2024

ALPHA NETWORKS SUSTAINABILITY REPORT

www.alphanetworks.com

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Cover Story

Gung Ho!! For a better future.

"Gung Ho" sounds like "common good" in Chinese. You're good, I am good, everyone is good. It also sounds like the Taiwanese phrase "kong-eh-ho", meaning "everyone has agreed to do this", or "let's do this thing right together." So, it implies a "division of labor and working together." No matter what interpretation you prefer, they all mean a shared commitment and the building of consensus which aligns with the spirit of "Partnership" in modern management.

As a network communication OEM manufacturer, Alpha Networks strengthens our "partnership" with clients and suppliers through the spirit of Gung Ho. By designing products with advanced technology, providing a robust supply chain and inventory management as well as balancing efficiency and quality during the production process to supply customers with satisfactory products and services, we maximize the role and value of Alpha Networks in the value chain.

2024 was a very tumultuous year for the world in terms of geopolitics and the economy. Issues related to climate change and human rights generated widespread attention and discussion as well (see 1.4 Risk Management). Alpha Networks continued to intensify our efforts in the field of sustainable development through the full implementation of relevant actions in the environmental protection, social responsibility, and corporate governance dimensions. Proactive responses to sustainability issues of concern to all stakeholder groups (clients, suppliers, employees, investors, and the public) fostered the common good for company, society, and environment so that all stakeholders can share a happy future together.

Inclusive society

Alpha Networks strives to build a happy workplace and improve employee happiness. Higher an employee satisfaction with the company and their job translates into better job performance, which in turn increases the Company's output and profits. To better understand employees' overall job satisfaction, their opinions, as well as tangible and intangible requirements on education and training, remuneration and benefits, leadership, and teamwork, an Employee Satisfaction Surveys, are conducted by Alpha Networks for the continuous review of improvement measures.

Employees aren't just human capital developed by the Company. They also form an important part of society. Alpha Networks makes active contribution to an inclusive society. This has also been extended to humanitarian assistance projects outside of the Company to imbue the next generation with even more passion and hope from the next generation. In 2024, Alpha Networks sponsored the "Gu Dong Yue Xing" bongo drum percussion troupe made up of intellectually disabled children from the Hsinchu Association for Welfare of Persons with Intellectual Disabilities. For the "Delivering Love to the Countryside to Fulfill Christmas Wishes" charity project, Alpha Networks' employees dressed up as Santa Claus for remote rural schools and gave away gifts on the student's Christmas wish list. Making their little dreams come true took the chill out of winter. (Please refer to 3.6 Social Engagement)

Sustainable environment

Alpha Networks is committed to protecting the environment and promoting biodiversity. In 2024, a number of charity and ecological events were held including the Summer Tea Harvest at Hengshan, Hsinchu, and Chrysanthemum Harvest at Tongluo, Miaoli. Alpha Networks also announced its goal to achieve RE60 and 30% carbon reduction in the supply chain by 2030, satisfy RE100 by 2040, and realize Net-Zero by 2050. Carbon reduction strategies and actions for "Green Energy", "Green Supply Chain", "International Initiative", "Organizational Carbon Inventory" and "Carbon Footprint" were drawn up and implemented in accordance with the above target. (Please refer to Carbon Reduction Action)

Cover design connotations

- Alpha Networks supports ESG sustainability strategies and actions to create a new and better life through energy-efficiency improvement and carbon reduction.

  "Gung Ho!! For a better future." was chosen as the design theme. The origami motif was used throughout the main visual design.

- The design was inspired by "paper cranes", a gift that symbolize happiness and blessing.

  The word origami originated from Japanese. Ori means "to fold" and gami means paper. In origami, paper is folded precisely over and over to create all kinds of artworks that demonstrate the infinite possibilities.

- Inclusion of origami dove element to complement the planet.

  The dove is a symbol of peace and hope. The Earth is the Mother Goddess. Together, they reflect how Alpha Networks has embraced sustainable development as its vision. By leading the way for a green and sustainable future, the Company will continue implement ESG to usher in a society based on common goodness.

Preface

About this Report
From the Chairman
About Alpha Networks

About this Report

Sustainability Report of Alpha Networks

Alpha Networks has published the annual sustainability report since 2018. The sustainability report will present to all stakeholders the investments and accomplishments made by Alpha Networks in terms of business operations, corporate governance, environmental protection, employee rights and community involvement.

This sustainability report is available in both Chinese and English. Stakeholders can download the contents of this report from our ESG website > Sustainability Report Download.

Publication

This report was published in August 2025. The inaugural Sustainability Report (originally known as the Corporate Social Responsibility Report) was first published by Alpha Networks in 2018. The Company has continued to disclose its sustainability-related performance and publish them periodically every year.

Scope and boundary

This Report discloses the measures implemented by Alpha Networks in the ESG domain and their outcomes. In addition to Alpha Networks (Hsinchu), parts of the Report also encompass the following factories located in China but not its sites in Chengdu (China), Japan, the U.S. and other corporate entities not directly controlled by Alpha Networks.

- Alpha Networks: Corporate Headquarters. Known as Alpha Networks (Hsinchu) for short
- Alpha Networks (Changshu) Ltd.: Known as Alpha Networks (Changshu).
- Alpha Networks Vietnam Company Limited: Known as Alpha Networks (Vietnam).

Guidelines and principles

This report was prepared in accordance with the GRI Standards 2021, and provides disclosure of sustainability issues and information at Alpha Networks in 2024. The GRI Standards reference table is also provided in full as an index to the contents of each section.

Assurance

In order to ensure the transparency and reliability of information disclosure, the report has received type 1, medium level assurance from a third party TÜV (hereinafter referred to as TUV Rheinland) based on AA1000 AS (2008), as well as the GRI Standards: Core option. The Independent Verification Statement is attached in the appendix of this report.

Contact information

Please do not hesitate to contact us with any questions or suggestions:

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From the Chairman

Practice corporate social responsibility on the path to sustainability and build an enduring business.

In 2024, the global environment behaved in a very unpredictable manner and the world was repeatedly challenged by extreme weather. The existing global politico-economic structure and order were buffeted by geopolitical conflict, high inflation as well as skyrocketing energy and material prices. Even as volatility became the new norm, everyone at Alpha Networks continue their relentless pursuit of excellence and innovative breakthroughs. We demonstrated our resilience at the operational level even as we continued to make steady progress on sustainability.

The Alpha Networks' vision is "Forging the Internet to Connect People and Things." We strive to create a more convenient lifestyle through greater use of technology products. We leverage our influence in the industry chain to drive social innovation, sustainable development in the supply chain, and participate in environmental protection initiatives on reducing electricity consumption, reducing water consumption, and waste reduction. We are also committed to a 30% reduction in carbon emissions from the supply chain by 2030, achieving RE100 by 2040, and realizing Net-Zero by 2050.

Climate change is a topic that the whole world must confront together. To promote the value of ESG, support the SDGs, as well as plan and implement related actions, Alpha Networks hosted the "Supplier Energy Conservation & Carbon Reduction Conference" to underscore our pledge to partner with our suppliers in our sustainability initiatives. At the conference, we shared our five key carbon reduction measures, namely "Green Energy", "Green Supply Chain", "International Initiative", "Organizational Carbon Inventory" and "Carbon Footprint." Experts were also invited to share practical experiences and global trends in carbon reduction. We hope to work with our suppliers in the creation of a sustainable, low-carbon supply chain and make progress on the realization of carbon reduction targets together.

Corporate sustainability is important to Alpha Networks. Internal management regulations were formulated to not only enhance corporate governance and foster a friendly workplace but also to build a diverse and equitable work environment. We believe in a sound corporate governance regime and are continuing to enhance our organizational competitiveness in order to recruit the talent we need. This will also supply the crucial momentum we need for the sustainable development and expansion of our global business operations.

At the same time, Alpha Networks strives to become a diverse, inclusive, environmentally friend sustainable enterprise. In 2024, we were recognized with two awards at the 17th Taiwan Corporate Sustainability Awards (TCSA) including "Sustainability Comprehensive Performance Award - Excellent Company" and "Corporate Sustainability Reports - Electronic Information Manufacturing Industry - Category 1 Gold Award." Other awards included the 6th "Corporate Health Responsibility (CHR) Award" hosted by the CommonHealth magazine, the CommonWealth magazine "CommonWealth Talent Sustainability Award." These accolades represent recognition of the efforts made by Alpha Networks in the six core fields of talent & welfare, healthy workplace, diversity & inclusion, and talent growth. Alpha Networks will continue to foster a diverse, equitable, and inclusive work environment.

Global presence, low-carbon and sustainability will remain the main development axis of Alpha Networks in the future. We believe that operational resilience is essential for businesses to weather the challenges. Through continued innovation and improvement, we will practice corporate social responsibility on the path to sustainability to build a sustainable business.

Chairman

About Alpha Networks

Trustworthy developer, manufacturer, and service provider for network communication equipment.

Introduction

Alpha Networks was officially founded in September 2003 as a spinoff of D-Link's network communication OEM business. Since its inception, Alpha Networks has specialized in the design, development, and manufacture of network communication products. The Company provides its customers with all-inclusive technical support in the categories of product design, system integration, mechanical design, product testing, and certification. It became a publicly traded company in 2004.

＊ For more details on the company profile and evolution of Alpha Networks, please refer to Company website > Company.

Basic Information of Alpha Networks

Company Name	Alpha Networks Inc.
Chairperson	April Huang
Headquarters	Hsinchu, Taiwan
Establishment Date	2003/09/04
Public Listing Date	2004/12/20 (TWSE: 3380)
2024 Capital	NT 5.417 billion
2024 Revenue	NT 21.44 billion (consolidated revenues)
2024 Earnings per Share	NT 0.40
2024 Total workforce	About 3,000 (worldwide)

Vision

Forging the Internet to connect people and things.

Mission

Alpha Networks is a globally recognized, professional networking DMS supplier.
We use advanced technology to provide our customers with outstanding solutions at the best value.

Alpha Values

Ethics
We value integrity and lead by example. We commit to strict confidentiality and avoid all conflicts of interest.

Customer Value
We put the values and needs of our customers first and commit to deliver.

Agility
We respond quickly to customer needs and identify market trends to develop the best solutions.

Network Performance
We refine processes and partnership models to create the optimal outcome.

Value Chain

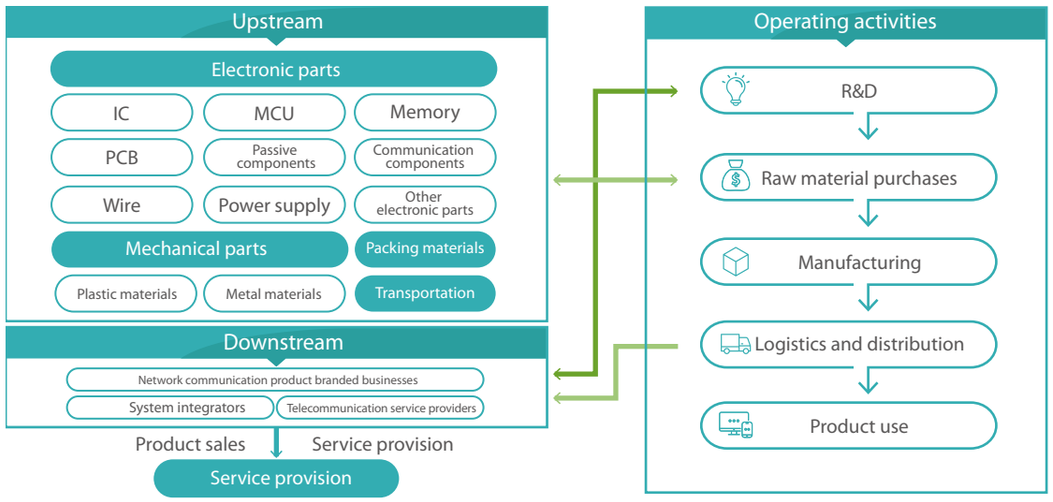
Alpha Networks is devoted to creating maximum value for its customers.

Company positioning

Alpha Networks is a global developer, manufacturer, and service provider for professional network communication equipment. The Company harnesses its visionary technologies to search for optimal solutions and create maximum value for its customers. This represents the Company's corporate mission.

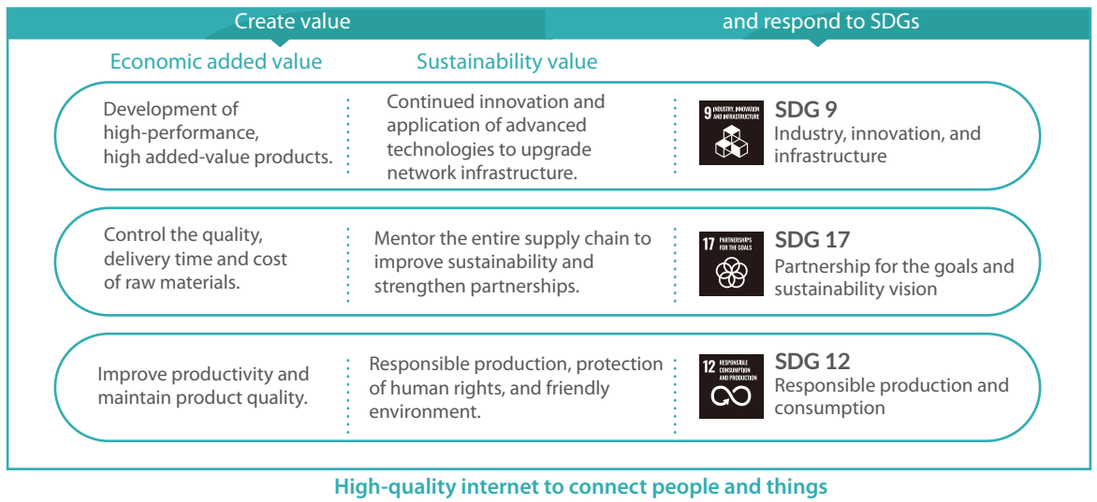
Product scope

Alpha Networks provides its customers with the most comprehensive product lines that fully satisfy the diversified needs and requirements of its customers. Our product lines include LAN/MAN products (a wide range of switches), wireless broadband products (including routers, ONT /PON equipment, and small cells), multimedia and mobile solution products (including video surveillance, Smart Home IoT Devices, and a wide range of automotive products such as ADAS, AVM, and T-Box). For more information on our product offerings, please refer to Chapter 2.1 Sustainable Products and our corporate website > Products.



Value creation

Alpha Networks is a provider of professional R&D, manufacturing and support services for network communications equipment that designs and develops high-performance, high added-value network communications products based on advanced technology. We monitor the quality, delivery time, and cost of raw materials, and mentor suppliers with lower scores from supplier evaluations to improve the overall delivery quality of all suppliers (please refer to 2.2.1 Supplier Management). In addition, we also require suppliers to adhere to RBA standards (please refer to 2.2.4 Supplier Audit and Due Diligence) and lead by example to encourage and support suppliers engaged in carbon reduction initiatives (please refer to Carbon Reduction Action) so we can all do our part for a sustainable environment; strict quality controls are enforced during production to improve productivity. Responsible production techniques are also emphasized to achieve a non-polluting, environmentally friendly production process (please refer to 4.1 Green Products). Production workers are also provided with a safe working environment (please refer to 3.5.1 Safety and Health Policy) and protection of labor rights; we supply clients with satisfactory products for building high-quality networking environments and services. Despite the fact that, as a network communication product OEM manufacturer, Alpha Networks does not have direct contact with end consumers/users, we indirectly satisfy the demand for network services on the part of end users through our corporate clients. In addition to an unwavering commitment to realizing its corporate vision of "Forging the Internet to Connect People and Things", Alpha Networks does not relent in its efforts to put sustainability values into practice in its operating activities in every way possible.



