



4. Sustainable Supply

4.1 Industry Supply Chain

4.1.1 Industry Overview

(GRI 2-6)

The Company is positioned upstream in consumer products, industrial control products, medical products, and automotive industries. We offer signal cables, electronic wire harnesses, PCBs, electronic components, and EMS products and services, which are categorized as technology and labor-intensive product types. Compared with 2022, there have been no significant changes in the industry, upstream suppliers, downstream customers, and other business relationships of the Company.

The Company's headquarter is in New Taipei City, Taiwan, with primary production areas in mainland China and Southeast Asia. The products and services provided by the Company span markets in mainland China, the United States, Southeast Asia, and Europe, with China and Southeast Asia as the main sales markets, accounting for over 80% of revenue.

The cables and connectors produced by the Company are primarily used in computers, their peripheral equipment, and network communication systems, so product growth aligns with the demand for personal computers and peripherals, mobile communications, and other products. We leverage existing cable manufacturing technology to deeply cultivate niche industries, such as components and modules required for automotive/medical/industrial/cloud server markets, thereby raising the technological standards for our products. PCBs are mainly for consumer products such as game consoles, computer monitors, TVs, smart speakers, and notebooks, providing hard boards and HDI boards needed by customers. Electronic Manufacturing Services (EMS) are primarily for extended needs of electronic component customers and diversified, niche product customers, offering comprehensive one-stop services.

4.1.2 Supply Chain Structure

(GRI 2-6, 204-1)

The Company's value chain encompasses upstream suppliers, including raw material suppliers, original manufacturers, trading agents, outsourcing service providers. These suppliers provide the Company with raw materials and semi-finished outsourcing services, such as copper wire, copper clad laminates, plasticized raw materials, packaging materials, PCBA, and injection molding. After undergoing various product processes such as inspection, wire cutting, cleaning, assembly, drilling, electroplating, and molding, the Company supplies signal cables, wire harnesses, PCBs, and other electronic components products, as well as EMS finished products, to downstream assembly customers or brand sellers.



▼ Pan-International Value Chain

Value Chain	Business Category	Industry Type
Upstream: Suppliers	Original manufacturers	Technology-intensive
	Agents	Service, capital-intensive
	Outsourcers (outsourced processing)	Labor-intensive
Our Company	Electronic component manufacturers, EMS service	Technology and labor-intensive
Downstream: Customers	Product assemblers, EMS service providers	Labor-intensive
	Brand manufacturers	Sales service

• **Upstream Suppliers in the Value Chain (GRI 2-6, 204-1)**

The Company’s suppliers provide raw materials, including copper wire, copper clad laminates, plasticized raw materials, active and passive components, and packaging materials, as well as outsourced services required for signal cables, electronic wire harnesses, PCBs, and electronic components. In 2023, the Company has accumulated over 1,155 suppliers, with local suppliers accounting for over 80% of procurement budgets in important operating locations such as mainland China and Southeast Asia.

The Company categorized suppliers into four grades of A, B, C and D according to the formulated supplier management operation process, supplier performance evaluation methods, and risk level evaluation regulations. Only those meeting Grade A are qualified suppliers and can be procured from. In 2023, original manufacturers accounted for approximately 42%, agents for about 55%, and outsourced processing factories for around 3%.

• **Downstream Customers in the Value Chain (GRI 2-6)**

The downstream segment of the Company’s value chain includes electronic products, automotive assemblers, and brand sellers. The Company supplies downstream customers with consumer products, automotive, industrial control, medical, and communication products, including signal cables, electronic wire harnesses, PCBs, PCBAs, electronic components and EMS services. In 2023, electronic product assemblers and brand sellers in Southeast Asia maintained growth in revenue with the Company compared to last year due to adjustments in supply chain flexibility.



