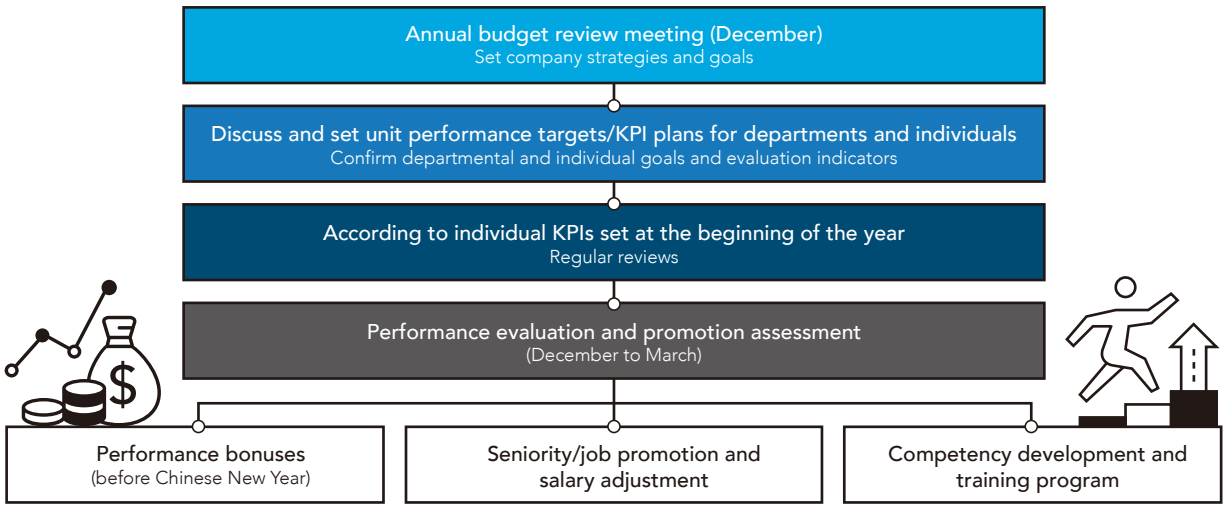
Employee Gender Pay Gap

Type	Male	Female
Annual salary of management personnel	1	0.98
Annual salary of non-management personnel	1	0.97
Average gender pay gap	1	0.96
Median gender pay gap	1	0.94
Average bonus gap	1	0.94
Median bonus gap	1	0.80

Note: For full-time base-level technical employees who are still employed as of December 31, 2022, their total compensation for the 12-month period of that year will be used as the basis for calculation. The compensation includes monthly salary, various bonuses, and dividends.

Performance Management

The Company regularly conducts performance evaluations for employees and also provides incentives in the form of rewards, salary adjustments, bonuses, and promotions based on performance evaluations. After the conclusion of the annual review and budget meeting, one-on-one meeting between managers from each level and department or functional heads is arranged to establish personal goals and main KPIs that are agreeable to both parties. Each department or functional head also interviews employees on a one-on-one basis to establish main KPIs that are agreeable to both parties.



At Zhen Ding, performance is one of the key topics of discussion between supervisors and subordinates for the year. Supervisors must fulfill their duty to performance planning and discussion. We believe that bilateral communication and discussion is not only related to a person's annual performance but also influences the company's general performance. Therefore, interviews should involve detailed discussions and rules about matters related to performance, such as the priority order of duties, employee expectation, aspects to be improved, and goals, etc.

Type \ Manufacturing Campus	Taiwan		Shenzhen		Qinhuangdao		Huai'an		Other overseas offices		Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Number of employees receiving regular performance and career development reviews	1,163	794	7,605	3,846	8,557	4,687	7,014	4,114	194	355	38,329
Total number of employees	1,379	951	8,044	4,038	8,727	4,752	7,235	4,200	233	382	39,941
Percentage	84%	83%	95%	95%	98%	99%	97%	98%	83%	93%	96%

Employee Benefits

Insurance System

The employee welfare measures for the company's employees in Taiwan include the National Health Insurance, Labor Insurance, and labor pension systems required by the Labor Standards Act of the Republic of China. We also provide employees with group insurance to protect their related benefits. Zhen Ding's group insurance in Taiwan includes a certain amount of term life insurance, accident insurance, hospitalization and medical insurance, cancer insurance, accident injury medical insurance, and occupational hazards insurance. In addition, employees' family members can also purchase the company's group insurance with lower insurance premiums. Employees in China are required by law to contribute to social insurance (including pension, medical care, work injury, maternity, and unem-

ployment insurance) and housing provident fund. In addition, the Company provides group commercial insurance for employees of grade 4 or above, including life insurance, accident insurance, major illness insurance, outpatient and inpatient insurance, hospitalization allowance, etc. Family members of key personnel can also join the Company's group insurance at a lower premium, and the Company provides annual health examinations for employees.

Retirement System

To take care of employees' post-retirement lives and to enhance the spirit of service during their employment, Zhen Ding has established employee retirement programs according to the "Labor Standards Act" and "Labor Pension Act" to ensure employees in Taiwan receive a fixed pension fund.

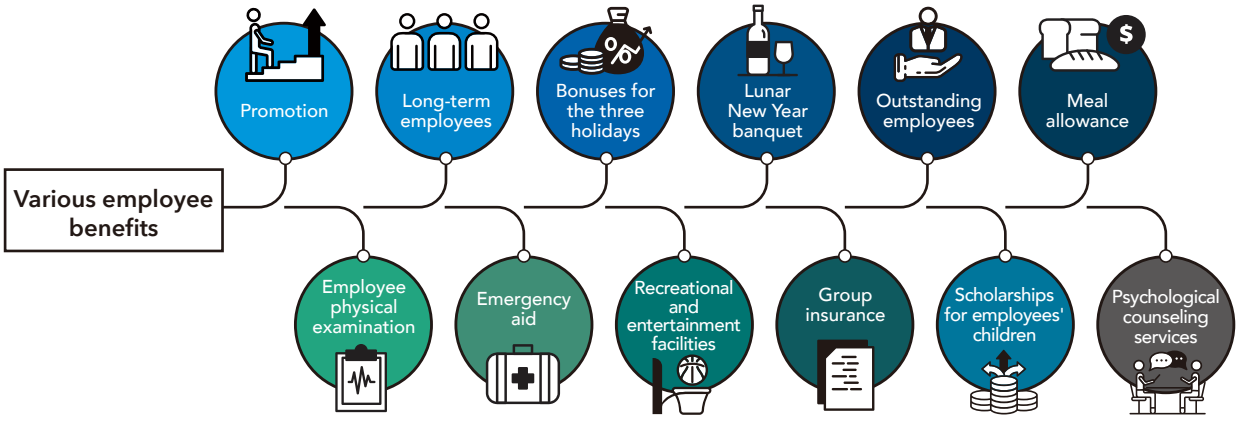
For employees under the former labor pension system, the company has established the "Retirement and Pension Management Regulations" in accordance with the "Labor Standards Act" to take care of employees after retirement and improve their services during employment. The company also established the Supervisory Committee of the Labor Retirement Reserve in accordance with regulations. The labor retirement reserve fund is appropriated each month in accordance with the "Regulations for the Allocation and Management of the Workers' Retirement Reserve Funds" to the Committee's dedicated account in the Central Trust of China and managed by the Committee. Since July 1, 2005, in conjunction with the implementation of the "new system" stipulated in the Labor Pension Act, for employees who were covered by the Labor Standards Act and opt for the new system or employees who commence their job after the new system is implemented, their seniority shall be calculated by the defined contribution plan. The Company shall pay pension by allocating 6% of the employee's monthly salary to the personal labor pension account established for each employee. Employees can choose to allocate 0% to 6% of their monthly salary to their personal retirement account. When employees reach the government-mandated retirement age, they can apply to the government to receive monthly retirement benefits or a lump-sum retirement payment.

The company's subsidiaries in China set aside pension insurance based on the mandatory ratio in accordance with the retirement and pension system required by the government of the People's Republic of China. All pension funds of current and retired employees are organized and managed by local governments.

Type	Shenzhen	Qinhuangdao	Huai'an
Company's Contribution	Non-Shenzhen residents: 14% Shenzhen residents: 15%	16%	16%
As a Percentage of Employees Covered by Pension Benefits	100%	100%	100%

Other Incentive and Benefit Programs

Employees are entitled to various benefits, in addition to special leave (statutory holidays, paid annual leave, marriage leave, bereavement leave, maternity leave, and paternity leave), retirement benefits, labor insurance, health insurance, and employee insurance (including endowment, medical care, work-related injury, maternity, and unemployment insurance) and housing provident fund according to relevant labor laws and regulations in each operating location. Zhen Ding also provides promotion and salary adjustment opportunities annually to reward outstanding performance of employees and issues production incentives, year-end bonuses, and other bonuses based on the company's operational performance. We also offer other relevant welfare measures to ensure the well-being of our employees and protect their rights and interests in the workplace.



Diverse Social Activities

It is Zhen Ding's mission to foster employees' interests and hobbies, create a talent cultivation space, and build a pool of talented artists and athletes. We also organize and fund different employee clubs and cultural and health-promoting activities. We actively renovate, optimize, and upgrade activity areas for employees. The manufacturing campuses also have a movie theater, gym facility, and yoga class to create a happy work and living environment for employees. In 2022, a total of more than 190 thousand people participated in clubs. Over 920 thousand people participated in Six Loves activities.

Sincere Communication

The Ding Sheng Time Magazine not only repeatedly advocates the company's corporate culture and core values of "Integrity, Responsibility, Innovation, Excellence, and Altruism", but also provides brief reports of major activities held in each manufacturing campus. In addition, there are columns dedicated to knowledge on laws, poems, articles written by employees, and photos of Zhen Ding. Our newsletter allows employees to apply their creative writing skills, and it also communicates information about the company's manufacturing campuses.

We also actively participate in external events and the Bao'an Development Exhibitions to interact with, learn from, and grow with external communities and showcase the corporate image of Zhen Ding and the unique qualities of our employees.

The company encourages employees to participate in joint management to improve the company's performance. In addition to the monthly extended morning meetings to communicate the major issues of the internal and external environment, the union committee also conducts regular communication meetings with employees. Through diversified communication platforms, we conduct timely and effective exchange of opinions with employees, actively shape a culture of mutual respect, communication and trust, in order to enhance employees' sense of identity, belonging and achievement with the company, thereby creating a harmonious labor-management relationship.

4-5 Health and Safety

Occupational Health and Safety Management Policy and Management

Zhen Ding adheres to legal and regulatory requirements, customer guidelines, and the Company's sustainable business principles to formulate occupational health and safety policies that align with the company's operational rules. The complete policy is publicly disclosed on the Company's website. For detailed information, please refer to the "Sustainability Focus - ESG Policies and Data" section on the Company's website.

Occupational health and safety management system

To provide a safe and healthy working environment for employees and contracted employees working in the Company, and to continuously improve occupational health and safety performance, Zhen Ding has implemented the Occupational Safety and Health Management System ISO45001, which has covered 100% of workers, activities, and workplaces. In 2022, the Shenzhen Campus, Qinhuangdao Campus, Huai'an Campus I, Huai'an Campus II, and Taiwan Campus have all passed the ISO45001: 2018 evaluation, ensuring that employees and contractors comply with the legal requirements and other requirements. All of Zhen Ding's major campuses in China and BoardTek Campus in Taiwan have completed "Occupational Safety and Health Management System ISO45001:2018" external verification.

According to Article 4 of the "Law of the People's Republic of China on the Prevention and Treatment of Occupational Disease": the employer shall create a working environment and conditions for workers that meet national occupational health standards and hygiene requirements, and take measures to ensure that workers receive occupational health protection.

Article 11 of the "Provisions on the Administration of Occupational Health at Workplaces": employers with occupational hazards shall prepare plans and implementation schemes for the prevention and control of occupational diseases, and establish and improve the following occupational health management rules and operating procedures.

The industrial safety department of each manufacturing campus has specialized personnel responsible for the business planning and promotion of safety and health management in their respective campuses, who are licensed to work in their position, while the industrial safety department of each manufacturing campus is directly under the administration supervisor of the campus.