Milestones

Alpha Networks' steps towards Progress

* For more details on Alpha Networks' milestones, please refer to our website>Milestones.

2003

Aug.

Alpha Networks founded as a spin-off of D-Link Corporation.

2004

Dec.

Alpha Networks became listed on Taiwan Stock Exchange (3380).

2016

May.

Alpha Networks ranked No.144 in Taiwan's Top 1000 Manufacturing Enterprises and No.7 in the Telecommunications and Networking industry in Taiwan for 2015 in a ranking published by CommonWealth magazine (issue no. 597).

2018

May.

Alpha Networks' Hsinchu Factory obtained IATF 16949 certification for global automotive industry quality management systems.

Oct.

Qisda Corporation became shareholder of Alpha Networks through private placement.

2019

Dec.

Alpha Networks acquired 30.4% stake in Hitron Technologies through private placement.

Alpha Networks' first Hybrid VDSL/LTD IAD (Integrated Access Device) with MPTCP function started to ship to European Tier-1 operator.

2020

May.

Alpha Networks collaborated with a US system provider with its first AVM system and obtained customer certification, successfully shipping to the largest logistics company in North America.

Oct.

Alpha Network began shipping 5G End-to-end Enterprise Solution to Japan for Japanese Local 5G Private Network PoC Field Trial.

Nov.

Alpha Network's truck version of the internal wheel difference radar system successfully obtained customer certification and began to ship.

Dec.

Alpha Networks' mmwave radar obtained customer certification and began to ship to Thai automakers.

2021

Nov.

Alpha Networks' Vietnam Factory obtained ISO9001 and ISO14001 certifications.

Alpha Networks won orders from Asian customers for joint production of intelligent traffic detection radar.

Oct.

Alpha Networks received the Category 1 Silver Reward in the "Sustainability Report – Electronic Information Manufacturing" in the 15th TCSA Taiwan Sustainability Award.

Jul.

ALPHA Networks' Dongguan Factory passed the ISO 14064--1:2018 verification.

Apr.

Alpha Networks' Hsinchu Factory passed the ISO 14064--1:2018 verification.

Feb.

Alpha Networks developed a next-generation 4D radar to improve radar resolution in the horizontal and vertical axes, enhancing ADAS accuracy.

2022

Dec.

Alpha Networks received the Extreme Networks 2023 Supplier of the Year.

Alpha Networks participated in the "Promoting Equality in the Workplace" Competition held by the Hsinchu Science Park Bureau, NSTC and won the Excellent Award.

2023

Nov.

Alpha Networks won two TCSA Accolades – "Sustainability Comprehensive Performance Award – Top 100 Taiwanese Sustainable Corporates Award" and "Corporate Sustainability Reports – Electronic Information Manufacturing Industry - Gold Award".

Oct.

Alpha Networks received the award for International Trade Export/Import Business Certificate for Top 500 Companies in 2022 from the International Trade Administration.

ALPHA Networks (Changshu Factory) accredited to the ISO 14064--1:2018 certification.

Dec.

Alpha Networks officially started the research and development on the low-orbit satellite communication equipment.

Aug.

Alpha Networks acquired Aespula Technology Inc., which is known for its unique 5G PHY technology in the industry.

Jan.

Alpha Networks successfully completed its in-house development of 5G private network end-to-end solution.

2024

Aug.

Alpha Networks' 400G Ethernet switch platform (TD4-X11) has successfully passed Broadcom's Enterprise SONiC qualification.

Alpha Networks' Outdoor Radar Video Doorbell started shipping to retail customers in North America.

Jul.

Alpha Networks received the 2023 Taiwan Sustainability Action Award for its promotion of eco-friendly packaging materials that contributed to effective plastic and waste reduction.

Apr.

Alpha Networks collaborated with E-Bus manufacturer to develop its Front Radar & ADAS Domain Controller for ACC/AEB/LDW.

Nov.

Alpha Networks won two TCSA awards – "Sustainability Comprehensive Performance Award - Excellent Company" and "Corporate Sustainability Reports - Electronic Information Manufacturing Industry -Gold Award."

Alpha Networks won the 6th "Corporate Health Responsibility (CHR) Awards" hosted by the CommonHealth magazine and was included in the 99 Healthy Enterprises.

Alpha Networks and its subsidiary, Interactive Digital Technologies, jointly invested in Fiber Logic Communications Inc., a leading developer and manufacturer of digital microwave devices in Taiwan.

Oct.

Alpha Networks won the "CommonWealth Talent Sustainability Awards" hosted by the CommonWealth magazine and was included in the Talent Top 100.

Jul.

Alpha Networks established a wholly owned subsidiary in India, INDIALPHA TECHNET PRIVATE LIMITED, to develop the India market.

Global Presence

Providing comprehensive service and efficient local support.

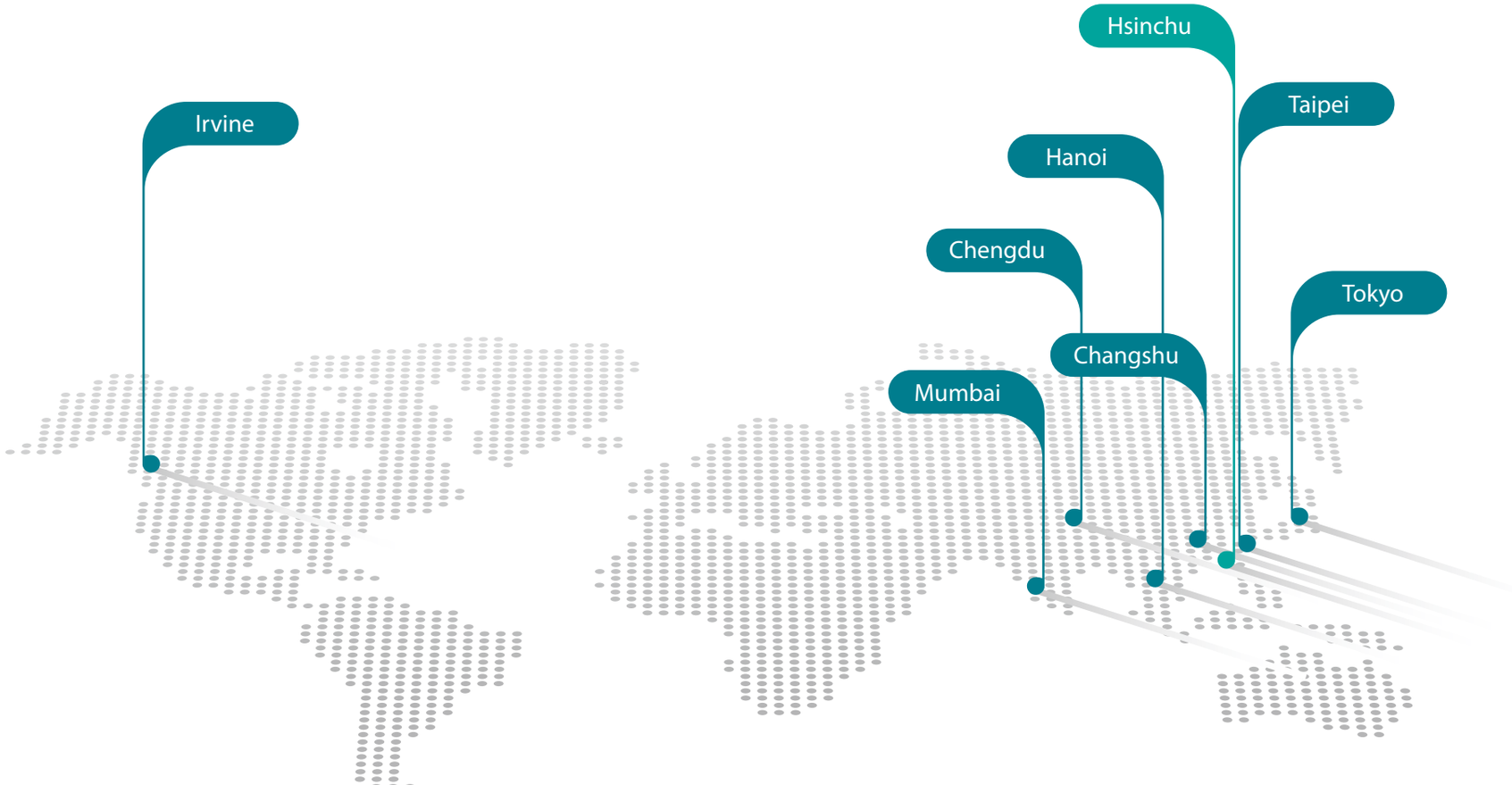
Alpha Networks is headquartered in Hsinchu Science-based Industrial Park in Taiwan. We have also established service or manufacturing sites in the U.S., Japan, China and Vietnam to provide the full spectrum of services and efficient localized support.

The combination of offices and workshops at Alpha Networks' headquarter support R&D, testing, sales and services, supply chain, manufacturing and RMA services. Headquarter is responsible for coordinating customer requirements and the allocation of resources.

The main production and manufacturing bases of Alpha Networks are Alpha Networks (Hsinchu Factory) in Hsinchu City, Taiwan, Alpha Networks (Changshu Factory) in Jiangsu Province, East China, and Alpha Networks (Vietnam). Alpha Networks (Dongguan Factory) in Guangdong, southern China, ceased operations in 2023 Q4 and some of its product lines were transferred to the Vietnam Factory. Investments and construction for the Vietnam Factory were approved by the Board of Directors in November 2020. Upon successive completion of production line deployment and mass production preparations, the factory was officially commissioned in Q4 2023.

Alpha Networks has a R&D center in Chengdu, China. There are operating locations in Taipei, Tokyo (Japan), and Irvine (CA, USA) to provide local support to customers. A new subsidiary Indialpha Technet Private Ltd. was established in Mumbai, India, in July 2024 to manage the sale of network products and market development.

Alpha Networks worldwide operating sites



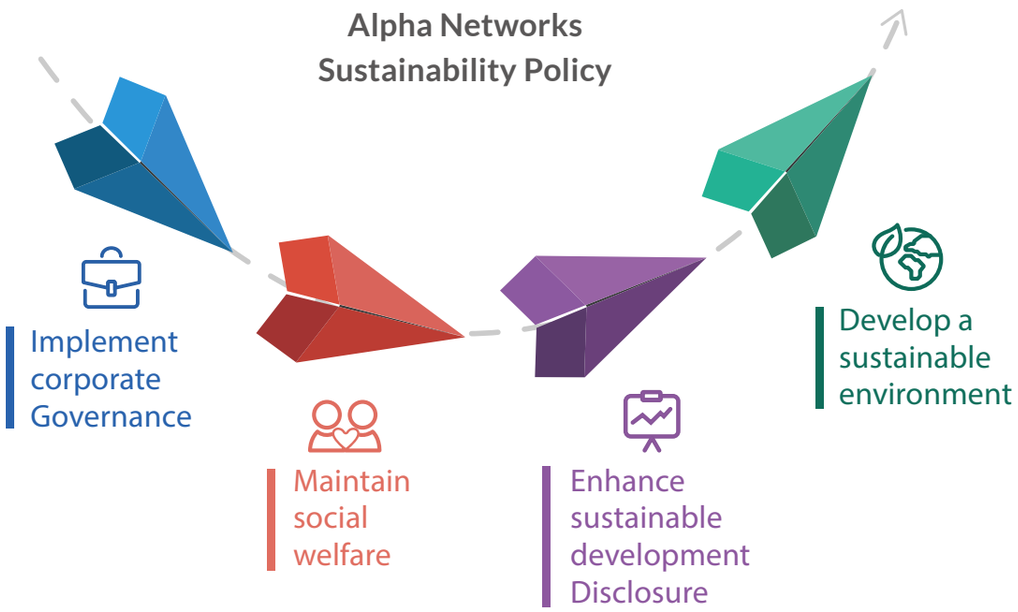
* Please refer to Company website>Global Presence for detailed information on each site.

Alpha Policies

Uphold integrity, legal compliance, and business ethics.

Sustainability policy

To practice corporate social responsibility and promote economic, environmental, and social progress, and to pursue sustainable development, the Company takes reference from the Sustainable Development Best Practice Principles for TWSE/TPEx Listed Companies published by the Taiwan Stock Exchange to help formulate the Company's "Sustainable Development Best Practice Principles" to manage the Company's economic, environmental and social risks and impacts.



RBA policy

Alpha Networks actively supports the Code of Conduct - Responsible Business Alliance, RBA Version 8.0 to ensure a safe working environment throughout the entire supply chain and for sub-contractors, every employee is treated with respect and dignity, business operations are environmentally friendly and ethical.

We conduct self-evaluations on an ongoing basis in accordance with the RSA (Responsible Business Alliance) Code of Conduct to determine our progress in the labor, health & safety, environment, and ethics. Social, environmental, and ethics risks that are present in the Company's business operations are identified autonomously by relying on the Self-Assessment Questionnaire (SAQ) designed by RBA. In 2017, the SAQ assessment rated the Company HQ and Changshu Factory in China as low-risk sites. Comprehensive audit reports are disclosed on the RBA-Online platform for the Company's customers. We also undergo RBA audits under the Validated Audit Program (VAP) by third-party certification bodies.

The Changshu Factory achieved Silver status during the RBA VAP audit in 2020 and completed the RBA re-audit in 2023.

The Vietnam Factory was commissioned in 2023 Q4 and received a Silver rating after VAP was carried out in October 2024. The Hsinchu Factory already plans to carry out VAP in 2025.
Alpha Networks requires all its sales & manufacturing locations and suppliers to strictly abide by RBA standards (please refer to 2.2.4 Supplier Audit and Due Diligence). We embrace integrity and take an uncompromising stance on ongoing advances in the field of RBA-related policies. This firm stance is paired with an unwavering commitment to safeguarding the rights and well-being of practitioners and communities of the network communications industry.

RBA Code of Conduct

Labor

- Prohibition of forced labor
- Young workers
- Working hours
- Salary s and Welfare
- Non-discrimination/ Non-harassment/Humane treatment
- Freedom of association

Health and safety

- Occupational health and safety
- Emergency preparedness
- Occupational injury and disease
- Industrial hygiene
- Laborious work
- Machine maintenance
- Public hygiene and accommodation
- Health, safety and communication

Environment

- Environment permits and reporting
- Pollution prevention and resource conservation
- Hazardous substances
- Solid waste
- Air emissions
- Materials restrictions
- Water management
- Energy consumption and greenhouse gas emissions

Moral Regulations

- Business integrity
- No unlawful pro¬fits
- Information transparency
- Intellectual property
- Fair business, advertising and competition
- Protection of identity and retaliation prevention
- Responsible sourcing of minerals
- Privacy

Management system

- Corporation's commitment
- Management accountability and responsibility
- Legal and customer requirements
- Risk assessment and risk management
- Improvement objectives
- Training
- Communication
- Worker/Stakeholder engagement and access to remedy
- Audits and assessments
- Correction measures
- Documentation and records
- Supplier responsibility

Ethics policy

Alpha Networks upholds integrity, fairness, legal compliance, and business ethics when engaging in business. It is strictly forbidden for our employees to offer or accept bribes, gifts, money or entertainment from or to suppliers, customers and stakeholders that do not conform to business etiquette. We also strictly protect confidential information, assets, intellectual property rights, and business secrets of our Company, our customers, and our suppliers. Alpha Networks took reference from the Guidelines for the Adoption of Codes of Ethical Conduct for TWSE/GTSM Listed Companies to establish the Alpha Networks "Code of Ethical Conduct" to regulate all employees of the Company and its subsidiaries (including members of the Board of Directors) to comply with those ethical requirements.