4.2 Supply Chain Management

4.2.1 Supply Chain Management Policy

Sustainable supply chain management practices involve a series of actions that incorporate environmental protection, social feedback, and organizational economics into traditional supply chains. These practices include both internal and external efforts within the Company and can achieve true sustainability in the supply chain from environmental, social, and economic aspects. The implementation scope of sustainable supply chain management practices ranges from green procurement to product lifecycle management, flowing through suppliers, manufacturers, and customers. This approach enhances partner relationships by improving the flow of goods and information, as well as promoting sustainable practical actions.

According to the latest global CEO survey by PwC, supply chain disruption is one of the top 10 threats to enterprises. Over 50% of CEOs have begun to adjust supply chain management and procurement strategies. Sustainable supply chain has become an important part of enterprise practice for continuous operations. Procurement management is a key mechanism for enterprises to fulfill social responsibility and drive the supply chain to achieve sustainable goals. The U.S. National Institute of Standards and Technology (NIST 800-161) includes sustainability as a key issue in supply chain risk management practices.

The Company has established a sustainable supply chain management mechanism focusing on three major aspects: product quality, legal compliance, and social responsibility. We have formulated requirements and evaluation standards for operating conditions, manufacturing and supply capabilities, technology development capabilities, quality assurance capabilities, management system performance, environmental management capabilities and trade security. New suppliers must pass an evaluation to be registered on the “Qualified Supplier List.” Additionally, suppliers are randomly inspected each year to ensure they continue to meet our evaluation standards. Only those confirmed to pass the evaluation are eligible for continued cooperation. We aim to improve supply chain management through pre-assessment, supplier commitments, and regular audits. Considering ESG trends, employee rights, alongside corporate governance and environmental protection, are also key priorities. We will reference international regulations such as the “United Nations Guiding Principles on Business and Human Rights,” the International Labor Organization’s “Declaration on Fundamental Principles and Rights at Work” and the “Universal Declaration of Human Rights” as well as labor laws in various regions. All suppliers will be required to adhere to the Company’s standards and commitments in business practices related to labor rights, health and safety, and employee benefits, ensuring full compliance with the laws and regulations of the regions where they operate.

The Company is committed to practicing corporate social responsibility and aims to expand partnerships with suppliers that closely cooperate in our business. We are gradually integrating corporate social responsibility terms into our supplier contracts, with the long-term goal of requiring 100% of suppliers to fulfill ESG clauses. If suppliers violate the terms of the agreement, we will require them to make improvements within a specified timeframe. Those with serious violations may have their cooperation terminated and dissolved. We actively communicate and share information related to social responsibility with our suppliers, encouraging them to develop materials that reduce environmental impact, or to implement energy saving and carbon reduction measures in their processes or equipment, thereby creating a win-win partnership.

When selecting suppliers, our plants set scoring indicators based on quality, price, environmental accreditation, pollution incidents, labor dispute incidents, non-use of child labor, corruption/bribery incidents, and ethical management. We conduct a strict review process, allowing only qualified suppliers to provide samples for testing.



In addition, before signing contracts and commencing supply, suppliers must sign commitment letters on topics such as integrity, environmental issues, and material composition declarations, affirming their dedication to ethical management and environmental protection.

- **Supplier Evaluation:** We conduct strict evaluations of all suppliers, including assessing their environmental management systems to ensure they comply with relevant environmental regulations and standards. We establish long-term cooperative relationships with suppliers and work together towards the development of green supply chains.
- **Environmental Education and Training:** We offer environmental education and training for suppliers to raise their awareness of environmental protection. We conduct environmental seminars and training courses, share best practice cases, and provide technical support to help suppliers implement environmental management measures.
- **Environmental Requirements:** We require suppliers to comply with strict environmental requirements, including energy saving and emission reduction, resource conservation, and waste management. We work with suppliers to promote the use of environmentally friendly materials and processes and encourage them to develop environmentally friendly products.
- **Monitoring and Auditing:** We regularly monitor and audit suppliers to ensure they meet our environmental requirements and policies. We have established an internal team responsible for monitoring the green sustainable development of the supply chain.