Key Points of Work Safety Improvements in 2022

Project name	Improvement measures
High temperature improvements for electrical cabinet terminals	Change the type of wire lug and install spring washers to reduce vibrations that lead to loosening and increased heat
Fool-proof improvement of tank car dosing pipeline	Stipulate fool-proof dosing pipeline connector standards
Improvements to chemical flooding prevention	Fool-proof improvements of dosing control. Liquid level + overflow + time +emergency stop

Occupational Health and Safety Committee

In 2022, the members of the safety committees in the plants totaled 233 people. Among them, 143 people were employee representatives, accounting for 61% of members. The Safety Committee is a platform that gathers together the awareness of the entire industrial safety management. The participation of senior executives of each unit personally reflects the importance that the company places on industrial safety. Promoting safety regulations, reviewing industrial safety incidents, improving industrial safety management, and exchanging ideas among different manufacturing campuses is achieved through the meetings. The Safety Committee is composed of members from production, manufacturing, and peripheral departments. Employees are represented by the plant industrial safety personnel or industrial safety officers are responsible for communicating meeting requirements and proposing safety requirements, and contractors are represented at the meeting by our management staff.

Region	Shenzhen Campus	Qinhuangdao Campus	Huai'an Campus I	Huai'an Campus II	Taiwan Campus
Frequency	1 time/month	1 time/month	1 time/month	1 time/month	1 time/month
Discussion topics	Establishment of safety standards, audit analysis statistics on safety problems, safety project implementation, new regulations and technical standards, emergency drill status, safety activities, safety proposal improvement, work-related injury/accident reviews, contractor safety management, and status of new employee training.				

In addition to the company-level safety committee, in order to promote local management, each plant holds safety meeting chaired by the plant manager or their agent at least once a month to analyze potential hazards and promote safety issues.

Occupational Health and Safety Risk Assessment

Risk assessment process:

Before taking over a new business, the industrial safety department organizes relevant professionals to identify and analyze hazardous and harmful factors, select qualitative or quantitative evaluation methods, and make evaluation conclusions, then formulate corresponding rules and regulations, operating procedures, and emergency plans for new businesses that meet the company's requirements.

The industrial safety department is involved in safety management during the planning and design phase of the new plant. This includes reviewing building fire protection designs, managing contractors, reviewing high-risk equipment/areas, evaluating plant protective equipment, collecting emergency equipment information, and recruiting/training personnel. Safety facilities and occupational disease prevention facilities are designed, constructed, put into operation, and used concurrently with the main engineering works in construction projects. The company has commissioned a third-party organization to conduct safety pre-evaluation and occupational disease hazard pre-evaluation at the feasibility study stage of the construction project.

To effectively prevent occupational hazards, we have established a safety assessment system. Every three years, we engage a third-party assessment organization to identify workplace risks, analyze risk points based on operational processes, and implement graded management. We are gradually improving our control methods. Additionally, within the Company, an annual risk identification is conducted. Unacceptable risks that are identified are prioritized for engineering and technical measures to reduce the frequency of occupational accidents. We also evaluate new machines and equipment and establish safety regulations for the equipment procurement evaluation. Safety assessment and acceptance are conducted before procurement, during installation, and before production. We eliminate the unsafe condition of equipment at the source, reduce the risk during personnel use, identify the hazards, and request the contractor to rectify the equipment posing actual danger, and only import the equipment after the rectification is passed. Source control measures such as the selection of less toxic chemicals instead of highly toxic chemicals for chemicals used on site are evaluated to ensure the safety of employees and the manufacturing campuses.

In addition, for unscheduled high-risk operations, contractors are required to submit an application before the operation, and industrial safety personnel will check whether the work site environment and protective measures are in compliance with the regulations and give approval before the operation. In the process of operation, the relevant departments will conduct supervision throughout or conduct inspection regularly.

Employees have the right to report to the supervisor about any plant, production line, or equipment that does not meet the requirements of safe production and pose serious danger. In case of serious danger to life and property, employees have the right to stop operation and report to the senior supervisor immediately.

Safety Problem Inspection and Improvement

To identify and deal with potential hazards in a timely and efficient manner, we are constantly refining our inspection methods and approaches, moving from reliance management to autonomous management. Items being audited include: illegal operations, equipment safety protection measures, electrical facilities, operating environment, occupational health, labor protection of employees, firefighting facilities, safety of special equipment, safety education and training of employees, fire and explosion prevention in the manufacturing campuses, and construction safety. Audited deficiencies are classified and managed based on severity. Minor deficiencies should be addressed immediately, while improvements to required processes should be completed as soon as possible. If improvements are difficult or have a significant impact, production or construction may need to be halted for improvement.

Strengthen Hazard Identification and Safety Awareness

Preventions: Joint audits are conducted by personnel from different units, enabling the identification of potential hazards and risks from various perspectives. The findings are then reported to the Safety Committee to enhance and improve the audit process.

Improvements: After a work safety incident occurs, a checklist is developed to investigate the incident. Simultaneously, all manufacturing campuses are mobilized to conduct inspections in order to prevent similar incidents from recurring.

Ongoing: Promotion of safety and occupational health knowledge is achieved through various training channels, which aim to continuously remind and enhance employees' safety awareness.

Occupational Safety Incident Management

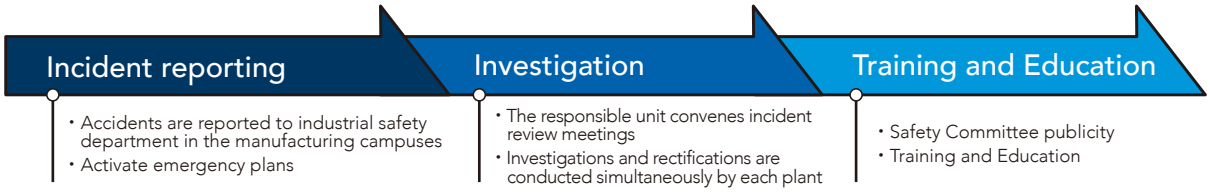
In order to ensure that relevant units can respond quickly when an occupational safety incident occurs, the Company has stipulated the "Process for Industrial Incident Management", which clearly stipulates reporting after the fact, the handling procedures, and subsequent investigation procedures. The responsible unit after the fact shall review the causes of the incident and propose short- and long-term policy adjustments according to the classification of the causes. The amended policies are implemented in every plant to prevent the recurrence of similar incidents.

Accident Occurrence Determination and Severity Grading

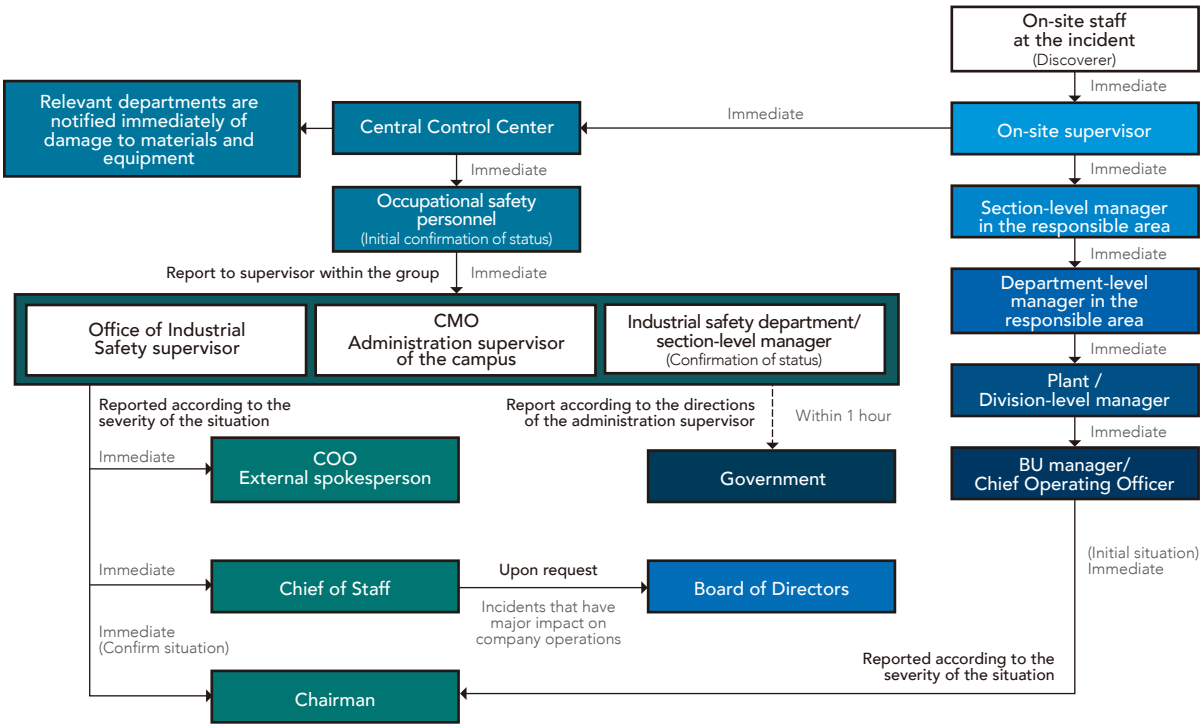
- **Startle incident:** On-site personnel must immediately report the incident to the on-site supervisor, who must immediately report the incident to the Central Control Center and notify the section-level manager. The unit supervisor shall report to their direct supervisor. The Central Control Center will also appoint industrial safety personnel to confirm the incident on site and report to the industrial safety department/section chief.
- **Minor and general incidents:** Add on industrial safety department/section chief reporting to the Office of Industrial Safety supervisor.
- **General fire/explosion, major and severe incidents:** Report to site administrator, business supervisor, CMO, and Chairman.

Incident investigation process

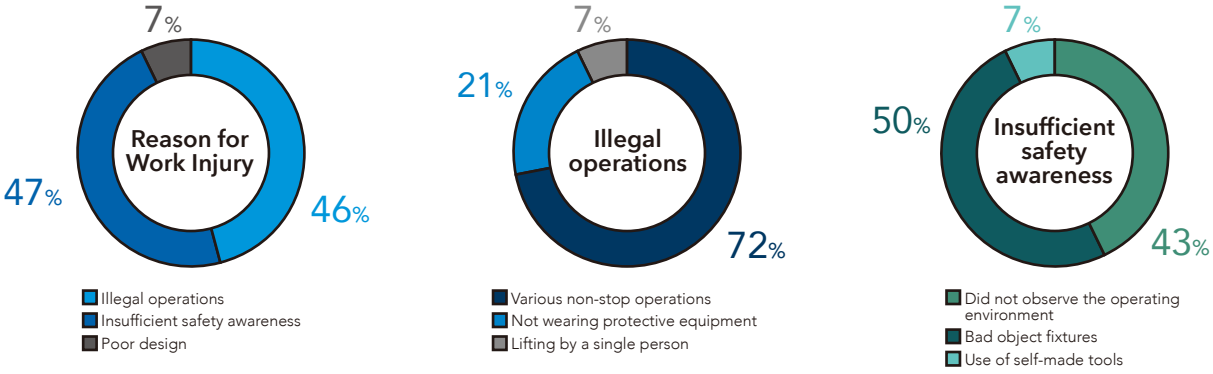
The company implements closed-loop management of occupational safety incidents. After an occupational safety incident occurs, the personnel of the incident unit shall immediately report to the central control center of industrial safety by telephone or mail, and the responsible personnel of the industrial safety unit shall file the record, which must indicate the reporting personnel's department, name, and contact telephone number to facilitate the investigation and clarification of the incident. For the personnel who successfully discover, eliminate, and report the incident, the company gives awards and commendations. We will not disclose the information of the reporting personnel and will ensure that the reporting personnel (worker) is exempted from punishment.



Incident Reporting Process



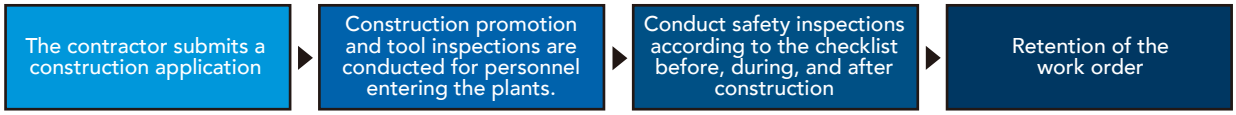
Reason for Occupational Injury and Improvement Measures



Illegal operations	Insufficient safety awareness	Poor design
• During the monthly safety committee, the review and regular ranking is conducted by the responsible department supervisor. • The Manufacturing Department conducts self-audits, while the Industrial Safety Department performs grid audits. • Work injury incidents are strictly investigated. Investigations and rectifications are conducted simultaneously. • Produce videos of safe operating procedures. • Safety and production performance evaluations are conducted quarterly for the manufacturing and related departments. • Promote regulations and operating procedures on the E-Learning APP platform. • Announce and promote safety knowledge. • Organize safety awareness meetings every quarter. • Share safety knowledge in Ding Sheng Time Magazine.	• Key position training and obtaining certification • Produce videos of safe operating procedures. • Promote regulations and operating procedures on the E-Learning APP platform. • Announce and promote safety knowledge. • Organize safety awareness meetings every quarter. • Share safety knowledge in Ding Sheng Time Magazine.	• Various methods for equipment acceptance and source control • During the monthly safety committee, the review and regular ranking is conducted by the responsible department supervisor. • Manufacturing Department self-audits + Industrial Safety Department grid audits. • Work injury incidents are strictly investigated. Investigations and rectifications are conducted simultaneously.