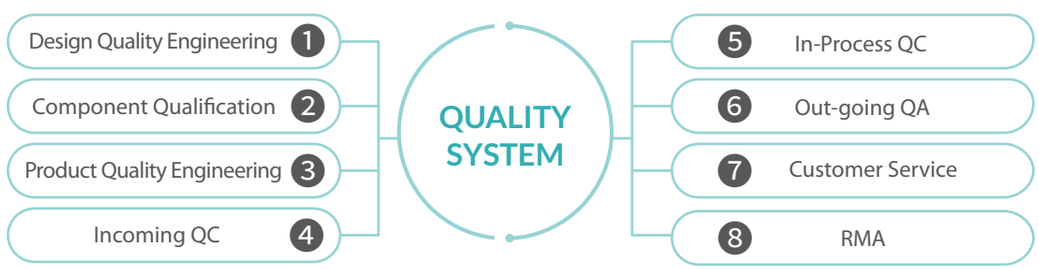
A channel for complaints is provided if any illegal behavior is detected. A thorough investigation will be carried out by Alpha Networks with protection given to the whistleblower. The content and outcome of the investigation will also be strictly protected to avoid harming the rights and interests of relevant personnel. For details on ethical management policies and their implementation, please refer to 1.2 Ethical Management and Legal Compliance.

Quality Policy

At Alpha Networks, we believe in "getting quality right the first time."

Alpha Networks has established systems and implemented related operations for effective assurance of product quality. A quality system based on the eight pillars of design quality verification, parts approval, sound production management, incoming quality inspection, process quality inspection, outbound quality inspection, customer after-sales quality service, and customer returns and warranty service has been established as part of the product life cycle to provide assurance on quality and services.

During the production process, quality is rigorously monitored by QC personnel using sampling plans based on the ANSI standard. Once production is complete, QA personnel randomly test the finished products as well to ensure product conformity on functionality and appearance. To prevent electrostatic discharges that can damage sensitive electronics during the production process, the ESD protection is enforced at every step from material transportation, R&D, production, process control, inspection, testing and maintenance. All operations are carried out and managed with the help of the relevant support systems for assurance of product quality. Alpha Networks provides comprehensive after-sales service once products have been shipped to ensure customer satisfaction. Alpha Networks will continue to enforce the above principles in the spirit of sustainable development and educate all of our employees accordingly. Quality-related feedback from within the company and from customers shall all be handled swiftly and appropriately.



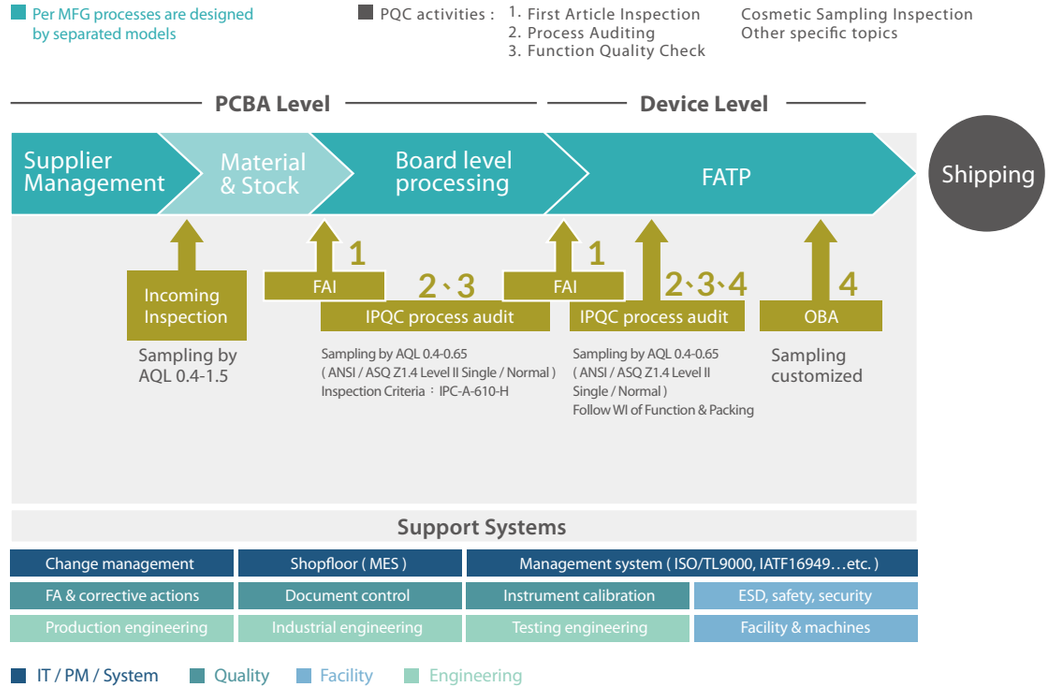
In addition, each Alpha Networks production site complies with international quality management system certifications such as ISO 9001, TL 9000, IATF 16949, and QC 080000.To this end, we commit to:

01 Make it a matter of honor to get quality right the first time.

02 The pursuit of excellence through continuous review and improvement.

03 Manufacture the products that customers need and provide customers with satisfactory service.

The quality policy defined in accordance with the Company's vision is used to establish a quality management system that provides all internal operations with a set of effective management standards that is enforced by each factory.



* For more details on the Company's quality policy, please refer to Company website> Superior Quality Control.

Development Strategy

Eyes on the future

Alpha Networks devised the following long-term development strategies to boost the Company's competitiveness, increase profits and realize sustainable management:

Core competitiveness	Long-term development strategy	Countermeasures
1 Value chain	Develop a long-term partnership with the Company's clients and suppliers, as well as expand the sales market.	New market - Such as entering the Indian market. New application - e.g. AI and automotive-related applications.
2 Quality and cost	Vigorously controls the quality and cost of manufacturing to increase operational efficiency and profitability for the Company.	New management systems (see Management System).
3 Technology	Invest in cutting-edge technology and establish core competitive advantage.	New technologies - e.g. 5G, 6G, WiFi 7.
4 Sustainable development	Enhance corporate governance and implement the corporate social responsibility.	New issues - e.g. SBTi, TCFD.

In 2024, political and economic factors such as the ongoing US-China trade war and global economic slowdown resulted in weak market demand. The Company not only did everything possible overcome these fluctuations in short-term operations but also continued to focus on the development of the long-term strategy and improving our business constitution. The Company also concluded that the network communications industry contained medium and long-term growth opportunities such as 5G, Internet of Vehicles (IoV), AI and low-earth orbit (LEO) satellites. Working from home (WFH) is also becoming mainstream and will create business opportunities for network communications. Network communication products have become an indispensable part of modern technology. Alpha Networks believe sustainable development can be achieved by choosing the right long-term development strategy and coping with short-term environmental turbulence.

Alpha Networks boasts the most complete product line in the industry. These include LAN/MAN, wireless broadband network, digital multimedia and action plan products. We are using advanced technology as our core for cultivating our ability to carry out innovative R&D. We will continue to invest in our core technologies and develop high-end integrated products to boost product value and avoid the competition on price between low-end products. We are actively expanding our sales network and offering complete solutions to provide value to external customers. In recent years, we also continued to develop products for automotive use and LEO. Alpha Networks is even building a patent portfolio to strengthen its core competitive advantage. For more information patent application status, please refer to 2.1.3 Development and Innovation.

Alpha Networks is in the network communications OEM industry. We not only value our long-term collaboration with customers and co-develop new products. The topic AI has become all the rage in the technology industry in the past two years. AI applications require products with faster processing speed, better thermal dissipation, and higher transmission specifications. These are all directions that Alpha Networks products are now following. Alpha Networks is aggressively developing new markets as well. Development of the Indian market is beginning to show results. The Indian subsidiary began shipping its output in 2024 Q4. The products included home WiFi equipment and wired relay equipment. The Company has adopted an attitude of cautious optimism on the Indian subsidiary's contributions to revenue and profit.

In terms of internal management, the Company will strive to improve organizational operational and management philosophy. We will closely manage the quality and cost of production & manufacturing in order to boost our business efficiency and profitability. The Company is continuing to invest in the introduction of management systems (please refer to Management System) to ensure the stability and efficacy of each management activity. We are also enhancing our corporate governance, ethical management, and transparency of disclosure to become a corporate partner that all stakeholders can trust and identify opportunities for growth in the trend towards corporate sustainability. In response to climate change issues, the Company assesses the physical and transformation risks brought by climate change using the TCFD framework. Physical risks are linked to the Business Continuity Plan (BCP), while transformation risks are linked to ESG strategy for the formulation of related approaches and promotion plans. a concrete commitment to the target of Net Zero by 2050 has already been made by Alpha Networks. A commitment letter has been submitted to the SBTi as well and we will continue to engage in carbon reduction actions (please refer to Carbon Reduction Action).

Management System

Alpha Networks strongly believes that product quality, information security, labor safety and health, and friendly working environment were all developed through management. International quality management systems ISO9001, TL9000, QC080000, IATF16949, C-TPAT, ISO 27001, ISO 45001, RBA and ISO 50001 have various international management system certifications. These ensure that all internal operations and processes are systemically managed.

System / Factory	Hsinchu Factory	Changshu Factory	Vietnam Factory	
			Plant A	Plant B
ISO 9001:2015	●	●	●	●
TL 9000 R6.3 / R5.7	●	●	●	●
IECQ QC 080000:2017	●	●	●	●
IATF16949:2016	●			
ISO 14001:2015	●	●	●	●
ISO 14064-1:2018	●	●	●[1]	●[1]
SONY Green Partner Certification				●
ISO 27001:2013	●			
ISO 26262:2011	●			
ESD S20.20				●
AEO	●			
C-TPAT		●	●	
SA 8000:2014			●	●
RBA		●	●	●
ISO 22301:2019				●
Sedex			●	●
ISO 45001:2018	●[2]			●
ISO 50001:2018	●[2]			

[1] Actual certificate issue date was June, 2025.
[2] Actual certificate issue date was January, 2025.

On the choosing a management system verification certification, we also collaborated with TÜV Rhineland, renowned internationally for its fairness. A trophy for long-term partnership was awarded as a result in 2024. A conformity inspection of Alpha Networks management systems was conducted by external auditors based on a relationship that goes back more than twenty years. The identified defects and suggested improvements will facilitate the enhancement of the management system.

ISO 9001

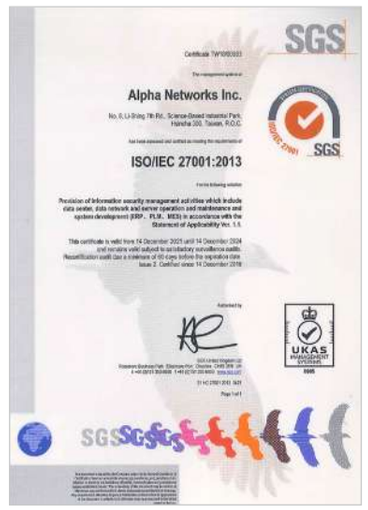
TL9000

QC080000

IATF16949

C-TPAT

ISO 27001



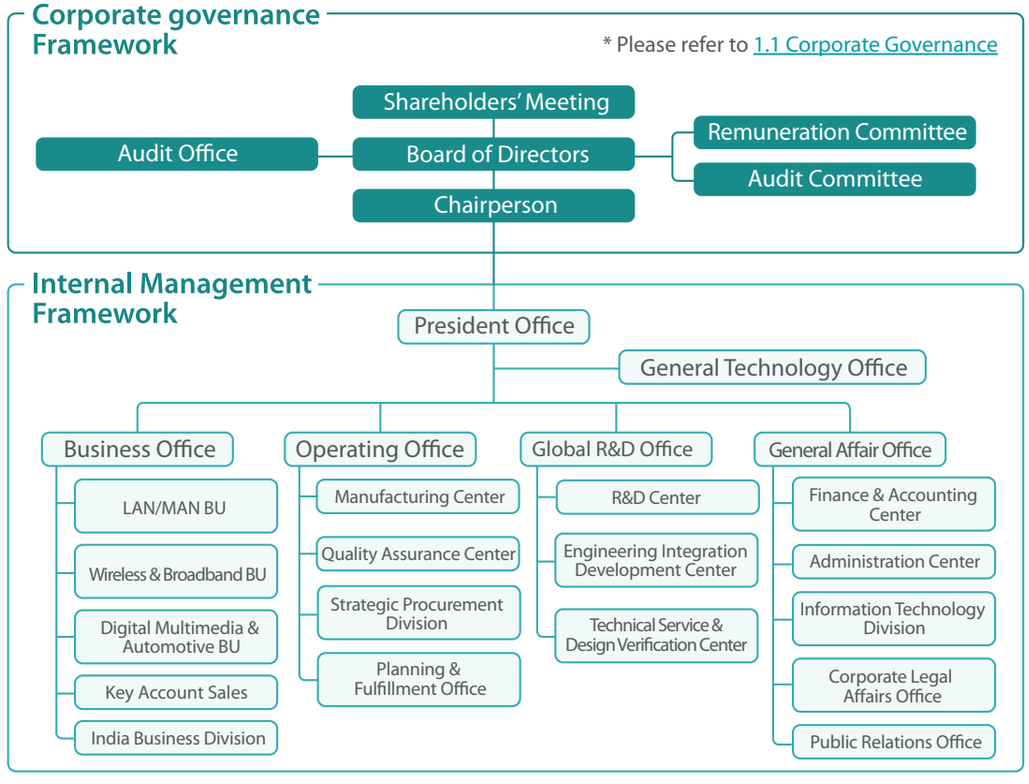
Organization Structure

We link our sustainable development strategies to our operational goals and deeply embed them into every dimension of our operating activities to prompt all internal organizational units within the company to take action, work in unison, and build consensus to facilitate implementation of all major sustainable development issues and thereby reinforce sustainable corporate development.

In 2023, we implemented several organizational adjustments including the addition of 4 Offices to oversee related functions or similar units. A new Sustainable Development Center was established to assist the CSO in integrating sustainability trends/ strategies and implementing sustainability works.

Due to the correlation between sustainability policy (social responsibility aspect) and human resources practices, the "HR Division" and "Sustainable Development Center" were combined in October 2024 to become the "Administration Center." The Center was designated as the owner unit for promotion of sustainability policy. Responsibilities include the compilation of sustainability trends and information, formulation of related sustainability policies and plans, and the implementation of related tasks in accordance with the sustainability vision set by the management. To support the expansion of the Indian market, the "India Business Division" was also established in 2024.