Strategic Approaches



• Supplier Evaluation Management - Key Plants

In addition to monthly assessment of supplier grades based on various indicators such as QCDS (Quality, Cost, Delivery, & Service), AEO (Authorized Economic Operator) certification audits will be conducted at the end of the year. Suppliers that do not meet standards must submit review and improvement plans and receive guidance from the Company. Those who fail to improve after this guidance will be eliminated and replaced with new suppliers.

2022 Supply Chain Conference: Due to the impact of the pandemic, it could not be held. However, we continued to promote various issues through online communication, and strengthened on-site audits and regular evaluation items to ensure the supply chain achieves goals such as compliance with regulations, pollution reduction, and zero accidents.



• **Responsible Mineral Purchase - Manufacturing Plants**

The RBA (Responsible Business Alliance) and RMI (Responsible Minerals Initiative) have developed the “Conflict-Free Smelter Program,” requiring their members and suppliers to investigate and disclose the mineral sources in their supply chains to avoid purchasing minerals from these armed conflict and large-scale violence conflict areas, indirectly supporting armed groups and countries that persecute human rights, to achieve responsible mineral procurement. The scope was later expanded to “conflict-affected” and “high-risk areas.” High-risk areas: These areas are typically characterized by widespread human rights violations and breaches of both domestic and international laws.

The Group also affirms that all products provided to customers do not use metals from “conflict-affected and high-risk areas,” complying with (DRC Conflict-Free) standards.

Therefore, suppliers collaborating with the Group must provide a “Declaration of Minerals Conflict-Free” - declaring that they do not purchase and use “conflict minerals” in conflict-affected and high-risk areas. Meanwhile, we are promoting and requiring the supply chain system to jointly support this initiative. To ensure mineral sources of materials and components.



• **Green Environmental Products - Manufacturing Plants**

Environmental regulations: Regarding the hazardous substance management of the extended RoHS Directive (EU)/2015/863 RoHS 2.0 which added four new phthalate hazardous substances (BBP/ DBP/ DEHP/ DIBP) effective in July 2019, the Group’s key subsidiaries (with production plants) have also formulated RoHS phthalate (including RoHS 2.0) management policies to thoroughly monitor raw materials, packaging materials, auxiliary materials, equipment, tools, and related consumables that may contain hazardous substances. To strengthen monitoring capabilities, we have increased relevant training for employees and require all suppliers to fully cooperate in meeting regulatory requirements and customer standards.

★ **Highlight: Honghuasheng, Yantai and legal entities jointly obtained SEDEX-SMETA Suppliers Ethical Data Exchange accreditation**



4.2.2 Supply Chain Audit Effectiveness

(GRI 308-2)

- Audit Status and Results

The Company had a total of 1,155 qualified suppliers in 2023, of which 79 were new suppliers this year. In 2023, a total of 144 suppliers underwent annual audits, with two being terminated, resulting in 142 qualified suppliers. Therefore, 142 suppliers were ultimately evaluated for their environmental impact. After evaluation, no significant actual or potential negative impacts were identified. Among them, 1,155 represents the total number of suppliers for Pan-International, Taipei, Dongguan Pan-International, and CJ Electric Systems, Wuhu. In addition, relevant information cannot be obtained due to the procurement systems of Yantai and Jiangxi are controlled by the Group.



▼ 2023 Supplier Audit Results

Audit Results	2023
Total Number of Suppliers	1,155
Number of Suppliers Evaluated for Environmental Impact	142
Number of Suppliers Identified as Having Significant Actual or Potential Negative Environmental Impacts	0
Percentage of Suppliers Agreeing to Improve After Evaluation	5%
Percentage of Relationships Terminated After Evaluation	0%

▼ New Supplier Audits (2023)

Location	Whether New Supplier Audits Were Conducted	Number of New Suppliers Audited
Pan-International, Taipei	No	0
US Subsidiary	No	0
Dongguan Pan-International	Yes	16
New Ocean Precision Component, Jiangxi	No	0
Honghuasheng, Yantai	No	0
CJ Electric Systems, Wuhu	Yes	63