Procedure for Contractors Entering the Plants

Zhen Ding has stipulated the "Person for Contractors Occupational Safety Management", which stipulate clear requirements and safety protective measures for managing the safety of three construction stages (before, during, and after construction). Before construction, Zhen Ding requires contractors to sign the "Health and Safety Commitment Letter" to ensure that all contractor activities comply with occupational health and safety standards. We require contractors to provide safety training for their own employees. Employees who engage in special operations must be certified. In addition, the company provides safety training to any persons with access to construction sites, including supervisors of construction works, construction workers, responsible persons, and service providers. We also organize examinations, and those who pass the examination are given a certificate. Any construction workers working in the Zhen Ding manufacturing campuses are required to obtain a safety training certificate (valid for one year; they must undergo training and examination again next year). In 2022, the company provided safety training to 2,393 construction workers and 591 supervisors.



Workplace Health and Safety Promotion

Chemicals Management and Occupational Health Services

To ensure the health of employees, priority is given to the use of non-toxic or low-toxic chemicals instead of highly hazardous and highly toxic chemicals. If no viable alternatives are available, the risk level is assessed before use, while effective control measures, including labor protective equipment and engineering technical measures, are taken during operation and use. If there are non-national employees in the plant, the information about the corresponding hazardous chemicals will be translated into the language of the employees to ensure that they understand the relevant hazard information.

We have strict procedures for the entry, storage, use, and disposal of chemicals, including the inspection of suppliers' qualifications before entering the plant, and the application of relevant documentation and approval procedures for precursor chemicals. The storage in designated warehouses is managed by a designated personnel, and the highly toxic chemicals are double-locked, double-recorded, and double-accepted/delivered (by two people). According to the type and characteristics of the hazardous chemicals, the corresponding ventilation, sun protection, temperature control, fire prevention, fire suppression, explosion-proof, moisture, lightning, static electricity, anti-leakage, protective barrier are set up at the storage and operation site. Small amounts of chemicals are dispensed in small bottles and labor protective equipment is worn on site, while large amounts are added automatically by the chemical supply system. Chemical waste and empty drums are recycled by professional units.

Zhen Ding hires certified third-party occupational health technical service providers in accordance with laws and regulations relevant to occupational health protection, to test (once a year) occupational risk factors in dangerous workplaces. Test items include physical and chemical factors. Zhen Ding's manufacturing campuses have completed the annual inspection for 2022. In addition, the company conducts internal quarterly noise inspections (once a quarter) to keep abreast of the types of severity of occupational risk factors in the workplace and to adopt targeted preventive control measures to protect the occupational health of employees. The company reported 0 cases of occupational diseases in 2022.

The Industrial Safety Department of each manufacturing campus will report the annual environmental risk factor test results to the management department and post the results on the occupational health announcement board to provide employees with real-time information on the status of the work environment.

Type	Hazard factors	Jobs
Physical	Noise, high temperature, X-ray, etc.	Trimming room, lamination machine, drilling, etc.
Chemical Substance	Acid fog, ammonia water, methanol, nitrogen oxide, dust, etc.	Etching, plating, trimming, and dust-collector room, etc.

Each manufacturing campus has employed local medical institutions or hospitals with medical practice permits to conduct occupational health checkups of employees working in hazardous positions before they start/during their time/after they resign from working dangerous jobs. Subsequently, physical examination items are determined according to the various risk factors associated with these jobs.

In 2022, 15,466 people underwent occupational health checks. Employees who returned abnormal results or occupational contraindications will be tracked to verify their status and have their position adjusted for improvement.

Employee Education and Training

Apart from the education and training courses required by law, the "occupational safety column" has been added to the Company's internal publication, "Ding Shen Time Magazine". The safety videos are played on all televisions and advertising displays in all plants of the Company. The videos are played on a loop to convey safety related information and are changed regularly. Through the text messaging app "Ding Ding Daming Applet" and the Ding Sheng E-Learning APP, safety information is dispersed to improve safety awareness among employees.

In 2022, all plants provided employee safety training, which includes A-level personnel training, emergency response, fire drills, safety training for new equipment introduction, and licenses required by laws and regulations (e.g. electrician's license, pressure vessel operator's license) etc. Interviews are conducted after the education and training to ensure the effectiveness of the training. The time used for training is the employee working hours.

The Company plans a series of safety awareness tests on the basis of its safety training. The tests are aimed at improving the safety competency of Zhen Ding employees and improving their ability to respond to emergency situations and provide first aid assistance in the event of danger. In total, 140,480 employees took the test in 2022, for a participation and pass rate of 100%. The evaluated knowledge includes:

Test Items	Q1	Q2	Q3	Q4
General Knowledge	Fire Safety Electrical Safety Hazardous chemical safety Traffic safety	Fire Safety Electrical Safety Hazardous chemical safety Traffic safety Safety in Summer	Fire Safety Electrical Safety Hazardous chemical safety Traffic safety Workshop safety education	Electrical Safety Traffic safety
Manufacturing	Manufacturing safety	Manufacturing safety	Manufacturing safety	Manufacturing safety
Equipment/electricity	Electrical and mechanical equipment safety	Electrical and mechanical equipment safety	Electrical and mechanical equipment safety	Electrical and mechanical equipment safety

The company designates June and November as Safety Month and Fire Prevention Month, respectively, during which a wide range of emergency response activities is held, including: safety knowledge quiz, safety knowledge competition, emergency response equipment on-hand practice, safety cartoon/poster competition. These lively and dynamic approaches are used to enhance employees' understanding of safety knowledge. In 2022, Zhen Ding's manufacturing campuses organized 14 safety activities.

Implementation in 2022	Major activities	Major achievements
Fire drills and emergency response	• Zhen Ding conducts a fire emergency evacuation drill every six months in each plant.	83 plant-level fire drills were held during the year, enhancing employee emergency response awareness and handling.
Work environment monitoring	• The Company engages a third-party professional organization to conduct an occupational risk factor test every year. • Internal noise tests are conducted once a quarter.	The test results show that the physical hazards mainly include: Noise, high temperature, X-ray, etc. Chemical hazards mainly include: Acid fog, ammonia water, methanol, nitrogen oxide, dust, etc. If non-compliance with legal requirements is found, technical and management measures are implemented to protect employee safety.
Employee health exams	Employee occupational health checks before they start/during their time/after they resigned from work.	A total of 15,466 employees received physical examinations during the year.
Health promotion services	Entertainment venues	Establish a gym and cinema
Channel for filing complaints	When employees encounter unfair treatment during work, they can give feedback through normal channels.	Complaints to the Central Control Center, complaints through the Ding Ding Daming Applet, employee suggestions, comment window, Chairman/union/party mailbox

Implementation in 2022	Major activities	Major achievements
Infectious disease prevention	Complete infectious disease control procedures and measures	Establish an organizational framework for infectious diseases, promote knowledge of infectious diseases, and stockpile protective materials.
Training, education, and awareness promotion for employees	• Organize safety awareness meetings every quarter. • June and November are Safety Month and Fire Prevention Month, respectively.	• In total, 140,480 employees completed the evaluation during the year, for a participation and pass rate of 100% • The manufacturing campuses organized 14 safety activities during the year.
Contractor safety training	All contractors are required to obtain safety training certificates every year.	During the year, the Company provided safety training to 2,393 construction workers and 591 supervisors.

2022 Occupational Injury Statistics

The following tab le shows the occurrence of occupational injuries and occupational diseases in each campus of Zhen Ding in 2022. The number of fatalities caused by occupational injuries, the number of fatalities caused by occupational diseases, and the number of recordable occupational diseases for the year were all 0. The fatality rate of occupational injuries was 0. The incidence rate of recordable occupational injuries was 0.29, and the types of injuries were mainly mechanical injuries and chemical burns.

Related indicators	Employees	All employees and workers who are not employees but whose work and/or workplace is controlled by the organization
Number of fatalities due to occupational injuries	0	0
Fatality rate of occupational injuries	0	0
Percentage of recordable occupational injuries	0.29	0
Main types of occupational injury	Mechanical injury, chemical burns	Mechanical injury
Number of fatalities due to occupational diseases	0	0
Fatality rate of occupational diseases	0	0
Number of recordable occupational diseases	0	0
The rate of loss of million work hours	10.81	0
The rate of loss of 200,000 work hours	2.16	0

	2019	2020	2021	2022
The rate of loss of 200,000 work hours over the years among employees	2.08	3.31	1.97	2.16
The rate of loss of million work hours over the years among employees	10.38	16.56	9.84	10.81

Note: Please refer to the related indicator formulas and definitions below:
(1) The rate of loss of 200,000 work hours (Lost Work Day Rate (LWD)) = Number of days lost to occupational injury ÷ Total number of work hours × 200,000.
(2) The rate of loss of million work hours (Disabling Injury Severity Rate (SR)) = Number of days lost to occupational injury ÷ Total number of work hours × 1,000,000.
(3) Fatality rate of occupational injuries = Number of fatalities due to occupational injuries ÷ total working hours x 1,000,000.
(4) Ratio of recordable occupational injuries (Disabling Frequency Rate (FR)) = Number of recordable occupational injuries ÷ Total work hours × 1,000,000.
(5) Fatality rate of occupational diseases = Number of fatalities due to occupational diseases ÷ Total working hours x 1,000,000.

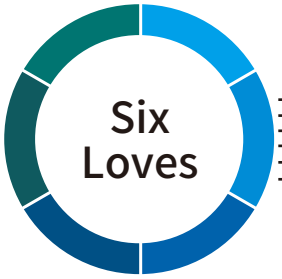
COMMUNITY

Giving Back to the Society

5-1 Social Participation

Zhen Ding Six Loves

We hope that employees could care for the people around them from the inside out and spread this sentiment of love around the world, starting with themselves. Our events throughout the year revolved around the "Six Loves" theme so that employees could participate and demonstrate their commitment to the society. Through the "Six Loves", we care for our employees and build a harmonious environment. We have also set up the Ding Shen Time Magazine and the daily broadcast "Joyful Sounds of ZDT" to enable employees to look out for the people around them, lead a fulfilling life, and identify more with the values and beliefs of the Company. In 2022, we organized 5,144 sessions of the Six Loves events with 779,348 participants.



Love Yourself

The company encourages employees to learn to love themselves and pay attention to their own health. We organize relaxing and fun activities that enable employees to have good health and fitness, relax their body and mind, de-stress, and improve their spiritual wellness. In addition, we plan a series of professional, technical, and management courses to help employees improve their tastes, increase their cultural appreciation, and build personal charm and style.

In 2022, a total of 22 Love Yourself events were held, including reading challenges, DIY workshops, and employee fitness programs. The total number of participants was 3,047.

Love Family

To create a warm, happy family atmosphere at Zhen Ding, and increase employees' wellbeing and sense of belonging, the company has organized events at all manufacturing campuses, such as matchmaking events, parent-child trips, family open day, and couple activities, as means of building a platform that surrounds employees with the love of their families, friends, and partners.

In 2022, a total of 42 Love Family events were held, including family photo collections and family-themed courses and salons, with a total of 12,026 participants.

Love Your Colleagues

The company provides employees with comprehensive care from visits to production lines, employee seminars, hotline assistance, and birthday celebrations for employees to strengthen positive relations among employees, thank the employees for their hard work, and to strengthen the team culture, that encourages interaction and communication and boosts team cohesion and solidarity.

In 2022, a total of 3,255 Love Colleagues events were held, such as cultural events, interactive activities, and motivational programs for returning to work, with a total of 449,640 participants.

Love the Company

The company provides employees with a stage to fulfill their personal values in life. We encourage employees to integrate their own growth in the company's development. The Company's development history and representative buildings enable employees to reap the results of their labor and share the glory of the Company's success. We organize various reward and incentive activities to inspire employees' passion for their jobs and careers. We continue to encourage employees of ZDT.

In 2022, a total of 268 Love the Company events were held, including online quizzes on cybersecurity knowledge and a photography exhibition showcasing the company's beauty, with a total of 76,071 participants.

Love Life

The company has built a movie theater, dance and yoga room, gym facility, and other integrated multi-functional cultural venues coupled with a wide range of activities (e.g., gym check-in, amateur club activities, sports competitions, themed parties, pottery, and floral design courses) to satisfy employees' different needs and help them to lead healthier and better lives.