The updated organizational structure after the aforementioned adjustments is shown below:



Units	Roles and Responsibilities
Audit Office	Establishment and full implementation of a sound, reasonable, and effective internal control system.
President Office	Formulation of strategies and implementation details in accordance with operational goals outlined by the board of directors and thorough execution thereof.
General Technology Office	Coordination and firm grasp of networking technology-related tasks.
Public Relations Office	Shaping corporate image and management of public relations, including curation, foundation operations, and participation in CSR report preparation.
Corporate Legal Affairs Office	Ensure the legal status of the Company's investment, technology, procurement, marketing, creditor's rights, intellectual property rights and other related matters, and optimally safeguard the Company's rights and interests.
Key Account Sales	Responsible for business development and services to major customers, communication and integration with business units, and develop product market combinations to achieve operational goals.
R&D Center	Responsible for the effective use of R&D resources, communication and integration with each BU,and assisting them to achieve the company's and BU's operational goals.
LAN/MAN BU	Execute the Company's established operational goals, and carry out promotion, sales, product planning, product development and testing of Ethernet switches and related products.
Wireless & Broadband BU	Execute the Company's established operational goals, and carry out promotion, sales, product planning, product development and testing of wireless and broadband networks and -related products.
Digital Multimedia & Automotive BU	Execute the Company's established operational goals, and carry out promotion, sales, product planning, product development and testing of digital multimedia and related products.
Technical Service & Design Verification Center	Execution of the quality policy, product design quality assurance, establishment of standardized automated testing procedures and provision of rapid and efficient technical support services to enhance customer satisfaction.
Engineering Integration Development Center	Wiring engineering, implement safety regulations, organize and deliver EMC technical support for network-related hardware.
Quality Assurance Center	Promote the Company's overall quality improvement and maintenance, ensure that products meet customer needs, and maintain a systematic quality information and experience platform.
Planning & Fulfillment Office	Effectively use Company resources, coordinate and arrange stable production with limited inventory to achieve the highest output, create maximum performance, profit, and meet customer shipment needs.
Strategic Procurement Division	Respond to the raw material market and the Company's product trends, formulate procurement strategies and plans, Implement and supervise supply chain management and procurement operations.
Manufacturing Center	Leading, planning, managing, manufacturing products, controlling quality, arranging shipment, provide service, improve productivity, and meet customer needs with high quality, low cost, and on-time delivery.
Administration Center	The Center was is responsible for the compilation of sustainability trends and information, formulation of related sustainability policies and plans, and their implementation in accordance with the sustainability vision set by the management. The Center oversees the HR Division responsible for the planning of organizational and talent development strategies, management of human resources, as well as the establishment and continuous improvement of HR systems; the Center also oversees the Labor Safety and Health Division responsible for the formulation, planning, supervision and implementation of factory affairs, general affairs, as well as safety and health management policies and tasks.
Finance & Accounting Center	Plan and control the Company's financial policy and accounting management system have complied with laws and regulations and the Company's operational needs.
Information Technology Division	Provide Information Technologies and Management Information Systems to promote or improve proposals online.

Memberships

Alpha Networks actively participates in network communications industry associations and technology alliances. We hope to stay on top of industry trends through frequent networking with members of the industry.

We are involved in the following organizations:

Units	Associations and Technology alliances	Type	Note
LAN MAN BU	25G/50G Ethernet Consortium	Association Adopter	
	Telecom Infrastructure Project	Member	
	OCP (Open Compute Project)	Member	
	DENT	Member	DENT aims to consolidate chip and system integrator, OEM and ODM to develop a standardized network operating system. In the early stages, the application targets include dispersed enterprises, factories, remote offices, subsidiaries and retailers, etc.
	SONiC	Contributing organizations	SONiC is a comprehensive network software functionality required by devices, designed to meet the requirements of cloud data centers.

Units	Associations and Technology alliances	Type	Note
WB BU	Wi-Fi Alliance	Member	Can obtain Wi-Fi Alliance-related Wi-Fi Logo certification.

Units	Associations and Technology alliances	Type	Note
DMA BU	Dolby Laboratories	Authorized Manufacturer	
	Apple Authorized MFi Manufacturing Licensee	Authorized Manufacturer	
	Driver Information Platform Development Alliance (DIPDA)	Member	
	Taiwan Vehicle Team	Member	
	Autonomous Driving Systems Industrial Platform	Member	

Units	Associations and Technology alliances	Type	Note
QAC	QuEST Forum	Member	Joined the organization in conjunction with the TL9000 system, Alpha Networks pays annual member fees and submit monthly statistics.

Units	Associations and Technology alliances	Type	Note
HCF	Association Connecting Electronics Industries (IPC)	Member	

Sustainable Development Operations

We are committed to the integration of stakeholder interests and responding to the Sustainable Development Goals (SDGs).

Sustainable Development Operational framwork

Stakeholder Communication and Identification of Issues of Concern

Stakeholder Communication Mechanism

Responding to the Sustainable Development Goals (SDGs)

Sustainable Development Operational frameworks

Implement the corporate sustainable development policy from top to bottom

The establishment of the Alpha Networks "CSR Committee" was approved by the management in 2018 for the promotion of related policies. In 2021, the name was changed to "Sustainable Development Committee" (hereafter referred to as the "ESG Committee") in 2021. The ESG Committee is chaired by the Chairman of the Company, with the CSO as the chief secretary. Committee members are drawn from senior executives in each unit to facilitate the inter-departmental coordination and implementation of all corporate sustainability affairs. These encompass the 3 aspects of environmental protection (e.g. energy-efficiency, carbon reduction, waste reduction, green product), social responsibility (e.g. human rights policy, employee welfare, labor health and safety) and corporate governance.

In response to sustainable development trends around the world, the ESG Committee analyzes the environmental and social impacts of our operations and material issues in the environmental, social, and corporate governance dimensions, and links those to our Company's operational goals. All the sustainable corporate development strategies of Alpha Networks are brought together under one roof and internal bodies integrated to drive our progress and ensure implementation of all tasks in this area. Current progress in the field of sustainable development is regularly reported to the Board of Directors. The board reviews sustainability strategies, programs, and goals and offers guidance to the ESG Committee, requesting adjustments as necessary.

In addition, to strengthen our sustainable development information disclosure within our sustainable development policy, the "Sustainability Report Compilation Team" takes reference from our annual sustainability report, Stepped-up work task implementation (ESG Committee) and information disclosure transparency (Report Preparation Task Force) and division of duties. The Report Preparation Task Force prepares and issues sustainability reports on an annual basis in accordance with our operating regulations to ensure full disclosure of all information related to our efforts and progress in the field of sustainable corporate development. The planned framework of the Sustainability Report is also reported to the Board of Directors (the 2024 report is to be presented to the Board in 2025 Q1) before work begins on compiling the Sustainability Report. Once the contents have been compiled and the report drafted, the contents are not only verified by an independent third-party unit but also reviewed by the ESG Committee, and approved by the Board (at a Board meeting in 2025 Q2) before publication.

In July 2023, we established a Sustainable Development Center as a staff unit directly subordinate to the Chief Sustainability Officer (CSO) responsible for assisting the CSO and ESG Committee in the integration of sustainability trends, formulation of strategies, and coordination of the efforts of all company units in the carrying out of sustainability tasks. Due to the correlation between sustainability policy (social responsibility aspect) and human resources practices, the "HR Division" and "Sustainable Development Center" were combined in October 2024 to become the "Administration Center." The Center was designated as the owner unit for promotion of sustainability policy. It is responsible for assisting the CSO and ESG Committee on all promotion tasks.

Linking ESG performance with executive remuneration

To encourage sustainability engagement by each unit, reduction in GHG emissions (Scope 1 + Scope 2), employee engagement score, and corporate governance evaluation hit rate* were chosen as the 3 ESG performance indicators and linked to the remuneration of senior executives. For each indicator, an annual KPI (over 5 years) was set and performance linked to the remuneration of executives (10%). This move change is expected to take effect once it is approved by the Board of Directors in 2025 Q2.

Note: Hit rate = Number of points awarded / Total number of questions.

ESG education and training

To infuse the Alpha Networks corporate culture with ESG concepts and make sustainable development a common consensus among all employees, Alpha Networks has, since 2022, incorporated "ESG Sustainable Development" and "Integrity Governance" modules into its new employee training curriculum. Training on material issues such as "Human Rights" and "Prevention of Insider Trading" was also strengthened. In 2024, ESG-related training totaled 1,556 hours and 3,480 trainees attended.

To continue strengthening our methodology on sustainable corporate development, Alpha Networks is continuing to select and dispatch personnel from different units to take part in external ESG training courses. 3 employees of Alpha Networks attended the "Corporate Sustainability Management Specialist Training Class", each trainee completes 80 hours of training and passed the exam for license, two Company employees attended the "Net Zero Management Specialist Training Class" organized by the Taiwan Institute for Sustainable Energy Research, each trainee completed 40 hours of training. Later on, passed the exam for license.

2024 ESG awards

In 2024, Alpha Networks took part in the Taiwan Corporate Sustainability Awards (TCSA) and won the "Sustainability Comprehensive Performance Award - Excellent Company" and "Corporate Sustainability Reports - Electronic Information Manufacturing Industry - Gold Award." We also entered the "CommonWealth Talent Sustainability Awards" hosted by the CommonWealth magazine and was included in the Talent Top 100, and entered the 6th "Corporate Health Responsibility (CHR) Awards" hosted by the CommonHealth magazine to be included in the 99 Healthy Enterprises. All these outstanding achievements clearly demonstrate that our sustainable development governance framework and our progress in the field of sustainable development are both in good shape. For information on the awards, please check the Company website > News (a) (b).

▼ "Net Zero Manager" licensing ceremony

Corporate Sustainability Reports - Electronic Information Manufacturing Industry - Gold Award

Sustainability Comprehensive Performance Award - Excellent Company

Sustainable Development Operations at Alpha Networks

01 Sustainability governance organization and operational framework

02 3 major dimensions Material issues Note 2

03 Implementation by each unit

04 ESG performance indicators link to executive remuneration

05 Vision realization

Alpha Networks Board of Directors

Decision-making level
Sustainable Development Strategy

ESG Committee
(CSO + all committee members) Note 1

Coordination of sustainable development strategy at the company level and make periodic reports to the Board of Directors.

Sustainability Report Preparation Task Force

Preparation of sustainability reports, ESG website section, implementation of sustainable information disclosure.

Administration Center Sustainable Development Department

Assistance to the CSO in the integration of sustainability trends and strategies and promotion and implementation thereof

E Environmental Protection

- Green products
- Green manufacturing
- Carbon emission management
- Wastewater and waste management
- Compliance with environmental laws and regulations

- Quality Assurance Center
- Manufacturing Center, all factories
- Facility and General Affairs Department
- Supply Chain Manage

- Purpose - Implement net zero carbon pathway
- Weighting: 40%
- Indicator: **Reduction in GHG emissions (Scope 1 + Scope 2) (%)**
- 2025 KP: **20%**

2030 Carbon reduction of 30% in the supply chain
2040 RE100
2050 Net Zero

S Social Responsibilit

- Human rights issues
- Talent recruitment
- Talent cultivation
- Salaries and benefits
- Labor safe and health
- Social participation

- HR Management Division
- Manpower Development Department
- Salary & Benefits Department
- Training & Development Department
- Labor Health & Safety Department
- Alpha Networks Foundation

- Purpose - Expand social participation and sustainability influence
- Weighting: 30%
- Indicator: **Employee engagement score**
- 2025 KP: **4.52 points**

- **Diversified, friendly work environments**
- **Harmonious society and common good**

G Corporate Governance

- Corporate governance
- Product innovation
- Information security
- Intellectual property protection
- Risk Management
- Operating performance

- Finance & Accounting Center/ Auditing Office
- All Business Units (BU) & RD
- Information Technology Division
- Legal Affairs Office
- Risk Management Committee (RMC)
- Finance & Accounting and entire company

- Purpose - Enhance corporate governance
- Weighting: 30%
- Indicator: **Corporate Governance Evaluation Evaluation indicator hit rate**
- 2025 KP: **78%**

- **Enterprise characterized by ethical corporate management**
- **Visionary, innovative products**
- **Highly satisfying services**

Note 1: ESG Committee members include senior executives from each department.
Note 2: For other sustainability issues, please refer to Stakeholder Communication and Identifying Material Issues.

Stakeholder Communication and Identification of Issues of Concern

Understanding stakeholders' material issues

Alpha Networks places strong emphasis on stakeholder engagement. In order to gain a full understanding of all concerned issues of all stakeholders for as a reference for corporate sustainability strategies and compilation of report contents, ESG Committee implements relevant procedures pertaining to stakeholder identification and investigation of issues of concern in a comprehensive and proper manner.

Identification of stakeholders

The ESG Committee has consulted the opinions of departments that have dealings with stakeholders including Finance, Investor Relations, Marketing, Customer Relations Management, Human Resources, Employee Relations, Supplier Management, and Public Relations. Upon discussion and analysis, the following potential stakeholders were identified: Employees, suppliers, clients, shareholders/investors, government authorities, media, societies and associations, contractors, scholars, job seekers, and neighboring communities. The following material stakeholders were identified based on the 5 major principles of AA1000 Stakeholder Engagement Standard (Dependency, Responsibility, Tension, Influence, Diverse Perspectives) in meeting discussions: Customers, employees, investors, suppliers, government authorities, and media. We provide diversified communication channels for different stakeholder categories and strive to gain a clear understanding of stakeholder demands and expectations through intensive interactions with the goal of facilitating review and planning of sustainable development strategies and creating value for stakeholders.

5 major stakeholder principles

Dependency	groups or individuals who are directly or indirectly dependent on the organisation's activities, products or services and associated performance.
Responsibility	groups or individuals to whom the organisation has, or in the future may have, legal, commercial, operational or ethical/moral responsibilities.
Concerned	groups or individuals who need immediate attention from the organisation with regard to financial, wider economic, social or environmental issues.
Influence	groups or individuals who can have an impact on the organisation's or a stakeholder's strategic or operational decision-making.
Diverse Perspectives	groups or individuals whose different views can lead to a new understanding of the situation and the identification of opportunities for action that may not otherwise occur

Key stakeholders

Key stakeholders of Alpha Networks

Identify material issues

The ESG Committee gathers sustainability issues not only through interactions with all stakeholders but also extensively from both internal and external sources including international trends in the field of sustainability, customer requirements, industry practices, and issue important to third-party assessment bodies. Referring to the definitions and classifications of the GRI Standards, the issues are categorized into 3 aspects of economic (corporate governance), environmental (environmental protection), and social (social responsibility). This approach helps identify issues that are significant to key stakeholders, critical to the company's operations and value chain, aligned with the SDGs, and correspond to the GRI Standards.

In 2024, sustainability issues such as TCFD (climate-related risks), TNFD (ecological and biodiversity) continued to become more important. The two topics ⑮ Risk management and ㉕ Ecological and biodiversity were added. There are currently 33 material sustainability topics in total.

Sources for compilation of sustainability issues

Internal	/	Corporate culture, business philosophy, work plans of different units, Sustainable Development Best Practice Principles, employee communication.
External	/	International trends, government policy, customer requirements or QBR, industry practices, and opinion from third-party organizations.