In 2022, a total of 1,525 Love Life events were held, including Show Your Colorful Life, weight loss and fat burning courses, and My Daily Diary, with a total of 230,104 participants.

Love the Earth

Protect the environment and make the Earth a better place is one of the Company's motto. The company organizes events during the Environmental Protection Month, environmental protection education on campus and in local communities, resource recycling exhibitions, and green hikes to promote a green corporate culture, fulfill our environmental missions, and make the earth a more beautiful place through our actions.

In 2022, a total of 32 Love the Earth events were held, including waste sorting promotion, battery recycling, and green community evaluations, with a total of 8,460 participants. The aim is to work together to protect our beautiful planet.

Zhen Ding Six Assistances

We fulfilled our corporate social responsibility through a series of "Six Assistances" events. The company adopted its own song "Let the World See" to deliver our corporate culture and take on corporate social responsibilities to contribute to social advancement. The company shall uphold the spirit for continuous innovation and we hope to make ourselves, the environment, society, and the Earth better each day. In 2022, 261 Six Assistances events were held with 143,074 participants and 3,734 volunteer hours.

Help the Elderly

It is a traditional virtue of the Chinese culture to respect, honor, love, and help the elderly. The company regularly organizes visits to elderly people who live alone and we organize employees to provide volunteer services in retirement homes to improve employees' gratitude and awareness for respecting their elders, and provide them with love and care.

A total of 23 elderly care events were organized in 2022, with 8,459 participants.

Help the Weak

The company sponsors children's homes and provides care to environmental health workers, and lead employees to care for and spend time with disadvantaged groups in society. We organize volunteer service teams and use our actions to implement the volunteer's spirit of "sacrifice, love, helping others, and progress".

A total of 146 disadvantaged care events were organized in 2022, with 106,544 participants.

Help the Disabled

The company provides disabled people with jobs to help them become self-reliant and fulfill their own goals. The company also regularly visits homes for the disabled to provide care and companionship, further realizing the company's value of "benefiting people" and fulfilling its social responsibility.

A total of 22 disabled care events were organized in 2022, with 3,129 participants.

Help Studies

The company encourages our employees to provide different volunteering services, such as collecting funds to set up a library, donating books and other learning materials to help children to broaden their horizon and expand their knowledge base. At the same time, we have helped to improve the teaching environment and sponsored financially-disadvantaged college students to help them grow and become successful. Zhen Ding has established a long-term support mechanism to enable more underprivileged students with excellent academic performance to complete their education.

A total of 25 academic assistance events were organized in 2022, with 6,357 participants.

Help Transportation

We promote transportation safety and increase pedestrians' awareness of traffic laws to construct a civilized and orderly transportation environment. We encourage compliance with traffic laws and civilized driving. We provide citizens and environment sanitation workers with drinking water and we distribute environmentally friendly bags to fulfill our low-carbon environmental protection ideals and show how much the company cares.

A total of 17 travel assistance events were organized in 2022, with 11,553 participants.

Help Cleanliness

We take action to demonstrate the importance of environmental health and protect the health of the environment around our manufacturing campuses, in order to foster environmental awareness in employees. Volunteers spend their rest time cleaning beaches and parks, transforming their care for the environment into actions in their daily lives, and putting into practice the concept of loving the earth.

A total of 28 cleanliness assistance events were organized in 2022, with 7,032 participants.

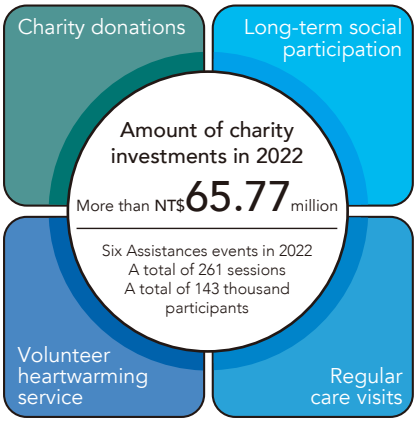
5-2 Contribution to the Public

Zhen Ding Social Welfare

Developing technologies for the betterment of human beings and protecting the environment for a greener earth.

Zhen Ding is committed to becoming the driver of social upward mobility, and takes "Six Assistances" as the core of social welfare, focusing on the business mission and social needs of "making the earth a better place". We give back to society through public welfare actions, fulfill corporate social responsibility, contribute to social harmony, and create value for the common good.

Zhen Ding also has a long-term volunteer service plan in place to care for elders living on their own, disadvantaged groups, and the disabled, as well as set up education and schooling plans, advocate green and environmentally-friendly actions, and care for the earth. We carry out our annual plan by implementing main social welfare activities month by month to achieve the goals of actively promoting the culture of filial piety and helping financially-disadvantaged students.



Sustainable Development Goals • Corporate Social Responsibility • Social Needs • Positive Energy • Generous Love

	Help the Elderly	Help the Weak	Help the Disabled	Help Studies	Help Transportation	Help Cleanliness
	Caring for elders living on their own	Caring for disadvantaged groups	Caring for people with disabilities	Caring for the disadvantaged in education	Promoting civilized transportation	Caring for a beautiful earth
Target Groups and Methods of Assistance	• Visits to old-age nursing homes • Visits to retirement homes • Visits to financially-disadvantaged elders • Visits to welfare centers • Providing the elderly with daily necessities • Performing cultural entertainment • Volunteers make blessing cards for happiness and peace • Promote and advocate the culture of filial piety	• Visits to orphanages • Visiting environmental health workers • Visiting families protected under the Five Guarantees System • Visits to rice farmers • Volunteers spend time with orphans to provide warmth and care • Provide warm clothing as gifts • Volunteers visit financially-disadvantaged families • Adopt a rice field and donate to charity	• Provide jobs for people with disabilities • Visits to rehabilitation center for people with disabilities • Visiting disabled children • Visits to centers for people with disabilities • Stress relief • Develop a continuous care program • Long-term care visits • Establish a pairing support program	• Visits to elementary school in financially-disadvantaged mountainous areas • Visiting financially-disadvantaged students • Caring for financially-disadvantaged university students • Knowledge classes on campus • Donation of educational materials • Continuing to help financially-disadvantaged students • Implement the public welfare sponsorship programs • Book Corner Program	• Promote civilized travel to the public • Promote civilized travel to elementary school students • Promote traffic rules to the public • Promote low-carbon transportation • Volunteer promotion • Civilized travel program • No-Violation Month program • Green and Low Carbon Initiative	• Promote beach cleanups • Promote green initiatives in parks • Promote green cycling activities • Advocating the public to take care of the earth • Distribute environmentally friendly bags • Volunteer advocacy • Green and Low Carbon program • Home cleaning program
Social Impact	• Raise awareness of filial piety among young people • Enhance the health and wellbeing of the elderly	• Raise the level of attention given by the society • Raise the level of concern for the disadvantaged	• Enhance the living standard of people with disabilities • Maintain social harmony and stability	• Eliminate the gap in education resources • Promote young talents to achieve success	• Promote public safety awareness • Promote a civilized environment	• Promote the public's environmental protection awareness • Advocate for lower energy consumption

Employee Care and Being Responsible

Community Impact Assessment

The company's manufacturing campuses maintain a positive interaction and communication with local communities and governmental agencies. Various operating activities in these campuses conform to requirements relevant to environmental impact assessment. The company continues to assess non-significant negative impacts on local communities and environments. Apart from these efforts, we also strive to act as the model example for the industry. In addition to minimizing negative impacts and completely abiding by environmental and social laws, we take further step in contemplating ways to improve our community and local environment. For instance, we take the initiative to assist with road planning and traffic management with regards to traffic congestions around our manufacturing campuses. In doing so, we hope to safeguard areas around to have zero accidents and protect the safety of employees commuting to work and leaving work.

Social Welfare Participation

Zhen Ding focuses on spreading great generosity and love. We actively participate in, organize, and sponsor public welfare activities with the concept of giving back to society what was taken from society, and fulfilling our corporate social responsibilities. In addition to regularly launching the "Six Assistances" public welfare brand activities, Zhen Ding pays great attention to education in our "Helping with Education" public welfare activities. In 2022, more than half of the public welfare funds were spent on education activities to eliminate the gap in educational resources and promote the growth and success of young talents.

Public Services and Fundraising

Manufacturing Campuses	Name of Activity	Content	Amount donated (Unit: NT$)
Shenzhen	Donations for Helping and Supporting Village Communities - Guangxi	Donated RMB100 thousand to "Helping and Supporting Village Communities" for poverty alleviation.	442,340
Shenzhen	Donations for Xin'an Subdistrict epidemic prevention	Three donations totaling RMB76,345 were made for epidemic prevention in Xin'an Subdistrict.	337,704
Shenzhen	Donation of epidemic prevention materials to Nyingchi City, Tibet Autonomous Region	Epidemic prevention materials worth RMB 95,240 were donated to Nyingchi City, Tibet Autonomous Region.	421,285
Huai'an	Donations to the Development District Charity Association	Donated RMB 200 thousand to the "Development District Charity Association".	884,680
Huai'an	Charity Donation Day event	RMB 300 thousand was donated during the "Charity Donation Day" event.	1,327,020
Subtotal			3,413,029

Public Welfare Sponsorship and Donation

Unit: NTD	Material donation (daily necessities, epidemic prevention supplies, educational supplies, etc.)	Cash donations	Total
Help the Elderly	67,169	0	67,169
Help the Weak	91,653	1,846,203	1,937,856
Help the Disabled	92,480	5,308	97,788
Help Studies	323,718	59,932,133	60,255,851
Total	575,020	61,783,644	62,358,664

My Piece of Land

We are fully aware of the importance of environmental conservation and sustainable management, and we are committed to environmental protection and the preservation of the natural ecology, to create a model of a green company. For the 11th year running, we have carried out the rice field adoption program. Zhen Ding has supported over 12.75 hectares of eco-friendly rice fields and worked together with farmers to ensure that nearly 30,000 kilograms of natural-farming rice can ripen. The adopted rice fields are all cultivated using the "natural farming method", which means that the non-toxic rice grown will not cause soil or environmental pollution and will return the healthiest ecosystem to nature.

In 2022, we continued to work with local rice farmers in Daxi. Through the "My Piece of Land" volunteering activity, we hope employees and their spouse can contribute to Taiwan with actual actions. Furthermore, Zhen Ding also donates a portion of the crops harvested to disadvantaged groups in need of help to fulfill our social responsibilities.

Support the Sheltered Center of the Children Are Us Foundation

In 2021, we began working with the Children Are Us Foundation. For two consecutive years, we chose gift boxes made by the "angels" for Mother's Day, so that we can share the love with everyone. At the same time, we were awarded the Taoyuan City Government's 2021 Encouragement for Corporations to Order Products from Taoyuan Sheltered Workshops Competition - Gold Award.

Industry-Academia Collaboration

For Zhen Ding, "talent" is the basis for competitiveness. To promote industry-academic cooperation and make use of schools' existing resources, the company encourages young learners to focus on relevant academic research and

technological innovation. The "Elite Training Scholarship" was set up to encourage students to devote themselves to relevant academic research and technological innovation, so that we can identify outstanding talents for Zhen Ding early on. In 2022, a total of 50 technological development projects through industry-academia collaboration were carried out to help students grow and develop their potential.

In 2021, Zhen Ding worked with the Education Bureau of the Taoyuan City Government to support the Technical and Vocational Training Program and set up a scholarship program for students with outstanding performance and with their household registration in Taoyuan City. In 2022, a total of 547 students received scholarships, including 309 technical and vocational scholarships, 202 technical and vocational assistance scholarships, and 36 special technical and vocational performance awards. The total amount awarded was NT$5.88 million.

Public Welfare for Supporting Education

Zhen Ding focuses on education and continues to make efforts to eliminate the gap in educational resources and promote the growth and success of young talents.

1. **Sponsoring the construction of financially-disadvantaged elementary schools and caring for financially-disadvantaged elementary students**

   For many years, Zhen Ding has been donating regularly to elementary schools in financially-disadvantaged mountainous areas to help improve their teaching facilities. As of 2022, we have helped 25 elementary schools to show our care. We donated chairs, tables, books, and winter suppliers. We also established reading corners in underprivileged schools. At the same time, classes on traffic safety and green campus activities were held for the students, and interactive games were used to help them broaden their horizons, benefiting more than 22 thousand elementary school students.