Compilation of material sustainability issues

Corporate Governance

① Financial/Economic Performance
② Business Continuity Management
③ Company Culture
④ Industry Localization
⑤ Environmental Protection Investments
⑥ Supply Chain Management
⑦ Research and Development
⑧ Information Security Management
⑨ Whistle Blower System
⑩ Technology and Quality
⑪ Marketing and Labeling
⑫ Protection of Customer Privacy
⑬ Shareholder Protection
⑭ Customer Satisfaction
⑮ Risk Management

Environment Protection

⑯ Green Product
⑰ Energy Management
⑱ Water Resource Management
⑲ Carbon Emissions
⑳ Waste Management
㉑ Environmental Regulation Compliance
㉒ Green Supply Chain Management
㉓ Effluent and Emissions
㉔ Conflict Minerals
㉕ Ecology and Biodiversity

Social Responsibility

㉖ Talent Attraction and Retention
㉗ Employee Relations
㉘ Career Development and Education Training
㉙ Employee Rights
㉚ Community Care and Participation
㉛ Child Labor
㉜ Forced or Compulsory Labor
㉝ Occupational Safety and Health

Issues that are critical to the company's operations and value chain

Dimension	Issue	Upstream	Company operations		Downstream	Operational importance				
		Procurement	Design	Production	Sales/Transport	Revenue	Profit	Clients Satisfaction	Employees Identification	Risk
Corporate governance	① Financial/Economic Performance	●	●	●	●	●	●	●	●	●
	② Business Continuity Management	●	●	●	●	●	●	●	●	●
	③ Company Culture							●	●	
	④ Industry Localization	●	●	●	●	●	●			●
	⑤ Environmental Protection Investments						●	●		●
	⑥ Supply Chain Management	●	●	●		●	●	●		●
	⑦ Research and Development		●	●		●	●	●		●
	⑧ Information Security Management		●	●			●	●		●
	⑨ Whistle Blower System	●						●	●	●
	⑩ Technology and Quality	●	●	●		●	●	●	●	●
	⑪ Marketing and Labeling				●	●	●	●		●
	⑫ Protection of Customer Privacy				●	●	●	●		●
	⑬ Shareholder Protection					●	●		●	
	⑭ Customer Satisfaction	●	●	●	●	●	●	●		●
	⑮ Risk Management	●	●	●	●	●	●	●	●	●
Environmental protection	⑯ Green Product	●	●	●	●		●	●		●
	⑰ Energy Management		●	●			●			●
	⑱ Water Resource Management			●			●			●
	⑲ Carbon Emissions	●	●	●	●		●	●		●
	⑳ Waste Management	●	●	●			●			
	㉑ Environmental Regulation Compliance		●	●			●			●
	㉒ Green Supply Chain Management	●								●
	㉓ Effluent and Emissions		●	●						●
	㉔ Conflict Minerals	●	●							
	㉕ Ecology and Biodiversity			●				●	●	●
Social responsibility	㉖ Talent Attraction and Retention		●	●		●	●		●	●
	㉗ Employee Relations								●	
	㉘ Career Development and Education Training		●	●		●	●		●	
	㉙ Employee Rights								●	
	㉚ Community Care and Participation								●	
	㉛ Child Labor								●	●
	㉜ Forced or Compulsory Labor								●	●
	㉝ Occupational Safety and Health			●	●				●	●

Alignment of issues with SDGs and GRI

Dimension	Issue	SDGs	GRI
Corporate governance	① Financial/Economic Performance	SDGs 8 Decent Work and Economic Growth	201-1, 201-2, 201-3, 201-4
	② Business Continuity Management		
	③ Company Culture		
	④ Industry Localization	SDGs 10 Reduce Inequality	204-1
	⑤ Environmental Protection Investments	SDGs 13 Reduce Inequality	
	⑥ Supply Chain Management	SDGs 17 Partnerships for the Goals	308-1, 308-2, 414-1, 414-2
	⑦ Research and Development	SDGs 9 Industry, Innovation and Infrastructure	
	⑧ Information Security Management		
	⑨ Whistle Blower System		RBA
	⑩ Technology and Quality	SDGs 12 Responsible Consumption and Production	
	⑪ Marketing and Labeling		417-1, 417-2, 417-3
	⑫ Protection of Customer Privacy		418-1
	⑬ Shareholder Protection	SDGs 8 Decent Work and Economic Growth	
	⑭ Customer Satisfaction		
	⑮ Risk Management		201-2
Environmental protection	⑯ Green Product	SDGs 12 Responsible Consumption and Production	302-1, 302-3, 302-4, 302-5
	⑰ Energy Management	SDGs 12 Responsible Consumption and Production	
	⑱ Water Resource Management	SDGs 12 Responsible Consumption and Production	303-1, 303-2, 303-3, 303-4, 303-5
	⑲ Carbon Emissions	SDGs 12 Responsible Consumption and Production	305-1, 305-2, 305-3, 305-4, 305-5, 305-6, 305-7
	⑳ Waste Management	SDGs 13 Climate action	306-1, 306-2, 306-3, 306-4, 305-5
	㉑ Environmental Regulation Compliance	SDGs 12 Responsible Consumption and Production	307-1
	㉒ Green Supply Chain Management	SDGs 12 Responsible Consumption and Production	308-1, 308-2
	㉓ Effluent and Emissions	SDGs 12 Responsible Consumption and Production	
	㉔ Conflict Minerals	SDGs 10 Reduce Inequality	
	㉕ Ecology and Biodiversity	SDGs 14 Life Below Water SDGs 15 Life On Land	
Social responsibility	㉖ Talent Attraction and Retention	SDGs 1 No Poverty	401-1, 401-2, 401-3
	㉗ Employee Relations		402-1
	㉘ Career Development and Education Training	SDGs 4 Quality Education	404-1, 404-2, 404-3
	㉙ Employee Rights	SDGs 5 Gender Equality	405-1, 405-2
	㉚ Community Care and Participation		
	㉛ Child Labor	SDGs 10 Reduce Inequality	408-1
	㉜ Forced or Compulsory Labor	SDGs 10 Reduce Inequality	409-1
	㉝ Occupational Safety and Health	SDHGs 3 Good Health & Well-being	403-1~ 403-10

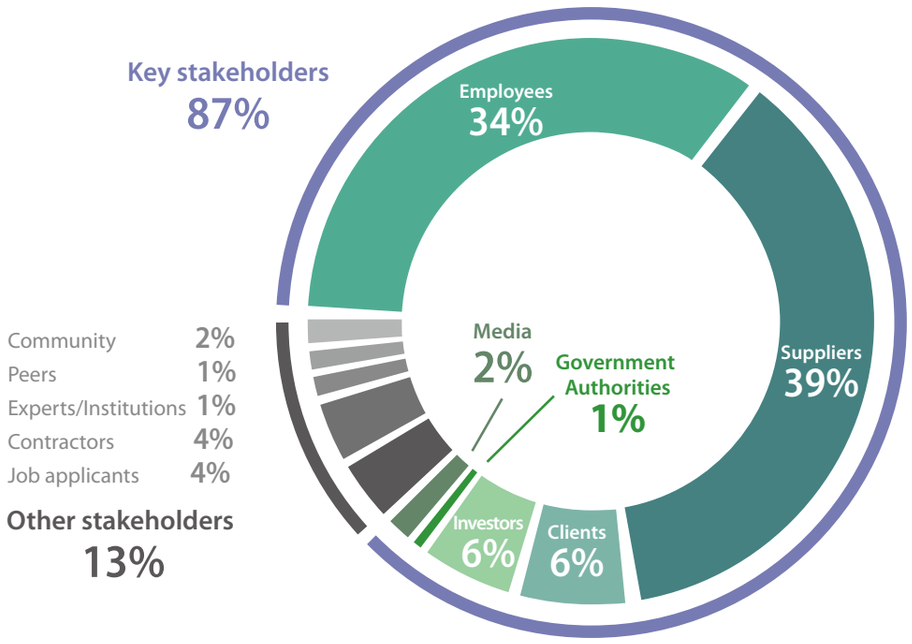
Investigate stakeholders' level of concern

Stakeholder questionnaire survey

In response to the paperless trend, and to make it easier for stakeholders complete the questionnaire, Alpha Networks introduced the online stakeholder survey in the ESG website. Through units that engage with stakeholders, including finance, investor relations, business units, customer relationship management, human resources, employee relations, and supplier management, links to the online survey were sent out to stakeholders in their own language (Chinese/English). Stakeholders were also encouraged to fill out the survey. In 2024, a total of 335 responses were received and the distribution of each stakeholder type is shown below. Up to 87% were key stakeholders and the stakeholder distribution was quite even, so the issues of concern to each stakeholder type could be compiled effectively.

Survey responses and sample distribution

Key Stakeholders	Employees	115	Clients	21	Government authorities	3	Total 335
	Suppliers	129	Investors	19	Media	6	
Other stakeholders	Job applicants	13	Experts/Institutions	5	Community	6	
	Contractors	13	Peers	5			



Level of concern

The ESG Committee conducts weighted calculations of the level of concern (high/medium/low/none) for each issue based on the information provided by stakeholders in the collected questionnaires. It keeps comprehensive statistics of the weighted levels of concern of all stakeholders. Based on a statistical analysis of the questionnaire contents, the following ranking of issues has been determined based on level of concern:

Concerned				Less concerned or surveys show no concern			
#	issue	Dimension		#	issue	Dimension	
1	⑦ Research and Development	●		19	㉙ Employee Rights	●	
2	① Financial/Economic Performance	●		20	㉗ Employee Relations	●	
3	② Business Continuity Management	●		21	㉒ Green Supply Chain Management	●	
4	⑩ Technology and Quality	●		22	⑰ Energy Management	●	
5	⑮ Risk Management	●		23	⑬ Shareholder Protection	●	
6	㉝ Occupational Safety and Health	●		24	⑱ Water Resource Management	●	
7	㉜ Forced or Compulsory Labor	●		25	④ Industry Localization	●	
8	⑭ Customer Satisfaction	●		26	㉖ Talent Attraction and Retention	●	
9	⑤ Environmental Protection Investments	●		27	㉓ Effluent and Emissions	●	
10	⑥ Supply Chain Management	●		28	㉘ Career Development and Education Training	●	
11	㉛ Child Labor	●		29	⑨ Whistle Blower System	●	
12	③ Company Culture	●		30	㉚ Talent Attraction and Retention	●	
13	⑧ Information Security Management	●		31	⑪ Marketing and Labeling	●	
14	⑯ Green Product	●		32	㉔ Conflict Minerals	●	
15	⑳ Waste Management	●		33	㉕ Ecology and Biodiversity	●	
16	⑫ Protection of Customer Privacy	●					
17	㉑ Environmental Regulation Compliance	●					
18	⑲ Carbon Emissions	●					

● Corporate governance
● Environmental protection
● Social responsibility

Issues of concern to each stakeholder - key stakeholders

Dimension	Issue	Employees	Suppliers	Clients	Investors	Government authorities	Media
Corporate governance	① Financial/Economic Performance	◑	●	◑	●	◑	●
	② Business Continuity Management	◑	●	●	◑	◑	●
	③ Company Culture	◑	●			●	
	④ Industry Localization		◑			●	
	⑤ Environmental Protection Investments		●			◑	●
	⑥ Supply Chain Management		●	●		◑	
	⑦ Research and Development	●	●	◑	●	◑	●
	⑧ Information Security Management	◑	●	◑	◑	●	
	⑨ Whistle Blower System	◑	◑				
	⑩ Technology and Quality	●	●	●	◑	◑	
	⑪ Marketing and Labeling	◑	◑			◑	
	⑫ Protection of Customer Privacy	◑	●	●	◑	◑	
	⑬ Shareholder Protection		◑		●	◑	
	⑭ Customer Satisfaction	◑	●	●	◑		
	⑮ Risk Management	◑	●	●	◑	●	
Environmental protection	⑯ Green Product	◑	●	◑		◑	
	⑰ Energy Management		◑				
	⑱ Water Resource Management		◑		◑		
	⑲ Carbon Emissions		◑		◑		
	⑳ Waste Management	◑	◑	◑	◑		
	㉑ Environmental Regulation Compliance	◑	●	◑			
	㉒ Green Supply Chain Management		◑	◑			
	㉓ Effluent and Emissions		◑		◑		
	㉔ Conflict Minerals		●	◑			
	㉕ Ecology and Biodiversity		◑				
Social responsibility	㉖ Talent Attraction and Retention	●	◑		◑	◑	
	㉗ Employee Relations	●	●		◑	◑	
	㉘ Career Development and Education Training	◑	◑			◑	
	㉙ Employee Rights	◑	●		◑	◑	
	㉚ Community Care and Participation	◑	◑			●	
	㉛ Child Labor	◑	●	●	◑	●	
	㉜ Forced or Compulsory Labor	◑	●	●	◑	●	
	㉝ Occupational Safety and Health	●	●	●	◑	●	

◑ Concerned ● Highly Concerned Less concerned or survey shows no concern

Issues of concern to other stakeholders

Dimension	Issue	Job applicants	Contractors	Scholars & Experts	Neighboring Enterprises	Surrounding Communities
Corporate governance	① Financial/Economic Performance	◑	◑	●	●	
	② Business Continuity Management		◑	◑	●	
	③ PerformanceCompany Culture	●	◑		●	
	④ Industry Localization				◑	
	⑤ Environmental Protection Investments		◑	◑	●	◑
	⑥ Supply Chain Management		◑		●	
	⑦ Research and Development	◑		●	●	
	⑧ Information Security Management	◑	◑		●	
	⑨ Whistle Blower System	◑		◑	◑	●
	⑩ Technology and Quality	●	◑	●	●	
	⑪ Marketing and Labeling				◑	
	⑫ Protection of Customer Privacy		◑	●	●	
	⑬ Shareholder Protection		◑	◑	●	
	⑭ Customer Satisfaction		◑	◑	●	
	⑮ Risk Management		◑	◑	●	
Environmental protection	⑯ Green Product	◑	◑		◑	●
	⑰ Energy Management		◑	●	◑	●
	⑱ Water Resource Management			◑	◑	●
	⑲ Carbon Emissions		◑	◑	◑	●
	⑳ Waste Management		◑	●	◑	●
	㉑ Environmental Regulation Compliance		◑	◑	◑	●
	㉒ Green Supply Chain Management	◑	◑		◑	●
	㉓ Effluent and Emissions		◑		◑	●
	㉔ Conflict Minerals		◑			
	㉕ Ecology and Biodiversity		◑			●
Social responsibility	㉖ Talent Attraction and Retention	◑	◑	◑		●
	㉗ Employee Relations	●	◑	◑	◑	
	㉘ Career Development and Education Training	●	◑	◑	◑	
	㉙ Employee Rights	●	◑	◑		
	㉚ Community Care and Participation		◑			
	㉛ Child Labor		◑			
	㉜ Forced or Compulsory Labor	◑	◑	●		
	㉝ Occupational Safety and Health	◑	◑	◑		

◑ Concerned ● Highly Concerned Less concerned or survey shows no concern

Evaluate level of impact

With respect to the degree of social and environmental impact of each issue, scores (from 1 to 5 based on impact degrees in ascending order) were assigned to each issue upon extensive discussion and consideration of management level perspectives, insights of all departments related to these issues, competitor opinions, and views of experts and other parties.