2. **Continued with public welfare activities to support financially-disadvantaged students with outstanding academic performance**

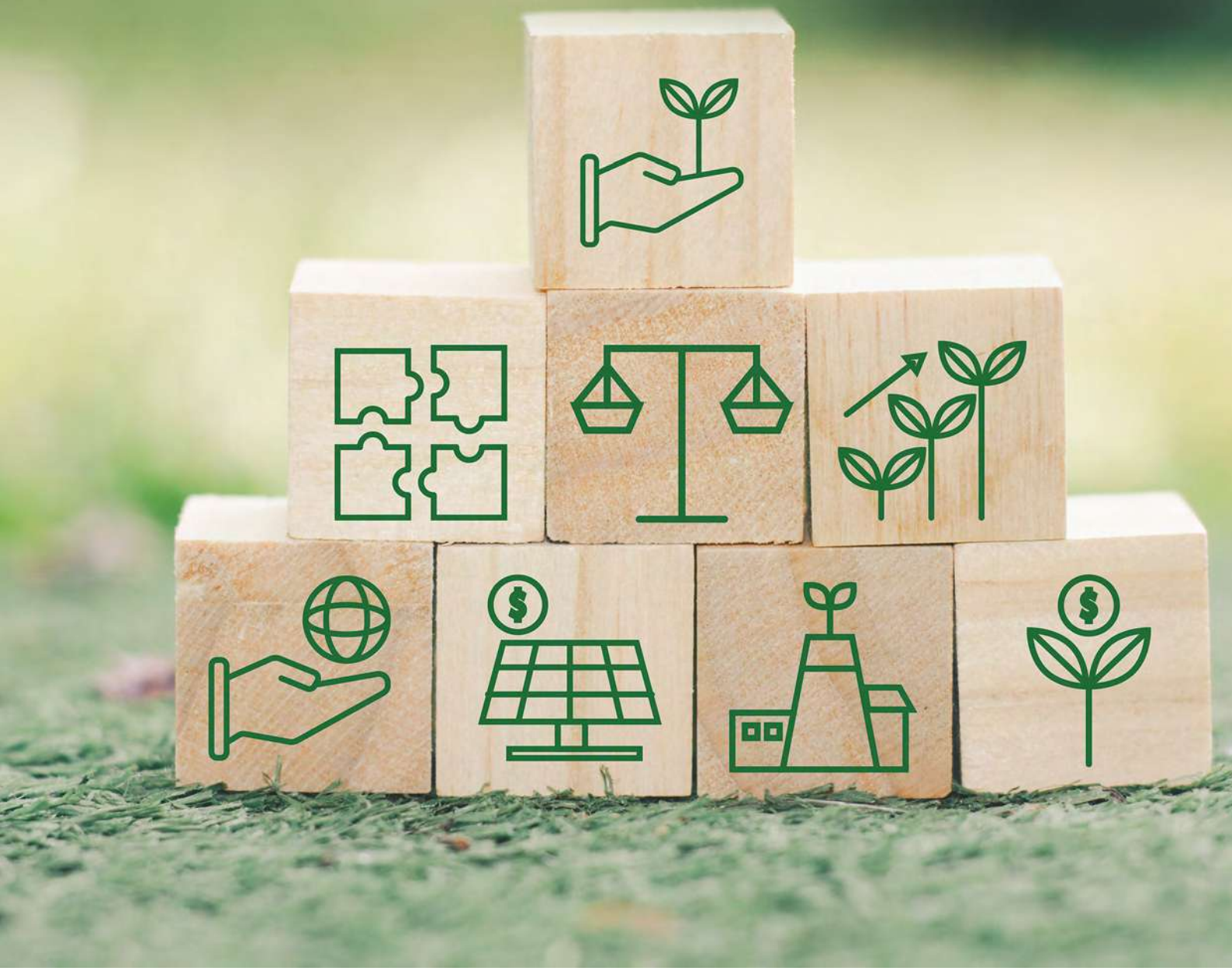
   Zhen Ding has continued with the long-term plan to provide financial support for financially-disadvantaged students with outstanding academic performance to complete their four years of university education. In addition, we carry out care interactions to keep an eye on the growth and learning of our students. At the same time, volunteers visit the families of financially-disadvantaged students in the mountainous areas, pay attention to the growth environment of students, and encourage the development of students. As of 2022, we have sponsored a total of 376 students in 14 schools.

   At the same time, ZDT interacts with school children regularly. We care about the growth and education of these students. When school started, we gifted the children with back to school gift bags. During the Lunar New Year, we traveled to the underprivileged schools to deliver new year gifts for the happy holidays.

University Students Sponsored

Region	Funded schools	No. of people funded in 2019	No. of people funded in 2020	No. of people funded in 2021	No. of people funded in 2022
Mainland China	Shenzhen University	0	20	19	19
	Guangdong University of Technology	0	15	15	15
	Dongguan University of Technology	0	15	14	12
	Yanshan University	0	20	20	18
	Hebei University of Technology	0	15	15	15
	Hebei Normal University of Science and Technology	0	15	15	14
	Huaiyin Institute of Technology	0	20	20	17
	Huaiyin Normal University	0	15	15	15
	Nanjing Institute of Technology	0	15	15	13
	Schools in Ziyang County, Shaanxi	12	42	89	138
	Daliang Mountains, Sichuan (from 2022)	/	/	/	10
Taiwan	National Tsing Hua University	0	18	28	38
	Chung Yuan Christian University	3	7	17	27
	Yuan Ze University	0	5	15	25
Total		15	222	297	376

Appendices



Environmental Data

Environmental protection investment amount in previous years (Unit: NT$ thousand)

Item	Type	2018	2019	2020	2021	2022
Response to climate change	Investment amount in climate change response	1,744	11,152	6,426	2,367	1,521
Amount invested in directly reducing environmental load	Pollution prevention	358,436	605,131	662,797	497,251	304,164
	Reduce resource consumption					
	Amount of construction and repair expenses for corporate waste storage facilities					
Amount invested in indirectly reducing environmental load (Management expenses related to environmental protection)	Environmental protection education and training expenditures	21,299	26,598	45,253	69,872	60,613
	Environmental management system certification expenses					
	Various environmental monitoring expenditures					
	Procure environmentally friendly materials					
	Environmental responsibility and organizational operation management expenses					
	Research and development					
Total		381,479	642,881	714,476	569,490	366,298

Note: 1. On November 4, 2020, BoardTek Electronics Corp. officially became a 100% owned subsidiary of Zhen Ding. It was included in the ESG Report since 2021.
2. The amounts in the table are the invested amounts and do not include operating costs.

Amount of energy usage in previous years

Type of energy	Unit	2018	2019	2020	2021	2022
Electricity (including purchased green electricity)	MWh	910,892	989,495	1,126,831	1,423,830	1,414,113
Gasoline	liter	333,612	229,540	141,660	105,076	107,787
Diesel	liter	155,904	57,292	79,081	114,463	85,661
Natural gas	Cubic meter	12,623,606	13,845,454	14,589,776	15,099,001	13,823,173
Purchased steam	Tons	121,466	114,901	123,312	141,398	152,052
Purchased heat power	Gigajoules (GJ)	121,826	124,045	141,977	179,057	138,361
Solar power	MWh	/	/	1,469	2,370	3,952
Total energy	Gigajoules (GJ)	4,245,459	4,553,093	5,120,643	6,300,195	6,209,379

This disclosure traces the historical data to reveal the increase in the use of renewable energy.

Energy usage intensity in previous years

Type of energy	Unit	2018	2019	2020	2021	2022
Purchased electricity intensity (including green electricity)	Gigajoules (GJ)/million NTD	27.81	29.67	30.90	33.06	29.71
Gasoline intensity	Gigajoules (GJ)/million NTD	0.09	0.06	0.03	0.02	0.02
Diesel intensity	Gigajoules (GJ)/million NTD	0.05	0.02	0.02	0.03	0.02
Natural gas intensity	Gigajoules (GJ)/million NTD	4.17	4.49	4.33	3.79	3.14
Purchased steam intensity	Gigajoules (GJ)/million NTD	2.86	2.65	2.60	2.53	2.46
Purchased heat power intensity	Gigajoules (GJ)/million NTD	1.03	1.03	1.08	1.16	0.81
Solar power intensity	Gigajoules (GJ)/million NTD	/	/	0.04	0.06	0.08
Total Energy Intensity	Gigajoules (GJ)/million NTD	36.01	37.92	39.00	40.65	36.24

Note: On November 4, 2020, BoardTek Electronics Corp. officially became a 100% owned subsidiary of Zhen Ding. It was included in the ESG Report since 2021. This disclosure traces the historical data to reveal the increase in the use of renewable energy.

Greenhouse gas emissions in previous years

Greenhouse gas emissions data	Unit	2018	2019	2020	2021	2022
Scope 1	tCO_2e	36,881	38,076	42,289	53,131	83,252
Scope 2	tCO_2e	678,134	694,596	849,479	1,041,369	1,002,774
Scope 3	tCO_2e	14,704	10,923	11,800	28,476	47,610
Scope 1 and Scope 2	tCO_2e	715,015	732,672	891,768	1,094,500	1,086,026
Total Emissions	tCO_2e	729, 719	743,595	903,568	1,122,976	1,133,636
Scope 1 and Scope 2 emission intensity	tCO_2e /million NTD	6.06	6.10	6.79	7.06	6.34
Percentage reduction targets of Scope 1 and Scope 2 GHG emission intensity	%	20	23	25	30	33
Actual percentage reduction of Scope 1 and Scope 2 GHG intensity	%	37	37	30	28	35

Note: 1. The greenhouse gas verification method is operational control. Covers the Shenzhen Campus, Qinhuangdao Campus, Huai'an Campus I, Huai'an Campus II, and BoardTek Electronics Corporation. You can find the greenhouse gas verification certificates for each site on the Zhen Ding official website at www.zdtco.com/tw/csr/list/ESGDatabase/ESGCertificationandVerification. The legal entity for the Shenzhen Campus is Avary Holding (Shenzhen) Co., Limited. The legal entities for Qinhuangdao Campus include Hong Qi Sheng Precision Electronics (Qinhuangdao) Co., Ltd. and Qi Ding Technology Qinhuangdao Co., Ltd. The legal entity for Huai'an Campus I is Hong Heng Sheng Electronical Technology (Huaian) Co., Ltd. The legal entities for Huai'an Campus II include Qing Ding Precision Electronics (Huaian) Co., Ltd. and Yu Ding Precision Electronics (Huaian) Co., Ltd. Lastly, the Boardtek Campus is represented by Boardtek Electronics Corporation.
2. Emission coefficient is calculated using the latest standards announced by local governments in China and Taiwan (electricity emission coefficient: Shenzhen 0.5271kg CO_2e/kWh, Qinhuangdao 0.8843 kg CO_2e/kWh, Huai'an 0.7035 kg CO_2e/kWh, Taoyuan 0.509 kg CO_2e/kWh).
3. The types of gases included in the calculation are: carbon dioxide, methane, nitrous oxide, chlorofluorocarbon, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride. The global warming potential (GWP) ratios used are based on the data from the IPCC 6th Assessment Report.
4. In 2013, the hardware infrastructures were complete, therefore, 2013 is used as the baseline for comparison with environmental data. Baseline year 2013: Scope 1 emissions were 35,282 tons CO_2e, Scope 2 emissions were 593,025 tons CO_2e, and Scope 3 emissions were 4,486 tons CO_2e. Scope 1&2 emissions intensity was 9.74 tons CO_2e/million NTD.
5. Emission intensity = Scope 1 and 2 carbon emissions ÷ Revenue.
6. The carbon intensity reduction target for 2025 is 40% (based on the 2013 carbon emission intensity of 9.74 tons CO_2e/million NTD).
7. On November 4, 2020, BoardTek Electronics Corp. officially became a 100% owned subsidiary of Zhen Ding. It was included in the ESG Report since 2021. Scope 1 and Scope 2 emission intensity in 2021 is different from the data disclosed in the previous report. This report has been adjusted to include the Boardtek Electronics Corporation.

Water consumption in previous years

Item	Unit	2018	2019	2020	2021	2022
Municipal Water	million liters	6,567	7,360	7,397	9,020	8,187
Surface water	million liters	4,574	4,123	4,724	4,862	5,425
Total water consumption	million liters	11,141	11,483	12,121	13,882	13,612
Water Intensity	million liters/million NTD	0.0945	0.0956	0.0923	0.0895	0.0794
Actual Reduction	%	28	27	30	32	40

Note: 1. Total water consumption = Municipal water and surface water.
2. Figures for municipal water and underground water are from water bills and the amount of water recycled for reuse and the amount of water used for production are estimated using the water meter.
3. Water intensity = Total water consumption ÷ Revenue. Reduction percentage is based on water intensity of 2013: 0.1314 million liters/million NTD as the basis for comparison with the carbon emission base year.
4. The above water resources are all from freshwater (total dissolved solids ≦ 1,000mg/L).
5. Water intensity in 2021 is different from the data disclosed in the previous report. This report has been adjusted to include the Boardtek Electronics Corporation.

Amount of recycled water in previous years

Item	Unit	2018	2019	2020	2021	2022
Water recycling and reuse	million liters	3,717	5,637	7,522	10,118	9,703
Waste water reuse rate	%	33.4	49.1	45.8	50.5	50.5
Waste water reuse target	%	31	40	45	48	50

Note: The waste water recycling rate equation for 2017 to 2019: Water recycled for reuse ÷ Total water consumption × 100%. The water recycling rate equation for 2020 has been changed to: Water recycled for reuse ÷ (Water recycled for reuse + Total wastewater discharge) × 100%.

Water Reuse at the Manufacturing Campus

Manufacturing Campus	Unit	2018	2019	2020	2021	2022
Shenzhen Campus	million liters	1,316	1,646	1,819	2,187	1,996
Huai'an Campus I	million liters	489	522	593	1,322	1,021
Huai'an Campus II	million liters	236	415	671	1,528	1,552
Qinhuangdao Campus	million liters	1,605	3,005	4,439	4,972	5,030
BoardTek Campus	million liters	N/A	N/A	N/A	109	104

Achievement of the Primary Indicator Targets of Wastewater Quality

Manufacturing Campus	Primary indicators for water quality	Unit	Status in 2022	Regulatory Standards	Zhen Ding Targets	Target Achievement
Shenzhen	Hydrogen ion concentration (pH)	-	7.3	6-9	6-9	Exceed the target
	Chemical oxygen demand (COD)	mg/L	85	160	100	Exceed the target
	Copper (Cu)	mg/L	0.09	1.0	0.6	Exceed the target
Qinhuangdao	Hydrogen ion concentration (pH)	-	7.4	6-9	6-9	Exceed the target
	Chemical oxygen demand (COD)	mg/L	170	400	300	Exceed the target
	Copper (Cu)	mg/L	0.08	0.5	0.4	Exceed the target
Huai'an Campus I	Hydrogen ion concentration (pH)	-	7.3	6-9	6-9	Exceed the target
	Chemical oxygen demand (COD)	mg/L	247	400	350	Exceed the target
	Copper (Cu)	mg/L	0.41	2.0	1.5	Exceed the target
Huai'an Campus II	Hydrogen ion concentration (pH)	-	7.6	6-9	6-9	Exceed the target
	Chemical oxygen demand (COD)	mg/L	229	400	350	Exceed the target
	Copper (Cu)	mg/L	0.39	2.0	1.5	Exceed the target
BoardTek	Hydrogen ion concentration (pH)	-	7.9	6-9	6-9	Exceed the target
	Chemical oxygen demand (COD)	mg/L	208	560	450	Exceed the target
	Copper (Cu)	mg/L	0.7	1.5	1.2	Exceed the target

Achievement of Major Emission Targets

Manufacturing Campus	Atmospheric Key Indicators (Unit: mg/m³)	Status in 2022	Regulatory Standards/Targets	Zhen Ding Targets	Target Achievement
Shenzhen	Volatile organic compounds	9.82	80	64	Exceed the target
	PM	12.6	120	96	Exceed the target
	Nitrogen oxides (boiler)	74.81	150	120	Exceed the target
	Sulfur dioxide (boiler)	7.25	50	40	Exceed the target
Qinhuangdao	Volatile organic compounds	5.63	50	40	Exceed the target
	PM	6.9	120	96	Exceed the target
	Nitrogen oxides (boiler)	12.91	30	25	Exceed the target
	Sulfur dioxide (boiler)	0.68	10	8	Exceed the target
Huai'an Campus I	Volatile organic compounds	5.79	40	35	Exceed the target
	PM	7.9	120	96	Exceed the target
	Nitrogen oxides (boiler)	18.94	50	40	Exceed the target
	Sulfur dioxide (boiler)	Not detected	35	28	Exceed the target
Huai'an Campus II	Volatile organic compounds	3.72	40	35	Exceed the target
	PM	4.47	120	96	Exceed the target
	Nitrogen oxides (boiler)	27.45	50	40	Exceed the target
	Sulfur dioxide (boiler)	Not detected	35	28	Exceed the target
BoardTek	Volatile organic compounds	15	N/A	60	Exceed the target
	Particulate matters	2	100	80	Exceed the target

Social Data

Workplace information for previous years

Item	Unit	2018	2019	2020	2021	2022
Total no. of employees	Number of people	36,330	36,181	46,919	42,820	39,941
Female supervisors	Number of people	370	448	567	649	564
Male supervisors	Number of people	2,002	2,567	3,244	3,635	3,366
Percentage of female supervisors	%	15.6%	14.9%	14.9%	15.1%	14.4%
Percentage of male supervisors	%	84.4%	85.1%	85.1%	84.9%	85.6%
Percentage of female entry-level supervisors	%	16.1%	15.1%	14.0%	12.2%	13.9%
Percentage of female mid-level supervisors	%	15.5%	14.8%	14.3%	15.1%	14.3%
Percentage of female senior supervisors	%	16.7%	22.2%	11.1%	16.7%	16.7%
Percentage of female supervisors in production and revenue-related departments(Note)	%	14.5%	13.8%	13.0%	14.4%	13.5%
Percentage of females in STEM-related departments	%	30.6%	30.8%	32.5%	34.0%	35.8%
Female employees	Number of people	11,345	11,399	15,448	14,764	14,323
Male employees	Number of people	24,985	24,782	31,471	28,056	25,618
Percentage of female employees	%	31%	32%	33%	34%	36%
Percentage of male employees	%	69%	68%	67%	66%	64%
Human resource capital	1,000 NTD	14,504,787	16,544,669	17,314,142	21,552,494	22,655,378
Human resource capital ROI	%	8.4	7.5	7.9	8.1	7.8
Employee training expenses	1,000 NTD	24,638	25,218	35,960	32,670	31,920
Average training expenses per employee	1,000 NTD	0.7	0.7	0.8	0.8	0.8
Average employee learning hours	hours	60	58	45	48	60

Note: 1. Entry-level supervisors refer to section and group-level supervisors. Senior supervisors are supervisors at the division level or above.
2. The production and revenue-related departments exclude units such as Human Resources, Business Affairs Office, Head Office Building, Information Technology, Smart Manufacturing, Legal, Supply Chain, and Finance.
3. STEM-related departments refer to units related to science and engineering.

Social engagement in previous years

Item	Unit	2018	2019	2020	2021	2022
Organization of charitable activities	Session	89	45	109	95	261
Participation in charitable activities	Number of participants	25,000	7,727	7,521	27,668	143,074
Corporate volunteer hours	hours	N/A	N/A	N/A	2,505	3,734
Material donation	1,000 NTD	466	631	716	1,300	575
Cash donations	1,000 NTD	3,105	2,042	14,351	12,900	65,196

Customer satisfaction in previous years

Item	Unit	2018	2019	2020	2021	2022
Customer satisfaction survey score	%	83	86	86	87	90

Stakeholder Communication in 2022

Stakeholder	Topics of concern	Communication Channels	Communication Frequency	Engagement Result
Employees	• Talent Cultivation and Development • Occupational Health and Safety • Employee Remuneration and Benefits • Information Security	Engagement survey	Every 2 years	• We organized 5,144 sessions of the Six Loves events with 779,348 participants. • Average employee learning hours was 60 hours. • Completed 85 employee forums. • 140,480 people participated in safety awareness tests. • 15,466 employees participated in occupational health exams. • 83 plant-level fire drills were held.
		Education and training programs for employees	Stipulated annually	
		Online E-Learning platform	As needed	
		Employee Service Center, employee suggestion box, complaint hotline, internal and external email, Employee Welfare Committee/Association, social and environmental responsibility policy promotion training	As needed	
		Occupational risk factor test	Annually	
		Fire drills	Every 6 months	
		Safety awareness tests	Quarterly	
		Safety Production Committee	Monthly	
		Occupational health check, employee safety training, safety promotion activities, safety issue reporting mechanisms, safety prevention management projects, emergency response drills	As needed	
Customers	• Product Quality • Customer Privacy and Relations Management • Intellectual Property Management • Information Security • Energy management	Customer Satisfaction Survey	Annually	• Average customer satisfaction score was 89.5%. • No customer complaints. • In 2022, the Company clearly labeled its products based on actual testing results and customer requirements.
		Hazardous substance regulation compliance assessment, customer requirement compliance assessment, confidential customer information protection education and training, customer service mailbox, quality improvement proposal	As needed	
Suppliers	• Supply chain sustainability management • Intellectual Property Management • Climate Action	Supplier social and environmental responsibility audit, supplier quality and hazardous substance audit, supplier greenhouse gas inventory	Annually	• Completed 179 supplier audits. • Green supply chain promotion rate reached 100%. • 100% of production suppliers have completed the signing of the supplier commitment letter encompassing ethical conduct, human rights, and environmental aspects. • Four quality-related courses were offered to suppliers, with 74 suppliers and 307 people participating.
		Supplier sunshine policy awareness campaign	Quarterly	
		Supplier education and training, supplier reporting channel	As needed	
Investor	• Tax Governance • Waste and Recycling • Climate Action • Water Stewardship • Energy management • Human Rights Protection	Annual shareholders' meeting, annual report, sustainability report	Annually	• 1 Shareholders' Meeting was convened in 2022. • 18 Investor Conferences were convened in 2022. • The Investor Relations Department was established to handle investor communications. The Department has responded to all investor calls and letters in 2022.
		Market Observation Post System, company website, Investor Conference, domestic and foreign investment institution forums, domestic and foreign institutional investor conferences, investor email	As needed	
Competent authority	• Regulatory Compliance • Ethical Management • Waste and Recycling • Climate Action	Corporate Governance Evaluation	Annually	• In 2022, the Company participated in six labor-related conferences and briefings convened by the government.
		Market Observation Post System, website mailbox, seminars/symposiums/conferences/networking events, industrial association events, official documents	As needed	
Social(note)	• Regulatory Compliance • Waste and Recycling • Climate Action • Water Stewardship • Human Rights Protection	Organize Environmental Protection Month events and ESG evaluations by third-party organizations	Annually	• 261 Six Assistances, including Help the Elderly, Help the Weak, Help the Disabled, Help Studies, Help Transportation, and Help Cleanliness, events were held with 143,074 participants and 3,734 volunteer hours.
		Participation in local environmental protection promotion activities, self-monitoring of water quality around manufacturing sites, website mailbox, corporate charity and volunteer activities	As needed	

Note: Society is a combination of "public associations and industrial management centers", "non-governmental and non-profit organizations", "media", and "academic institutions and research institutes" into a single stakeholder.

GRI Standards Comparison Table

GRI Standards	Disclosure No.		Chapter	Page number	Footnote
General Disclosures					
GRI 2: General disclosures 2021	2-1	Detailed organizational information	1-1 Company Operations	14-15, 31	
	2-2	Entities Included in the Organization's Sustainability Report	About this Report	1	
	2-3	Reporting period, frequency, and contact person	About the Report, important operating locations	1, 135	
	2-4	Restatements of information	3-2 Act on Climate Change	71	The Boardtek Campus has been included in the 2021 greenhouse gas emissions, therefore the data is different to the data disclosed in the previous report.
	2-5	External assurance	Appendices	133-134	
	2-6	Activities, Value Chain, and Other Business Relationships	1-1 Company Operations 2-2 Responsible Supply Chain	17-18 43	
	2-7	Employees	4-2 Employee Diversity and Inclusiveness	97	
	2-8	Non-employee workers	4-2 Employee Diversity and Inclusiveness	97	
	2-9	Governance structure and composition	1-3 Board of Directors Governance	20	
	2-10	Nominating and selecting the highest governance body	1-3 Board of Directors Governance	21	
	2-11	Chair of the highest governance body	1-3 Board of Directors Governance	20	
	2-12	Highest governance body's role in monitoring impact management	1-3 Board of Directors Governance	21	
	2-13	Head of Impact Management	Sustainable Promotion and Management	11	
	2-14	Highest governance body's role in sustainability reporting	Sustainable Promotion and Management	12	
	2-15	Conflicts of Interest	1-5 Ethical Management	25	
	2-16	Communicate key material events		-	No material negative events in 2022.
	2-17	Collective knowledge of highest governance body	1-3 Board of Directors Governance	22	
	2-18	Evaluating the highest governance body's performance	1-3 Board of Directors Governance	22	
	2-19	Remuneration Policy	1-3 Board of Directors Governance	22	
	2-20	Process for determining remuneration	1-3 Board of Directors Governance	22	
	2-21	Total annual remuneration ratio		-	The total compensation is confidential group information.
	2-22	Sustainable Development Strategy Statement	Message from the Chairman	4-5	
	2-23	Policy commitments	1-5 Ethical Management 4-1 Human Rights Protection	24 91	
	2-24	Introduce policy commitments	1-5 Ethical Management 4-1 Human Rights Protection	24-25 86-89	
	2-25	Procedures for Remediating Negative Impacts	Goals and performance of material topics management	14-15	
	2-26	Mechanisms for Seeking Advice and Raising Concerns	1-5 Ethical Management	26	
	2-27	Regulatory Compliance	1-7 Regulatory Compliance	31	
	2-28	Membership of associations	Participation in external advocacy associations	10	