Level of impact

The ESG Committee has ranked each issue based on its degree of social and environmental impact in line with the results of comprehensive assessments:

Highly Concerned

#	Issue	Dimension
1	① Financial/Economic Performance	●
2	⑦ Research and Development	●
3	⑩ Technology and Quality	●
4	㉑ Environmental Regulation Compliance	●
5	② Business Continuity Management	●
6	⑮ Risk Management	●
7	⑲ Carbon Emissions	●
8	⑥ Supply Chain Management	●
9	⑰ Energy Management	●
10	㉝ Occupational Safety and Health	●
11	⑳ Waste Management	●
12	㉓ Effluent and Emissions	●

Concerned

#	Issue	Dimension
13	⑭ Customer Satisfaction	●
14	⑬ Shareholder Protection	●
15	⑯ Green Product	●
16	㉗ Employee Relations	●
17	⑤ Environmental Protection Investments	●
18	㉘ Career Development and Education Training	●
19	㉖ Talent Attraction and Retention	●
20	㉒ Green Supply Chain Management	●
21	⑪ Marketing and Labeling	●
22	⑫ Protection of Customer Privacy	●
23	㉙ Employee Rights	●
24	㉜ Forced or Compulsory Labor	●

Less Concerned

#	Issue	Dimension
25	③ Company Culture	●
26	④ Industry Localization	●
27	㉕ Ecology and Biodiversity	●
28	⑧ Information Security Management	●
29	⑱ Water Resource Management	●
30	㉔ Conflict Minerals	●
31	㉛ Child Labor	●
32	⑨ Whistle Blower System	●
33	㉚ Community Care and Participation	●

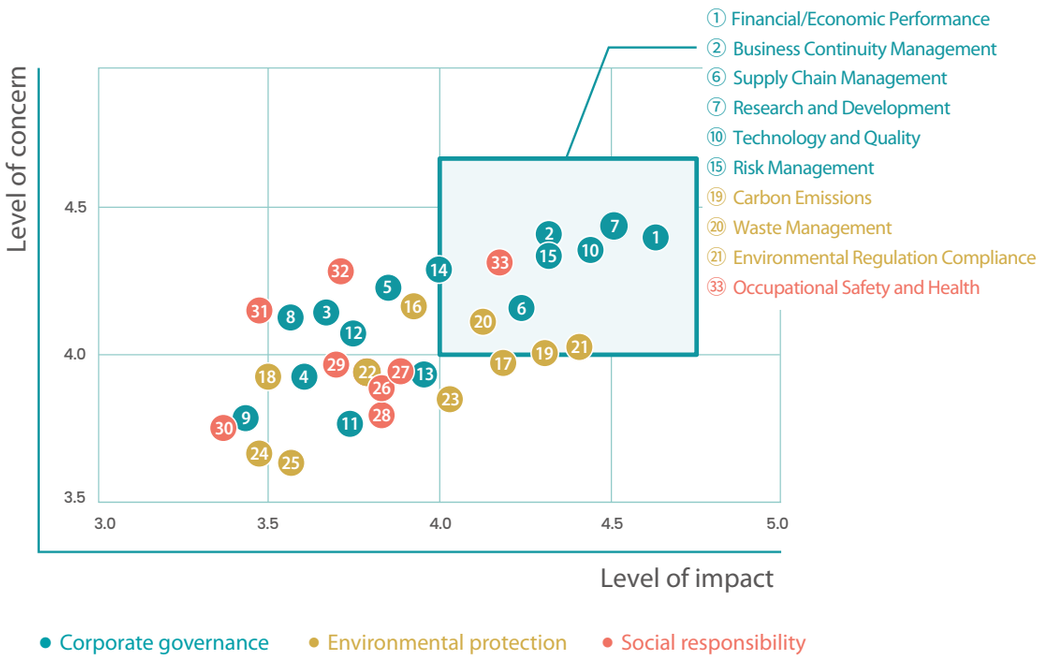
● Corporate governance ● Environmental protection ● Social responsibility

Material Issues conclusion

The distribution of issues of concern on the Y-axis (degree of stakeholder concern) and X-axis (degree of environmental and social impact) can be gleaned from the chart below. The following material issues of concern which averaged scores above 4.0 in both dimensions (degree of concern and degree of impact) were identified: ① Financial/Economic Performance, ② Business Continuity Management, ⑥ Supply Chain Management, ⑦ Research and Development, ⑩ Technology and Quality, ⑮ Risk Management, ⑲ Carbon Emissions, ⑳ Waste Management, ㉑ Environmental Regulation compliance, and ㉝ Occupational Safety and Health.

The difference between the 2023 and 2022 survey results is carbon emissions. This issue is significant to the company's operations and value chain. However, in 2022, stakeholder survey responses did not indicate notable concern about this. In 2023, more stakeholders—such as suppliers, customers, investors, and government authorities—expressed concern about this issue. Additionally, questionnaire collection in the 2023 survey was from more diverse stakeholders. As a result, this topic could be highlighted as a material issue in 2023 stakeholder survey. Furthermore, carbon emissions remains a critical issue of concern in 2024.

Distribution of Issues of concern to shareholders and impact



Difference between 2024 and 2023 survey results:

2023 survey result

- Financial/Economic Performance
- Business Continuity Management
- Supply Chain Management
- Research and Development
- Technology and Quality
- Energy Management
- Carbon Emissions
- Environmental Regulation Compliance
- Occupational Safety and Health

2024 survey result

- Financial/Economic Performance
- Business Continuity Management
- Supply Chain Management
- Research and Development
- Technology and Quality
- Risk Management
- Carbon Emissions
- Waste Management
- Environmental Regulation Compliance
- Occupational Safety and Health

• Issues added in 2024

⑮ Risk Management-
This was a material issue candidate added in 2024. The impact of politico-economic situations including climate risk, Russian-Ukraine War, Israeli-Hamas conflict led to risk management awareness becoming an issue of concern to stakeholders. Risk management-related operations all impacted on Company operations in the social and environmental dimensions so this was designated as a material issue.

⑳ Waste Management -
Waste represents a burden on the environment. Waste recycling and the circular economy have recently both becomes issues of concern to stakeholders. As waste management impacts on corporate governance, society, and the environment, it was chosen as a material issue.

• Issue not selected in 2024

⑰ Energy Management -
Energy management was a material issue in the previous two years and energy-efficiency remains a popular issue as well. Even though energy consumption impacts on corporate governance, society, and the environment, the stakeholder survey results showed that while (overall) concern remained high, it did not meet the threshold for inclusion (4 points). Analysis of survey samples and the issues of concern for each stakeholder found that a key stakeholder - customers - did not consider this to be an issue of concern. This did not match our actual experience from customer interactions however. For example, customers often asked questions relating to energy efficiency performance during QBR. We spoke to the customers in question and found that due to Alpha Networks' recent introduction of the ISO 50001 energy management system, energy-saving measures, and purchasing of renewable energy certificates, they were satisfied with Alpha Networks practices in energy management even though it was a material issue. As a result, they did not assign a high degree of concern to that issue on the survey so the average degree of concern did not pass the test for significance.

List of Material Issues for Alpha Networks in 2024

Material issue	Significance or importance to Alpha Networks	Management approach (policy/action/promise)	GRI Standards	Disclosure chapter
① **Financial/ Economic Performance**	Alpha Networks responds actively to the expectations of each stakeholder. Business performance affects the economic value that can be shared with employees, investors and others. The Company must remain profitable as well in order to stay in business and achieve sustainable development.	Information in related disclosures are sourced from audited financial statements or use data from management reports that have been verified internally.	201-1 Direct economic value generated and distributed	1.5 Operating Performance
			201-3 Defined benefit plan obligations and other retirement plans	3.3.2 Welfare Measures and Employee Insurance
			201-4 Financial assistance received from government	1.5 Operating Performance
② **Business Continuity Management**	Drills are held for each type of event (e.g. power outage, natural disaster, infectious disease, IT failure, supply chain disruption) to ensure business continuity and prevent stoppages that impact on revenue.	Business Continuity Management (BCM) has been implemented through business impact analysis and risk assessment. Business Continuity Planning (BCM) is carried out so that operations can be restored as quickly as possible.	N/A	1.4.4 Business Continuity Management
⑥ **Supply Chain Management**	As a provider of professional R&D, manufacturing and support services for network communications equipment, supplier management is critical to business performance. At Alpha Networks, we select suppliers that provide the best materials, delivery times, and technology in terms of quality and cost for our customers. We also lead by example in the industry chain and mentor suppliers on engagement with sustainability-related issues.	Alpha Networks has defined supplier rules in accordance with the "RBA Code of Conduct." Suppliers are required to adhere to their promises on social responsibility and integrity. Annual supplier audits are also carried out on an ongoing basis to ensure that they comply with the relevant standards on labor rights, health and safety, environmental protection, code of ethics, management system, and social impact.	308-1 New suppliers that were screened using environmental criteria	2.2.1 Supplier Management
			308-2 Negative environmental impacts in the supply chain and actions taken	2.2.1 Supplier Management
			414-1 New suppliers that were screened using social criteria	2.2.1 Supplier Management
			414-2 Negative social impacts in the supply chain and actions taken	2.2.1 Supplier Management
⑦ **Research and Development**	Alpha Networks leverage cutting-edge technology to design high-performance, high value-added network communications equipment for our customers. Innovative R&D embodies the core competitiveness of Alpha Networks.	New products and technologies are developed by Alpha Networks in response to industry trends. Using patent applications and approvals are used as the KPI, we work actively to build up our portfolio of network communications patents in order to strengthen our competitiveness.	N/A	2.1.3 Development and Innovation (R&D focus, new products and technologies under development, patent approvals during the year)
⑩ **Technology and Quality**	As a network communications OEM, the quality of Alpha Networks' manufacturing technology and products determine customer satisfaction and willingness to place orders. These in turn determine the level of revenue.	Conformity on ISO 9001 and TL9000 international quality management system certification as well as continuous review and improvement in accordance with the Alpha Networks quality policy of "getting quality right the first time."	N/A	About Alpha Networks- Quality Policy, Management System
⑮ **Risk Management**	To ensure the sustainability of the Company, Alpha Networks periodically identifies, assesses, processes, reports and monitors risks that may negatively impact on our ability to meet business targets.	The "Alpha Networks Risk Management Policy and Procedure" explicitly defines the risk management policy, principles, procedures, and the responsibilities of each unit to ensure effective risk management. Management tools are also employed to optimize the total of risk management.	201-2 Financial implications and other risks and opportunities due to climate change.	1.4.1 Risk Management Policy and Operations 1.4.2 Risk Management Process and Results 1.4.3 Risks and Opportunities of Climate Change

Material issue	Significance or importance to Alpha Networks	Management approach (policy/action/promise)	GRI Standards	Disclosure chapter
⑲ Carbon Emissions	Climate change, carbon reduction and net zero are important issues in environmental sustainability scenarios. During recent interactions, key stakeholders (e.g. customers during QBR and investors during institutional investor conferences or visits) all took great interest in Alpha Networks Networks' carbon reduction efforts and results. Carbon reduction performance is beginning to affect customers' willingness to place orders and investors' willingness to invest.	Alpha Networks is already committed to carbon reduction of 30% for the supply chain by 2030. We also joined the Science-based Targets Initiative (SBTi) committing to setting science-based reduction targets and achieving net zero by 2050. All TWSE/TPEx-listed companies are now required under the Sustainable Development Roadmap of the Financial Supervisory Committee to inventory and verify the carbon emissions of their subsidiaries by the given deadline.	305-1 Direct (Scope 1) GHG emissions	4.3.3 Greenhouse Gas Inventory
			305-2 Energy indirect (Scope 2) GHG emissions	4.3.3 Greenhouse Gas Inventory
			305-3 Other indirect (Scope 3) GHG emissions	4.3.3 Greenhouse Gas Inventory
			305-4 GHG emissions intensity	4.3.3 Greenhouse Gas Inventory
			305-5 Reduction of GHG emissions	4.3.3 Greenhouse Gas Inventory
			305-6 Emissions of ozone-depleting substances (ODS)	4.3.3 Greenhouse Gas Inventory
			305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	4.3.3 Greenhouse Gas Inventory
⑳ Waste Management	Waste is an environmental issue that has generated public concern for many years. The circular economy is now a global trend as well. As a "responsible producer", Alpha Networks strives to reduce the environmental burden from our operations and reduce the amount of waste produced in accordance with SDG 12 - Ensure sustainable consumption and production patterns.	The "Waste Management Procedure" was formulated by Alpha Networks to establish an effective internal waste management system to prevent the polluting of the environment through improper waste management. Waste is divided into general waste, hazardous industrial waste and general industrial waste.	306-1 Waste generation and significant waste-related impacts	4.4.1 Waste Management
			306-2 Management of significant waste-related impacts	4.4.1 Waste Management
			306-3 Waste generated	4.4.1 Waste Management
			306-4 Waste diverted from disposal	4.4.1 Waste Management
			306-5 Waste directed to disposal	4.4.1 Waste Management
㉑ Environmental Regulation Compliance	Environmental regulations governing factory affairs such as emissions and wastewater affect fines and factory operations. Electronic and ICT products that do not conform to the relevant regulations on restricted substances may also be banned from import.	Alpha Networks complies with the relevant regulations of the "Waste from Electrical and Electronic Equipment" (WEEE) Directive and the "Restrictions of Hazardous Substances (RoHS) Directive."	307-1 Non-compliance with environmental laws and regulations	4.5 Environmental Regulations Compliance

Material issue	Significance or importance to Alpha Networks	Management approach (policy/action/promise)	GRI Standards	Disclosure chapter
㉝ Occupational Safety and Health	Healthy and safety working conditions as a human right is mentioned in important documents issued by the International Labor Organization (ILO), the Organization for Economic Co-operation and Development (OECD), and the World Health Organization (WHO). The UN 2030 Agenda for Sustainable Development also includes safe and healthy working conditions as a sub goal of sustainable development goals. Employees are a key stakeholder of Alpha Networks and an important asset to the Company's continued growth. Beyond complying with the relevant occupational safety regulations, the promotion of employee health is crucial to ensuring our continued growth.	5 safety and health policies were formulated by Alpha Networks to provide employees with sound working environment that is healthy, safe, and sanitary (please refer to 3.5.1). The Safety and Health Committee was established by Hsinchu HQ in accordance with the "Occupational Safety and Health Management Measures" to enforce the above policies. OSH meetings are convened on a regular basis. Changshu Factory has established a Safe Production Committee and meetings on safe production management are convened regularly as well. At the Vietnam Factory, safety and health management are continuously enforced and refined in accordance with the "Law on Environmental Protection" and "Law on Occupational Safety and Health" passed by the Vietnamese government.	403-1 Occupational health and safety management system	3.5.1 Health and Safety Policy
			403-2 Hazard identification, risk assessment, and incident investigation	3.5.1 Health and Safety Policy; 3.5.3 Occupational Incident
			403-3 Occupational health services	3.5.5 Health Promotion
			403-4 Worker participation, consultation, and communication on occupational health and safety	3.5.1 Health and Safety Policy; 3.5.5 Health Promotion
			403-5 Worker training on occupational health and safety	3.5.2 Safety and Hygiene Training
			403-6 Promotion of worker health	3.5.5 Health Promotion
			403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	3.5.5 Health Promotion

Stakeholder Communication Mechanism

Responding to the stakeholders' expectations towards Alpha Networks

Alpha Networks assigned a corresponding internal unit or working group to each issue of concern for communicating and responding to stakeholders through a variety of channels in order to understand stakeholders' expectations of Alpha Networks, and to compile them in a systematic manner to serve as an important reference for compiling the CSR report for next year.

Our general communication channels are: our website (www.alphanetworks.com/en), email, annual report, and the Taiwan Stock Exchange's Market Observation Post System (https://emops.twse.com.tw/server-java/t58query). Stakeholders can find important information of Alpha Networks through the above channels, and may also contact relevant departments through those channels.

The communication channels and frequency for issues of concern to stakeholders have been collated in the following table.

	Client	Employees	Investors	Supplier	Media	Government authorities	Neighboring communities
Concern Material issue	• Business Continuity Management • Supply Chain Management • Innovation R&D • Customer privacy • Green product management * For further detail, see issues to key stakeholders	• Corporate culture • Employee RelationsInnovation • Talent Attraction and Retention • Training and education • Occupational safety and health * For further detail, see issues to key stakeholders	• Operating performance • Business Continuity Management • Innovation R&D • Supply Chain Management • Customer satisfaction • Green house gas * For further detail, see issues to key stakeholders	• Operating performance • Business Continuity Management • Industry localization • Emission and air pollution • Environmental regulation compliance • Green supplier chain * For further detail, see issues to key stakeholders	• Operating performance • Innovation R&D	• Energy management • Water resource management • Green house gas • Waste management • Environmental regulation compliance • Occupational safety and health * For further detail, see issues to key stakeholders	• Green product • Water resource management • Water resource management • Emission and air pollution • Community Care and Participation • Occupational safety and health * For further detail, see issues to key stakeholders
Communication Channel and Frequency	• Customers satisfaction survey (annual) • Quarterly business review • Customer complaints management (ad hoc) • Supplier conference (ad hoc) • Client information security questionnaire survey (ad hoc) • Company website>contact us(ad hoc) • Stakeholders questionnaire(annual)	• Employer-Employee Meeting (quarterly) • Employee Welfare Committee (monthly) • Education Training Platform (ad hoc) • Intranet (ad hoc) • Company Performance Briefing • Stakeholders questionnaire(annual)	• Shareholders' Meeting (annual) • Investor conference(ad hoc) • Market Observation Post System (ad hoc) • Company website> IR(ad hoc) • Stakeholders questionnaire(annual)	• Supplier platform (ad hoc) • Supplier evaluation (ad hoc) • Supplier conference (ad hoc) • Supplier visit (ad hoc) • Company website> contact us(ad hoc) • Stakeholders questionnaire(annual)	• Press release (ad hoc) • Company website> News(ad hoc) • Press conference (ad hoc) • Stakeholders questionnaire(annual)	• Official document (ad hoc) • Company website> News(ad hoc) • Stakeholders questionnaire(annual)	• Company website> News(ad hoc) • Stakeholders questionnaire(annual)

Responding to the United Nations Sustainable Development Goals(SDGs)

Escalate the Value of Sustainable Development

To consolidate its sustainable development strategies, Alpha Networks not only actively investigates and integrates stakeholders' concerns, but also aligns those issues to SDGs to drive high level value of sustainability actions with higher vision.

Chapter	SDGs		Actions and performance
Ch1 Implementing Corporate Governance • Corporate Governance • Ethical Management and Legal Compliance • Intellectual Property and Information Security • Risk Management • Operating Performance	8 DECENT WORK AND ECONOMIC GROWTH	Promote equitable, inclusive, and sustainable business growth, achieve full employment, and allow everyone to enjoy decent work.	Alpha Networks continually strengthens its corporate governance with the Board of Directors as the core, upholds integrity management and legal compliance. The Risk Management Committee (RMC) identifies and manages risks that impact achieving the operational goals, ensures that the Company can achieve sound financial results, and promotes the Company's sustainable business growth, full employment, and decent work for all. • In 2024, attendance at Board, Audit Committee, and Remuneration Committee meetings reached 100%. There were 4 independent directors and they made up 50% of all Board members. All independent directors comply with the rules on concurrent positions and have not served for more than 3 terms. External board performance evaluations were also duly completed (scheduled once every 3 years). • Education and training on integrity management in 2024: "Ethical Management" training was attended by 1,188 people and totaled 224.4 hours; Training course on prevention of insider training was attended by 936 people and totaled 128 hours. No violations of ethical management or insider trading occurred in 2024. • In 2024, information security courses were attended by 243 people and totaled 213 hours; courses on intellectual property laws were attended by 106 people and totaled 114.5 hours; a course on "Drafting Patents and Examples Explained" was also held and this was attended by 12 people, with a total duration of 18 hours. • No instances of customer complaints, information leakage or theft, or loss of customer data occurred in 2024. • The Risk Management Committee convened on a regular (quarterly) basis in 2024 with the goal of identifying risks, reducing operational impacts, and preventing physical losses (no financial losses or assembly line stoppages). In addition, the committee completes climate risk assessments in accordance with the TCFD framework and links physical risks to BCP and transition risks to ESG strategies. • Alpha Networks reported consolidated revenues of TWD 21.4 billion and EPS was TWD 0.40 in 2024.
Ch2 Building a Sustainable Value Chain • Sustainable Products • Resilient Supply Chain • Customer Satisfaction	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	Build resilient infrastructure, foster an inclusive and sustainable enterprise industries, and drive innovation.	Alpha Networks has many years of expertise in network communication products, engages in innovative thinking, and invests in the research and development of online communications core technologies to create a full range of network communication products, covering: regional/metropolitan networks, wireless broadband networks, digital multimedia networks and enterprise solutions, with a key technology-oriented global patent application strategy, 5G/6G, Wired Technology Fiber, Edge Computing/ AI and other core technology fields, and a number of patents that cover 5G, small base stations, cloud technology and other current core technologies of internet communications. • The number of patent applications by Alpha Networks in 2024 was 28, and we plan to file 86 patent applications in different countries. • The number of patents approved by the competent authorities of various countries in 2024 was as follows in the Table of Approved Patents (including applications before 2024).

Chapter	SDGs	Actions and performance
Ch2 **Building a Sustainable Value Chain** • Sustainable Products • Resilient Supply Chain • Customer Satisfaction	 Strengthen sustainable development implementation methods and mobilize global partnerships for sustainable development Ensure sustainable consumption and production patterns.	The mission of Alpha Networks is to "be a globally recognized, professional networking supplier of design, manufacturing and services (DMS)." As a network communication OEM, Alpha Networks connects the entire value chain. Alpha Networks' responsible procurement requires all suppliers to comply with all relevant laws and regulations. We pay special attention to the management of labor rights, environmental protection, safety and health risks throughout our supply chain. We also use the Conflict Minerals Reporting Template (CMRT) to collect supplier data on such prohibited substances. In addition, based on the concept of environmentally friendly operations, we take quality and manufacturing approaches that implement responsible production that fully satisfies our customers and embodies our E-CAN Values. • A total of 569 suppliers were evaluated in 2024. The average percentage of excellent (A) and good (B) suppliers and poor (E) suppliers was 98.42% and 0.35%. We offered project-based guidance to these poor (E) suppliers and requested them to take corrective action. Ongoing guidance for corrective action regarding anomalies and other issues was also provided to acceptable (C) and inferior (D) suppliers to improve the overall quality of delivered goods. • None of the 204 suppliers assessed in 2024 were listed as non-recommended suppliers (score lower than 70) and no suppliers were suspended from new material transactions. • In 2024, corporate social responsibility audits were conducted for 68 suppliers (45 suppliers audited in the context of annual audits and 23 new suppliers audited prior to adoption). • In 2024, 50 CMRT surveys were sent to suppliers, 50 of which were completed and returned (100% completion rate). • Overall customer satisfaction reached 87 in 2024 (exceeding the target score of 85). The scores for punctuality and green product exceeded 90.
Ch3 **Creating an Inclusive Society** • Human Rights • Talent Acquisition • Salaries and Benefits • Talent Development • Safety and Health • Social Engagement	 Achieve gender equality and empower all women and girls. Reduce inequality within and between countries.	To promote gender equality in work and avoid gender discrimination and pregnancy discrimination, Alpha Networks allows female employees to apply for menstrual leave, maternity check-up leave, maternity leave and breastfeeding time according to their physiological needs, and male employees can apply for paternity leave according to their needs. We also offer employees unpaid leave for childcare. In addition, employee salaries and rewards do not discriminate or differentiate based on gender. • Alpha Networks has a fair salary and welfare policy, whereby employees' salaries, rewards and welfare items are not treated differently based on gender, race, nationality, or age. • In 2024, 7 female employees took maternity leave, and 11 male employees took paternity leave. Equal vacation days and benefits are provided to male and female employees. • There is no difference in remuneration based on gender, the starting salary ratio of new male and female employees is 1:1, and is higher than the local statutory minimum wage for both men and women.
	 Ensure inclusive, equitable, and quality education and provide lifelong learning opportunities for all.	Alpha Networks invests in talent cultivation, runs a comprehensive training system and learning channels according to employees' needs at different stages, and provides science education for disadvantaged people through its foundation. • Entered the "CommonWealth Talent Sustainability Awards" hosted by the CommonWealth magazine and was included in the Talent Top 100. • The total training hours in 2024 reached 48,451 hours, with a cumulative total of 21,792 participants throughout the year. • Courses on topics such as AI and LEO satellite were held in response to trends in technology development to cultivate R&D talent in 5G, 6G and other specialist fields. A total of 967 training hours were clocked by RD-related courses. ESG related courses clocked up 1,556 hours and were attended by 3,480 people to strengthen our ESG culture. • In keeping with the philosophy of "giving back to society", the Alpha Networks Foundation sponsored the "Gu Dong Yue Xing" bongo drum percussion band made up of intellectually disabled children from the Hsinchu Association for Welfare of Persons with Intellectual Disabilities." For the "Delivering Love to the Countryside to Fulfill Christmas Wishes" charity project, employees dressed up as Santa Claus for remote rural schools and gave away 494 gifts on the student's Christmas wish list to take the chill out of winter.

Chapter	SDGs		Actions and performance
Ch3 Creating an Inclusive Society • Human Rights • Talent Acquisition • Salaries and Benefits • Talent Development • Safety and Health • Social Engagement		Eradicate poverty in all its forms.	In addition to pursuing the Company's sustainable business growth, Alpha Networks also raises employee salary levels. • In 2024, the average salary of full-time non-management employees was TWD 1,144 thousand (1% increase from 2023), and the median was TWD 1,132 thousand (6% increase from 2023).
		End hunger, achieve food security and improve nutrition.	To provide safe, hygienic, and healthy group meals for employees, Alpha Networks manages food safety in each factory compound. For instance, a "food committee" checks the meals, The selected meal service provider has acquired a HACCP certificate and a dietitian license, meals are prepared with less oil, and kitchen hygiene is inspected every month from ingredients delivery, storage, processing, tableware safety, to management of kitchen personnel environmental equipment, and food safety. Dining satisfaction stayed above 70 throughout 2024.
		Promote healthy lifestyles and well-being at all ages.	Alpha Networks sets much store with employee health management, carries out systematic health promotion and activities, offers employee health check-ups above and beyond the legal requirements, has a medical room in each facility staffed with 2 occupational health nurses, while 3 specialist physicians visit the factory three times a month to promote health care, raise health awareness, and provide special care. • Alpha Networks provides health check-ups above and beyond the legal requirements. In 2024 the general health examination rate for employees reached 97%. • Factory nurses analyzed the top ten anomalies (compared over a three-year period) based on the results of health exams and implemented graded health management for high-risk individuals. Different management measures are adopted based on individual grading. Physician consultations were arranged for 56 individuals. • Health promotion seminars were held 7 times and attended by 280 people; 3 seminars on new metabolic syndrome and colorectal cancer were held and attended by 158 people. • Periodic tracking, seminars, and physician consultations reduced the frequency of metabolic anomalies to 15.4%. • Workers whose operations involve special health hazards including noise, ionizing radiation, or n-Hexane, are provided with special worker health exams. The examination rate was 100% in 2024. • Entered the “Corporate Health Responsibility (CHR) Awards” hosted by the CommonHealth magazine and was recognized as a “99 Healthy Enterprises.” • Upgrades to the environment and facilities of the lactation room led to the “Friendly Lactation Room - Outstanding Performance Award” from the Public Health Bureau of Hsinchu City. • Self-funded influenza vaccination was held in 2024 with 118 people taking part. • Two blood donation events were held and 144 participants donated 200 bags of blood.
Ch4 Towards a Sustainable Environment • Green Products • Environment and Energy • Carbon Emission • Environmental Protection Measures • Environmental Regulations Compliance		Take urgent actions to address climate change and its impacts.	Alpha Networks has declared RE60+ 30% carbon reduction in the supply chain by 2030 / RE100 by 2040 / Net Zero by 2050 as its vision for environmental sustainability. The goals are to reach 60% renewable energy consumption and reduce the carbon emissions of suppliers by 30% by 2030; reach 100% renewable energy consumption by 2040; and ultimately, realize net zero emissions by 2050. Carbon reduction strategies and actions for “Green Energy”, “Green Supply Chain”, “International Advocacy”, “Organizational Carbon Inventory” and “Product Carbon Footprint” were also planned and launched based on the 30/40/50 goals. For more information, please refer to Carbon Reduction Action. At the same time, through its hazardous substance management platform, Alpha Networks purchases raw materials that fully meet regulatory standards, complies with the environmental protection laws and customer requirements across various countries, and avoids the impacts from harmful substances. We design and product environmentally friendly products through designing for disassembly (DfD) and energy-efficiency. Employees are recruited to take part in ecological events to help preserve biological diversity. For further information on environmental indicators such as electricity savings, carbon reduction, water conservation, and waste reduction, please refer to CH4 Sustainable Environment - Annual Accomplishments.
		Conservation and sustainable use of terrestrial ecosystems to ensure biodiversity and prevent land degradation.	

1 Corporate Governance

Continue to strengthen corporate governance to allow the Company to continue to operate and develop.

Annual Accomplishments

1.1 Corporate Governance

1.2 Ethical Management and Legal Compliance

1.3 Intellectual Property and Information Security

1.4 Risk Management

1.5 Operating Performance

Annual Accomplishments

Corporate Governance

- Attendance rate of **100%** at Board of Directors, Audit Committee, and Remuneration Committee meetings in 2024.
- In 2024, there were 4 independent directors and they accounted for **50%** of the total Board membership. All complied with the regulations on concurrent positions and had not served for more than three terms;
- Ranked in the **6%~20%** band at the 10th Corporate Governance Evaluation.

Risk Management

- The Risk Management Committee convened on a regular (quarterly) basis in 2024 with the goal of identifying risks, reducing operational impacts, and preventing physical losses (**no** financial losses or assembly line stoppages).
- Completion of climate risk assessments and monetization in accordance with the TCFD framework, linkage of physical risks to BCP and transition risks to ESG strategies.

Financial Performance

- Consolidated revenue of NT$ 21.4 billion and EPS of $0.40 in 2024.

Information Security and Confidentiality protection

- In 2024, information security courses were attended by 243 trainees and totaled 213 hours; courses on intellectual property laws were attended by 106 trainees and totaled 114.5 hours; a course on “Drafting Patents and Examples Explained” was also held and this was attended by 12 trainees, with a total 18 training hours.
- **No** instances of customer complaints, information leakage or theft, or loss of customer data occurred in 2024.

Ethical Management and Legal Compliance

- Employee code of conduct and **integrity-related** training courses were attended by a total of 1,188 trainees (224.4 training hours); **no** whistleblower reports/grievances were received in 2024.
- **No** violations of local laws or instances of major litigation occurred in 2024.
- **No** instances of insider trading occurred in 2024; relevant education courses were attended by a total of 936 trainees (128 training hours).

1.1 Corporate Governance

Alpha Networks is firmly committed to operational transparency and ongoing advances in the field of corporate governance. In addition to the establishment of a rigorous corporate governance framework, the Company directs its efforts in strengthening functionality of Board of Directors and building of a supply chain characterized by a strong emphasis on social responsibility, labor rights, safety, health, and sustainable development. Alpha Networks implements its business strategies, optimizes its corporate risk management mechanism, and strengthens operational monitoring at each level of the organization with the ultimate goal of ensuring compliance with the code of business conduct and ethics and realization of the core value of honesty and integrity. The Company also place high priority on the protection of shareholders' equity and achievement of its corporate vision.

Based on these principles, the Alpha Networks Board of Directors authorizes the Audit Committee and Remuneration Committee, which are directly subordinate to the board, to assist in the fulfillment of its supervisory responsibilities. Both committees submit regular reports on its activities and resolutions to the Board of Directors.

Commitments and policies

Corporate governance is the cornerstone of corporate operations. Alpha Networks is fully committed to the disclosure of corporate governance information and the enhancement of management performance transparency. Risk mitigation and risk response capabilities are bolstered through optimization of existing business management practices and risk control in our daily operations. Organizational activities are promoted and monitored on an ongoing basis pursuant to national and international laws to ensure sound organizational development and safeguard stakeholders' interests.