GRI Standards	Disclosure No.		Chapter	Page number	Footnote
GRI 2: General disclosures 2021	2-29	Stakeholder engagement approach	Stakeholder Communication in 2022	125	
	2-30	Collective bargaining agreements	4-1 Human Rights Protection	96	
GRI 3: Material Topics 2021	3-1	Procedure for determining material topics	Sustainable Promotion and Management	12	
	3-2	List of material topics	Sustainable Promotion and Management	13	
	3-3	Material Topics Management	Goals and performance of material topics management	14-15	
Material Topics					
Regulatory Compliance					
GRI 3: Material Topics 2021	3-3	Material Topics Management	Goals and performance of material topics management 1-7 Regulatory Compliance	14-15 31	
GRI 2: General disclosures 2021	2-27	Regulatory Compliance	1-7 Regulatory Compliance	31	
Operational Risk Management (Topic Determined by Zhen Ding)					
GRI 3: Material Topics 2021	3-3	Material Topics Management	Goals and performance of material topics management 1-6 Risk Management	14-15 27	
Information Security					
GRI 3: Material Topics 2021	3-3	Material Topics Management	Goals and performance of material topics management 1-8 Information Security	14-15 32	
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	1-8 Information Security	33	
Tax Governance					
GRI 3: Material Topics 2021	3-3	Material Topics Management	Goals and performance of material topics management 1-4 Tax Governance	14-15 23	
GRI 207: Tax affairs in 2019	207-1	Tax approaches	1-4 Tax Governance	23	
	207-2	Tax management, management, and risk management	1-4 Tax Governance 1-6 Risk Management	23 27-30	
	207-3	Stakeholder communication and management related to tax issues	1-4 Tax Governance Stakeholder Communication in 2022	23 125	
Innovation, Research and Development (Topic Determined by Zhen Ding)					
GRI 3: Material Topics 2021	3-3	Material Topics Management	Goals and performance of material topics management 2-1 Innovation, Research and Development	14-15 35-42	
Product Quality (Topic Determined by Zhen Ding)					
GRI 3: Material Topics 2021	3-3	Material Topics Management	Goals and performance of material topics management 2-3 Product liability	14-15 51	
Supply chain sustainability management					
GRI 3: Material Topics 2021	3-3 Material Topics Management		Goals and performance of material topics management Responsible Supply Chain	14-15 43	
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	2-2 Responsible Supply Chain	45-47	
	308-2	Negative environmental impacts in the supply chain and actions taken	2-2 Responsible Supply Chain	45-47	
GRI 414: Supplier social assessment 2016	414-1	New suppliers that were screened using social criteria	2-2 Responsible Supply Chain	45-47	
	414-2	Negative social impacts in the supply chain and actions taken	2-2 Responsible Supply Chain	45-47	

GRI Standards	Disclosure No.	Chapter	Page number	Footnote
Waste and Recycling				
GRI 3: Material Topics 2021	3-3 Material Topics Management	Goals and performance of material topics management 3-4 Green Manufacturing	14-15 82-83	
GRI 306: Waste in 2020	306-1 Waste generation and significant impacts related to waste	3-4 Green Manufacturing	82-83	
	306-2 Management of significant impacts related to waste	3-4 Green Manufacturing	82-86	
	306-3 Waste generation	3-4 Green Manufacturing	82-85	
GRI 306: Waste in 2020	306-4 Disposal and transfer of waste	3-4 Green Manufacturing	82-85	
	306-5 Direct disposal of waste	3-4 Green Manufacturing	82-85	
Water Stewardship				
GRI 3: Material Topics 2021	3-3 Material Topics Management	Goals and performance of material topics management 3-3 Water Stewardship	14-15 73	
GRI 303: Water and discharge in 2018	303-1 Mutual impact of shared water	3-3 Water Stewardship	73-74	
	303-2 Management of discharge-related impacts	3-3 Water Stewardship Appendices	78-79 122	
	303-3 Water Use Quantity	3-3 Water Stewardship Appendices	75-76 122	
	303-4 Water Release Volume	3-3 Water Stewardship Appendices	75-76 122	
	303-5 Water Consumption	3-3 Water Stewardship Appendices	75-76 122	
Climate Action				
GRI 3: Material Topics 2021	3-3 Material Topics Management	Goals and performance of material topics management 3-2 Act on Climate Change	14-15 62	
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	3-2 Act on Climate Change	64-67	
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	3-2 Act on Climate Change Appendices	71 122	
	305-2 Energy indirect (Scope 2) GHG emissions	3-2 Act on Climate Change Appendices	71 122	
	305-3 Indirect (Scope 3) GHG emissions from energy	3-2 Act on Climate Change Appendices	71 122	
	305-4 GHG emissions intensity	3-2 Act on Climate Change Appendices	71 122	
	305-5 Reduction of GHG emissions	3-2 Act on Climate Change Appendices	71-72 122	
	305-6 Emissions of ozone-depleting substances (ODS)	Not applicable	-	No ODS emissions
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant gas emissions	3-4 Green Manufacturing Appendices	81-82 121	
Occupational Health and Safety				
GRI 3: Material Topics 2021	3-3 Material Topics Management	Goals and performance of material topics management 4-5 Health and Safety	14-15 107	
GRI 403: Occupational health and safety 2018	403-1 Occupational health and safety management system	4-5 Health and Safety	107	
	403-2 Hazard identification, risk assessment, and incident investigation	4-5 Health and Safety	108-111	
	403-3 Occupational health services	4-5 Health and Safety	111-113	
	403-4 Worker participation, consultation, and communication on occupational health and safety	4-5 Health and Safety	107	
	403-5 Worker training on occupational health and safety	4-5 Health and Safety	112	
	403-6 Promotion of worker health	4-5 Health and Safety	111-113	
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	4-5 Health and Safety	111	

GRI Standards	Disclosure No.		Chapter	Page number	Footnote
GRI 403: Occupational health and safety 2018	403-8	Workers covered by an occupational health and safety management system	4-5 Health and Safety	107	
	403-9	Occupational injury	4-5 Health and Safety	113	
	403-10	Occupational disease	4-5 Health and Safety	-	The company reported 0 cases of occupational diseases in 2022.
Protection of Human Rights (Topic Determined by Zhen Ding)					
GRI 3: Material Topics 2021	3-3	Material Topics Management	Goals and performance of material topics management 4-1 Human Rights Protection	14-15 91	
GRI 408: Child labor in 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	4-1 Human Rights Protection	91	
GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	4-1 Human Rights Protection	93-94	
Talent Cultivation and Development					
GRI 3: Material Topics 2021	3-3	Material Topics Management	Goals and performance of material topics management 4-3 Talent Recruitment and Retention	14-15 99	
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	4-3 Talent Recruitment and Retention Appendices	101 124	
	404-3	Percentage of employees receiving regular performance and career development reviews	4-4 A Happy Workplace	104	
Other Topics					
Economic					
GRI 202: Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	4-4 A Happy Workplace	103	
Environmental					
GRI 301: Material 2016	301-1	Weight or volume of all materials used	2-2 Responsible Supply Chain	43-44	
	301-2	Use recycled and reused materials	2-2 Responsible Supply Chain	43-44	
	301-3	Reclaimed products and their packaging materials	2-2 Responsible Supply Chain	43-44	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	3-2 Act on Climate Change Appendices	69-70 121	
	302-3	Energy intensity	3-2 Act on Climate Change Appendices	69-70 121	
	302-4	Reduce energy consumption	3-2 Act on Climate Change Appendices	69	
Social					
GRI 401: Employment 2016	401-1	New employee and employee turnover	4-3 Talent Recruitment and Retention	99-100	
	401-2	Benefits provided to full-time employees (not including temporary or part-time employees)	4-4 A Happy Workplace Appendices	104-106 124	
GRI 405: Diversity and equal opportunity 2016	405-1	Diversity of governance bodies and employees	1-3 Board of Directors Governance 4-2 Employee Diversity and Inclusiveness	20 97-98	
	405-2	Ratio of basic salary and remuneration of women to men	4-4 A Happy Workplace	117	
GRI 413: Local communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	5-2 Contribution to the Public	117	

SASB Content Index

Indicators	No.	Descriptions of Indicators	
Industry activities	TC-HW-000.A	Production capacities of different product types	5,574,153 (KPCS)
	TC-HW-000.B	Plant area	Shenzhen Campus: 40,322 m^2 Huai'an Campus: 142,507 m^2 Qinhuangdao Campus: 70,629 m^2 Taiwan Campus: 51,394 m^2 Total: 304,852 m^2
	TC-HW-000.C	Production percentage of self-owned facilities	100%

Indicators	No.	Descriptions of Indicators	Chapter	Page number	Footnote
Product safety	TC-HW-230a.1	Description of approach to identifying and addressing product data security risks	1-8 Information Security	32	
Employee diversity and inclusion	TC-HW-330a.1	Gender and racial/ethnic group ratios of management, technical staff, and all other employees	4-2 Employee Diversity and Inclusiveness	97	
Product life cycle	TC-HW-410a.1	Percentage of revenue from products comply with IEC 62474, RoHS and other applicable regulation and laws	2-2 Responsible Supply Chain	54	
	TC-HW-410a.2	Percentage of revenue from products that comply with EPEAT registration or equivalent standards	-	-	Not an end product, not applicable
	TC-HW-410a.3	Percentage of revenue from products that comply with ENERGY STAR® criteria	-	-	Not an end product, not applicable
	TC-HW-410a.4	Weight and percentage of recycled end-of-life products and e-waste	3-4 Green Manufacturing	83	
Supply chain management and sources of raw materials	TC-HW-430a.1	The percentage of first-tier supplier facilities that have undergone the RBA Verification Assessment Process (VAP) or equivalent process for (a) all facilities and (b) high-risk facilities	2-2 Responsible Supply Chain	45-46	
	TC-HW-430a.2	(1) The non-compliance rate of first-tier suppliers with the RBA Verification Assessment Process (VAP) or equivalent procedure, and (2) the rate of corrective measures taken for (a) priority non-compliances and (b) other non-compliances.	2-2 Responsible Supply Chain	45-46	
Material procurement	TC-HW-440a.1	Description of the risk management for key materials	2-2 Responsible Supply Chain	44, 48-50	

Note: Using the SASB Indicators for the Hardware Standard of the Technology and Communication Industry, version 2018-10.

Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies

(Climate-related information and industry sustainability indicators)

Climate-related information of TWSE/TPEx listed companies

Item	Chapter	Page number
1. Description of the monitoring and governance of climate-related risks and opportunities by the Board of Directors and management.	3-2 Act on Climate Change	63
2. Description of how the identified climate risks and opportunities affect the operations, strategies, and finances of companies (short term, medium term, and long term).	3-2 Act on Climate Change	64-67
3. Description of the financial impacts of extreme climate events and transitional actions.	3-2 Act on Climate Change	64-67
4. Description of how the identification, evaluation, and management of climate risks are integrated in the overall risk management system.	3-2 Act on Climate Change	62, 64
5. If scenario analysis is used to assess resilience against climate change risks, the scenario, parameters, assumptions, analysis factors, and major financial impacts should be described.	3-2 Act on Climate Change	68
6. If there is a transitional plan for responding to climate-related risks, the content of the plan and the indicators and targets for identifying and managing physical risks and transition risks should be described.	3-2 Act on Climate Change	62
7. If the internal carbon pricing is used as a planning tool, the basis of the pricing should be stated.	3-2 Act on Climate Change	72
8. If climate-related goals are set, information on the covered activities, scope of greenhouse gas emissions, planning timeline, and progress achieved annually should be stated. If carbon offsets or Renewable Energy Certificates (RECs) are used to achieve the goals, the source and quantity of carbon offsets or the number of RECs used for carbon reduction should be stated.	3-2 Act on Climate Change	71-72
9. Greenhouse gas inventory and assurance.	3-2 Act on Climate Change Appendices	71 122

Sustainability Disclosure Indicator - Electronics Components

No.	Indicators	Status of annual disclosures	Chapter	Page number
1	Total energy consumption, percentage of externally purchased electricity, and usage rate of renewable energy	The total energy consumption, including self-generated solar power, was 6,209,379 GJ. The proportion of purchased electricity (including green energy) was 82%, and the proportion of renewable energy usage was 2.2%.	3-2 Act on Climate Change appendix	69 121
2	Total water intake and total water consumption	Total water intake was 13,612 million liters. Total water consumption was 4,110 million liters.	3-3 Water Stewardship appendix	75 122
3	Weight and recycling percentage of generated hazardous waste	The total amount of hazardous corporate waste was 52,907 tons. The percentage of hazardous corporate waste recycled (recycled and reused) was 91%.	3-4 Green Manufacturing	82
4	Describe the types, number of affected people, and percentage of occupational disasters	Mechanical injury, chemical burns The number of people affected by recordable occupational injuries was 30 people. Ratio of recordable occupational injuries was 0.29	4-5 Health and safety	113
5	Disclosure of product lifecycle management: Including the weight of end-of-life products and electronic waste and the percentage of recycling (Note) Note: Including the sale of scraps and other recycling processes. Related information should be provided.	The total amount of scrapped boards and scraps for recycling reached 3,597 tons, achieving a recycling rate of 100%.	3-4 Green Manufacturing	83
6	Description of the risk management related to using key materials	The key raw materials used by Zhen Ding include gold, palladium, and tin, involving potassium gold cyanide, palladium salt/palladium solution, copper powder/copper balls/copper foil, solder paste/tin balls, and copper foil contained in FCCL and CCL. The PCB industry as a whole is striving to find alternative materials or reduce the amount of rare metals used, and Zhen Ding is working hard to keep in close contact with related suppliers and pay attention to the future trend of related technology applications. However, due to quality considerations and the current level of industry technical standards, there are currently no other feasible alternative metals. Nevertheless, in order to increase the diversity of sources to ensure supply, and based on the company's philosophy of caring for the earth, Zhen Ding has been working with suppliers and customers to promote the use of recycled metals.	2-2 Responsible Supply Chain	44, 48-50
7	Total amount of monetary loss resulting from legal actions related to anti-competitive behaviors	No legal actions involving any violation of domestic or overseas anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	-	-
8	Production capacities of main products according to product type	5,574,153 KPCS	Appendices	130

Assurance Checklist

No.	Item	Target Information	Page number	Applicable Standard
1	Number of suppliers audited for SER and results	In 2022, we audited 47 suppliers onsite to evaluate their social and environmental responsibilities (SER), with reference to RBA audit items including labor, health and safety, environment, ethics, and management system. According to the evaluation results of 2022, 18, 28, and 1 suppliers obtained green, yellow, and red ratings, respectively.		The number of suppliers audited onsite and results of onsite auditing for the year according to the Company's Supplier Social Responsibility Management Regulation. Items audited include labor, health and safety, and environment, code of ethical conducts, and management systems. Note: 1. The number of suppliers audited based on the number of production sites; there were a total of 248 companies (excluding electronic parts and customer accessories). 2. Total score=200; green=score > 180; yellow= 160 < score ≦180; and red=score ≦160. Green, yellow, and red mean that a supplier has passed, passed conditionally, and failed the audit, respectively. 3. Audit results are based on the initial audit result.
2	Electricity usage and intensity	The major business locations of our subsidiaries consumed 1,414,113 MWh (5,090,807 GJ) of electricity (including externally purchased green electricity) in 2022, and power intensity was 8.25 MWh/million NTD (29.71 GJ/million NTD).		Electricity bills by local power supply companies. The scope of statistics includes Shenzhen, Qinhuangdao, Huai'an Campus I, Huai'an Campus II, and Boardtek Electronics Corporation. Intensity is calculated by dividing the energy value of electricity used by each campus by the consolidated revenues of Zhen Ding Technology Holding Limited. Note: Sources of equation for calculating energy intensity and energy values 1. Energy intensity=Energy value × Energy Used ÷ Revenue. 2. Electricity energy value: 3,600 KJ/kWh.
3	Hazardous business Total amount of waste removed and intensity	The major operating locations of our subsidiaries generated a total of 52,907 tons of hazardous waste in 2022, registering a hazardous waste intensity of 0.31 tons/million NTD.		Amount of hazardous waste transferred by each campus in 2022 is calculated using information on the form for transfer of hazardous wastes from each campus. The scope of statistics includes Shenzhen, Qinhuangdao, Huai'an Campus I, Huai'an Campus II, and Boardtek Electronics Corporation. Intensity is calculated by dividing the total amount of hazardous waste by the consolidated revenues of Zhen Ding Technology Holding Limited. Note: 1. Intensity of hazardous waste = Total hazardous waste generated ÷ Revenue. 2. The weight of waste generated includes only the actual weight of waste removed from the plant, but does not include the weight recycled in the plant. 3. Business wastes are disposed of by certified waste disposal companies.
4	Total amount of general business waste removed	The major operating locations of our subsidiaries generated 27,402 tons of general corporate waste in 2022.		Based on data sources jointly confirmed by qualified professional firms and the Company, a comprehensive big data table on general corporate waste removal volume was compiled. The table provides statistics on the transfer amounts of general industrial waste for each plant in 2022. The scope of statistics includes Shenzhen, Qinhuangdao, Huai'an Campus I, Huai'an Campus II, and Boardtek Electronics Corporation. Note: 1. The weight of waste generated includes only the actual weight of waste removed from the plant, but does not include the weight recycled in the plant. 2. Business wastes are disposed of by certified waste disposal companies.
5	Percentage of recordable occupational injuries	Ratio of recordable occupational injuries was 0.29.		Based on the Company's internal guidelines for occupational safety incident management and regulatory requirements, along with the classification standards for occupational injuries and fatalities, statistics were compiled for the number of recordable occupational injuries and total working hours in each manufacturing site in 2022. The scope of statistics includes Shenzhen, Qinhuangdao, Huai'an Campus I, Huai'an Campus II, and Boardtek Electronics Corporation. Note: Ratio of recordable occupational injuries = Number of recordable occupational injuries ÷ Total work hours × 1,000,000. 1. Number of recordable occupational injuries: Based on the Company's internal guidelines for occupational safety incident management and regulatory requirements, along with the classification standards for occupational injuries and fatalities, statistics were compiled for the number of injuries due to occupation safety incidents and directly related to work. 2. Total work hours: Calculated based on the recorded clock-in and clock-out hours of employees in the attendance system. The total work hours is compiled by the IT Department.
6	Number of fatalities due to occupational injuries (Ratio)	The number of fatalities due to occupational injuries was 0. The fatality rate of occupational injuries was 0.		Based on the Company's internal guidelines for occupational safety incident management and regulatory requirements, along with the classification standards for occupational injuries and fatalities, statistics were compiled for the number of fatalities due to occupational injuries and total working hours in each campus in 2022. The scope of statistics includes Shenzhen, Qinhuangdao, Huai'an Campus I, Huai'an Campus II, and Boardtek Electronics Corporation. Note: Fatality rate of occupational injuries = Number of fatalities due to occupational injuries ÷ total working hours x 1,000,000. 1. Number of fatalities due to occupational injuries: Based on the Company's internal guidelines for occupational safety incident management and regulatory requirements, along with the classification standards for occupational injuries and fatalities, statistics were compiled for the number of fatalities due to occupational injuries. 2. Total work hours: Calculated based on the recorded clock-in and clock-out hours of employees in the attendance system. The total work hours is compiled by the IT Department.

Third Party Assurance Statement

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Independent Limited Assurance Report

To Zhen Ding Technology Holding Limited

We have been engaged by Zhen Ding Technology Holding Limited ("Company Initial or Company") to perform assurance procedures on the sustainability performance information identified by the Company and reported in the 2022 Sustainability Report, and have issued a limited assurance report based on the result of our work performed.

Subject Matter Information and Applicable Criteria

The sustainability performance information identified by the Company (hereinafter referred to as the "Subject Matter Information") and the respective applicable criteria are stated in the "Summary of Subject Matter Assured" on page 132 of the Sustainability Report. The scope of the aforementioned Subject Matter Information is set out in the "Scope and Boundary" on page 1 of the Sustainability Report.

Management's Responsibilities

The Management of the Company is responsible for the preparation of the sustainability performance information disclosed in the Sustainability Report in accordance with the respective applicable criteria, and for such internal control as management determines is necessary to enable the preparation of the sustainability performance information that is free from material misstatement, whether due to fraud or error.

Our Responsibilities

We conducted our assurance work on the Subject Matter Information disclosed in the Sustainability Report in accordance with the Standard on Assurance Engagements 3000, "Assurance Engagements other than Audits or Reviews of Historical Financial Information" of the Republic of China, to identify whether any amendment is required of the Subject Matter Information to be prepared, in all material respects, in accordance with the respective applicable criteria, and issue a limited assurance report.

We conducted our assurance work in accordance with the aforementioned standards including identifying the areas where there may be risks of material misstatement of the Subject Matter Information, and designing and performing procedures to address the identified areas. The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

The extent of the assurance work we performed were based on the identified risk areas and determined materiality, and given the circumstances of the engagement, we designed and performed the following procedures:

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Third Party Assurance Statement

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- Made inquiries of the persons responsible for the Subject Matter Information to understand the processes, information systems, and the relevant internal controls relating to the preparation of the aforementioned information to identify the areas where there may be risks of material misstatement; and
- Based on the above understanding and the areas identified, performed analytical procedures on the Subject Matter Information and performed selective testing including inquiry, observation, inspection, and reperformance to obtain evidence for limited assurance.

We do not provide any assurance on the Sustainability Report as a whole or on the design or operating effectiveness of the relevant internal controls.

Compliance of Independence and Quality Management Requirement

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies Standard on Quality Management 1, "Quality Management for Public Accounting Firms" of the Republic of China and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Inherent Limitations

Certain Subject Matter Information involves non-financial data which is subject to more inherent limitations than financial data. Qualitative interpretations of the relevance, materiality and the accuracy of data are subject to individual assumptions and judgments.

Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, we are not aware of any amendment that is required of Subject Matter Information to be prepared, in all material respects, in accordance with the respective applicable criteria."

Other Matter

The Management of the Company is responsible for maintaining the Company's website. If the Subject Matter Information or the applicable criteria are modified after this limited assurance report is issued, we are not obliged to re-perform the assurance work.

Hsu, Yung-Chien
For and on behalf of PricewaterhouseCoopers, Taiwan
May 30, 2023

Business Locations

Subsidiaries in China

Avary Holding (Shenzhen) Co., Limited	Address: AVARY Park, Songluo Road, Yanchuan Community, Yanluo Subdistrict, Bao'an District, Shenzhen, Guangdong Province, China Telephone: (86) 755-3381-0388
Hong Heng Sheng Electronical Technology (Huaian) Co., Ltd.	Address: No.168, Fushikang Road, Huai'an Economic and Technological Development Zone, Jiangsu Province, China Telephone: (86) 517-8351-6888
Qing Ding Precision Electronics (Huaian) Co., Ltd.	Address: No. 8, Pengding Road, Huai'an Economic and Technological Development Zone, Jiangsu Province, China Telephone: (86) 517-8351-6888
Yu Ding Precision Electronics (Huaian) Co., Ltd.	Address: No. 18, Pengding Road, Huai'an Economic and Technological Development Zone, Jiangsu Province, China Telephone: (86) 517-8351-6888
Qi Ding Technology Qinhuangdao Co., Ltd.	Address: No.18-2, Tengfei Road, Qinhuangdao Economic and Technological Development Zone, Hebei Province, China Telephone: (86) 335-7138-888
Hong Qi Sheng Precision Electronics (Qinhuangdao) Co., Ltd.	Address: No. 18, Tengfei Road, Qinhuangdao Economic and Technological Development Zone, Hebei Province, China Telephone: (86) 335-5308-888
Kui Sheng Technology (Shenzhen) Limited	Address: AVARY Park, Songluo Road, Yanchuan Community, Yanluo Subdistrict, Bao'an District, Shenzhen, Guangdong Province, China Telephone: (86) 755-3381-0388

Subsidiaries in Taiwan

Zhen Ding Technology Co., Ltd.	Address: No.6, Lane 28, Sanho Road, Sanshi Village, Dayuan District, Taoyuan City, Taiwan, R.O.C. Telephone: (886) 3-383-5678
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Contact window	Duen Ling, Senior Manager of Spokesperson & Investor Relations Division
Company website	www.zdtco.com

Zhen Ding Tech. Group

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Zhen Ding Tech. Group

Develop technologies for the betterment of human beings
Protect the environment for a greener earth

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