Implementation of corporate governance

- Early convening of the Shareholders' Meeting at the end of May.
- Upload the procedure manual (both Chinese and English) 30 days before the date of the Shareholders Meeting.
- When the Board of Directors decides on a Regular Shareholders Meeting, it releases the most important information in both Chinese and English, including the date, method, reason for meeting, and the date when the shareholder list updates are cut.
- Disclose information on corporate governance, sustainable development, and risk control on the Alpha Networks website.

Annual report disclosures

- The annual report (both Chinese and English) is uploaded 18 days before the date of the Shareholders Meeting.
- Implementation resolutions passed by the Shareholders Meeting, Board of Directors performance evaluation procedures and outcomes, as well as the responsibilities and current status of the dedicated corporate governance unit.

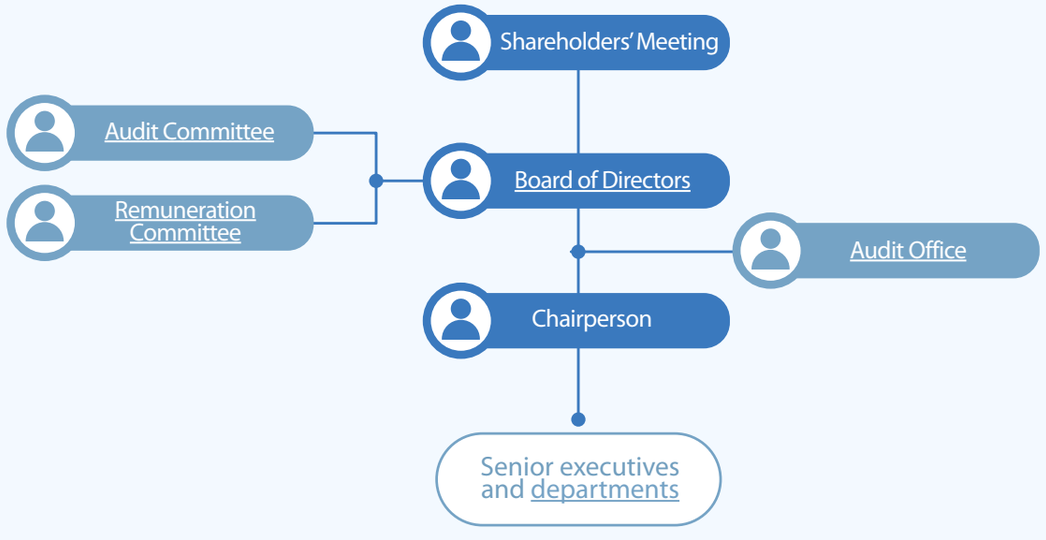
Corporate governance evaluation

The Company was ranked in the 6% ~ 20% band at the 10th Corporate Governance Evaluation and an external performance evaluation was conducted for the Board of Directors. We will continue to monitor new change management indicators in corporate governance to improve our corporate governance regime and evaluation results.

1.1.1 Governance Structure

Protecting shareholders' rights and interests has always been an issue that Alpha Networks has always attached great importance. The Regular Shareholders Meeting of Alpha Networks uses an electronic voting system, and votes are cast on a case-by-case basis, to increase the proportion of shareholders attending the shareholders' meeting and ensure that shareholders can exercise their shareholder rights according to the law. We also communicate our operations and financial situation to the shareholders, and field questions from shareholders. In addition to having a management team composed of experienced managers, Alpha Networks also has board members who generally have the knowledge, skills, and achievements necessary to perform their duties, and they are committed to maximizing shareholders' interests.

Corporate governance structure



1.1.2 Operation of the Board of Directors

Our Board of Directors is the highest governance and decision-making body of the Company. Its members are elected by all attending shareholders in a shareholders' meeting pursuant to applicable laws, "Articles of Incorporation" and "the Rules for Election of Directors" for a term of 3 years. This term's board is composed of 8 members (including 4 independent directors). Members of committees subordinate to the Board of Directors are nominated and appointed by board resolution pursuant to the organizational charters of such committees. All our independent directors meet the criteria in the categories of professional qualifications, work experience, limitations on concurrent appointments of independent directors, and independence requirements as laid out in the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies. The Chairperson is elected by the Board of Directors. All directors have more than 5 years' work experience in commerce, law, finance, or accounting, or areas otherwise necessary for the business of the company. Ms. April Huang duly serves as the Chairperson of Alpha Networks pursuant to the provisions set forth in Article 208, Paragraph 3 of the Company Act. Where a director is an interested party in relation to an agenda item, he/she must recuse himself/herself from the discussion or the voting on said item provided that the relationship is likely to prejudice the interest of this Company pursuant to Article 206, Paragraph 2 of the Company Act and application mutatis mutandis of the recusal provisions set forth in Article 178 of the same Act. Where necessary, the Chairperson may appoint another director to serve as meeting chair. Where recusal due to conflict of interest occurs, the matter must be duly disclosed in the corporate governance chapter of the Company's annual report for the respective year. The Alpha Networks Board of Directors is convened at least once per quarter to ensure proper supervision over company management. Board members must exercise full their responsibility as prudent administrator and duty of loyalty in order to maximize shareholder equity. They must also exercise their authority, carry out business assessments and make important resolutions with a high level of self-discipline and abundance of caution. A total of 5 Board meetings were convened by the 2024. The attendance rate was 100% and surpassed the standard of 80% set for Board performance self-evaluations. All Board members attended all Board meetings in person. Minimum attendance requirements for directors will be incorporated into the Corporate Governance Best Practice Principles in the future.

Diversity of Board membership

A candidate nomination system is explicitly stipulated in the Articles of Incorporation. It is further stated in Article 20 of the Corporate Governance Best Practice Principles that "the composition of the Board of Directors must be determined by taking diversity into consideration. It is advisable that directors concurrently serving as managerial officers not exceed 1/3 of the total number of board members, and that an appropriate policy on diversity based on the company's business operations, operating dynamics, and development needs be formulated." This policy must include, but not be limited to, basic criteria and values such as gender, age, nationality, and culture as well as professional knowledge and skills including professional background, skills, and industry experience. One member (12.5%) of the current Board is an employee of the Company and there are 4 independent directors (50%), so the specific objectives of having more than 1/3 of the Board being independent directors and less than 1/3 of the Board holding concurrent managerial positions set by the diversity policy were both met.

Board of Directors, committees, and diversity

Job title	Full name	Gender	Age	Members of functional committees	Diversified industry-related skills and professional competence								Independent directors Term of office
					Business administration	High-tech industry	Venture capital	Sustainable development	Finance & accounting	Risk Management	Information security	Academic research	
Chairperson	April Huang	Female	51-60	NA	v	v		v					
Vice Chairperso	Peter Chen	Male	61-70	NA	v	v	v	v		v			
Director	Han-Chou Huang	Male	61-70	NA	v	v		v					
Director	Jasmin Hung	Female	51-60	NA	v		v		v	v			
Independent Director	Shu-Hsing Li	Male	61-70	• Audit Committee convener • Remuneration Committee member	v	v			v			v	3 terms or less
Independent Director	Ming-Te Hsieh	Male	61-70	• Audit Committee convener • Remuneration Committee member		v					v	v	3 terms or less
Independent Director	Cheng-Jung Chiang	Male	71-80	• Audit Committee convener • Remuneration Committee member	v	v		v				v	3 terms or less
Independent Director	Chung-Jui Chen	Male	61-70	• Audit Committee convener • Remuneration Committee member	v	v	v		v				3 terms or less

* For more details on the academic and professional experience of Board members, concurrent positions at other companies Board Diversification Policy and Implementation, and Continuing education for directors, please refer to our Company website > Corporate Governance or our Annual reports.

Management goals of the Board diversity policy and achievement status

Category	Management goals	Achievement status
Board composition	Total of 8 board seats (general and independent directors accounting for 4 seats each)	v
Gender	2 female directors	v
Term of office	Independent directors must serve for no more than 3 terms	v
Concurrent appointments	• Directors concurrently serving as managerial officers must not exceed 1/3 of the total board membership. • Independent directors must not hold concurrent appointments as independent directors at more than 3 companies. • Independent directors must not hold concurrent appointments as directors (incl. Independent directors) or supervisors at more than 5 TWSE/TPEx Listed Companies.	v
Diversified professional competence	Including high-tech industry, technology R&D, industrial innovation, finance & accounting, financial investments, corporate sustainability	v

Board performance evaluations

We have adopted Rules for Performance Evaluation of Board of Directors, stipulating that the Board of Directors conduct an internal performance evaluation at least once a year and an external performance evaluation at least once every 3 years.

Internal performance evaluations

Internal performance evaluations for the Board of Directors and functional committees were completed at the end of 2024. The result of "Excellent" from the self-evaluations indicated the effective operation of the Board as a whole and reported to the Board of Directors in the first quarter of 2025.

External performance evaluations

In 2023, we commissioned the independent assessment body, the Taiwan Corporate Governance Association (CGA) to conduct external evaluations. Appraisals were conducted in form of online self-assessment questionnaires and on-site investigations in the 8 dimensions of board composition, guidance, authorization, monitoring, communication, internal control, risk management, self-discipline, and support system. We reported the results of this evaluation to the Board of Directors on October 31, 2023. Recommendations from the Taiwan Corporate Governance Association will be used by the Board of Directors as a reference for ongoing improvement of its functions.

* The Board of Directors Performance Evaluation Results Report can be viewed in Company website > Corporate Governance.

Governance of climate issues

Amid global climate change and the low-carbon market transition, Alpha Networks pays attention to the risks and opportunities that climate change may bring. To promote transparent information disclosure on climate-related risks and opportunities, we follow the disclosure recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) for independent tools for climate change risk and opportunity assessment and climate-related financial disclosures. Based on internal rules and external regulations, market and technology changes, goodwill and substantive risks, our Company analyzes, develops and adapts mitigation strategies.

The Board of Directors instructs the relevant departments and offices and divides the labor on climate issues as follows:

- The Board of Directors and its functional committees: The Board of Directors reviews and directs climate change strategy, action plans and annual goals, while the sustainable development committee drafts, plans and implements those. Each quarter, the risk management and corporate sustainability management committees implement climate change risk surveys and responses, while they annually report the implementation status to the Board of Directors, which reviews the greenhouse gas reduction goals and achievements.
- Risk Management Committee: Coordinates departments and offices within the Company to review the Company's internal and external risks (including climate change risks), formulate risk response strategies for major company-wide risks, and annually reports on this to the Board of Directors.
  * For identification of climate change risks and opportunities and related financial disclosures, please refer to 1.4.3 Risks and Opportunities of Climate Change.
- Sustainable Development Committee: Proposes and implements the corporate social responsibility vision, tasks, systems, related management guidelines and specific action plans (including climate change), and annually reports to the Board of Directors on the climate action plans and outcomes.

1.1.3 Operation of the Audit Committee

The Audit Committee was established by the Company on June 15, 2012, and is made up of all independent directors in accordance with the law. At least one member must also come from an accounting or financial background. The Audit Committee mainly plays a supervisory role that involves carefully reviewing the business execution of the Company and the Board of Directors. The Audit Committee meets at least once every quarter.

Accountants conduct semiannual audits twice a year, and internal audits occur quarterly. The risk management, legal affairs, financial accounting and other units report to the Audit Committee on the latest financial statement review status, internal audit results, major litigation cases, financial business overview and other information from time to time. Moreover, the audit committee also assists shareholders to ensure the company's credibility in terms of corporate governance and information transparency, so as to protect the rights and interests of shareholders.

In 2024, we held 5 Audit Committee meetings with an average attendance rate of 100%. Annual work priorities and operations of the Audit Committee are disclosed in the "Audit Committee Operations" chapter of our 2024 Annual Report. Committee's communications, communicated items and outcomes are disclosed are disclosed in the "Audit Committee" part of the Corporate Governance section on the Alpha Networks' website.

1.1.4 Operation of the Remuneration Committee

The establishment of the "Remuneration Committee" in accordance with the "Regulations Governing the Appointment and Exercise of Powers by the Remuneration Committee of a Company Whose Stock is Listed on the Taiwan Stock Exchange or the Taipei Exchange" was approved by the Alpha Networks Board of Directors on December 23, 2011. and the Alpha Networks Remuneration Committee Charter was drawn up. The Committee is responsible for formulating and regularly reviewing the policies, systems, standards and structure of governing executive performance evaluation and compensation. The Committee also assesses and sets the compensation for directors and executives. Our Articles of Incorporation cap directors' compensation at no more than 1% of the annual profits (profit before tax minus employee and directors' compensation). For senior executive remuneration, the fixed components shall, in principle, maintain the average competitiveness of the company in the industry. The variable components shall be based on company and individual performance as well as their personal contributions. Assessment items, goals and weightings are set at the start of each year based on internal and external business developments. Performance targets and industry compensation standards are then taken into accounts and reviewed by the Remuneration Committee. It is then submitted to the Board of Directors for approval and implementation.

The Remuneration Committee is convened at least twice a year or as necessary. The Alpha Networks Remuneration Committee has 4 members (whose terms run from May 31, 2023, through to May 30, 2026) who are all independent directors. For more information, please refer to the "Remuneration Committee" part of the "Corporate Governance" section on the Alpha Networks website. In 2024, we held 3 Remuneration Committee meetings. Attendance is shown in the table below.

Position	Name	Number of meetings Times (A)	Attendance in person Times (B)	Attendance by proxy	Actual Attendance Rate (%) (B/A)
Convener	Ming-Te Hsieh	3	3	0	100%
Member	Shu-Hsing Li	3	3	0	100%
Member	Cheng-Jung Chiang	3	3	0	100%
Member	Chung-Jui Chen	3	3	0	100%

Remuneration Committee may invite the Chairman or CEO to attend meetings of the Committee. They shall however recuse themselves if there is a conflict of interest and not participate in the discussion. Directors, internal auditors, accountants, legal advisors and other personnel may be invited to attend the meetings to provide any necessary information.

* For information on Remuneration Committee operations, please refer to the "Remuneration Committee" part of the "Corporate Governance" section on the Alpha Networks website.

1.1.5 Operation of the Audit Office

Audit Office organization

The Company's internal audit is an independent unit, directly subordinate to the Board of Directors, with one person in charge of the Audit Office and dedicated auditors. The Auditing Office is an independent unit that reports to the Board of Directors. Auditors carry out the annual auditing plan approved by the Board. They also review compliance with internal controls by Alpha Networks Dongguan and Alpha Networks Changshu and its subsidiaries to ensure their continued effectiveness and to provide a basis for further revisions to the internal controls.

The head of auditing shall not only brief the Audit Committee regularly on auditing affairs but also attend Board of Directors meetings to present reports as well. Any defects or potential risks identified during the audits may also be immediately reported if necessary. Our auditors have the International Internal Auditor Certificate issued by the international Institute of Internal Auditors (IIA). Alpha Networks upholds integrity and abides by the law. We have an effective internal control system in place with a dedicated unit for implementation at the management departments of our Dongguan Factory and Changshu Factory.

The internal control system at Alpha Networks was established in accordance with the Regulations Governing Establishment of Internal Control Systems by Public Companies. In addition to annual periodic self-reviews of internal control systems, the effectiveness of Alpha Networks' internal controls are constantly being reviewed and revised in response to changes in the internal and external environments. Such revisions are then evaluated by the Audit Committee and Board of Directors.

How the Audit Office works

1. Formulate audit plans based on identified risks and submit those to the Board of Directors for approval before implementation.
2. Check legal and regulatory compliance, Company policies and rules.
3. Evaluate and improve the efficacy of the design and implementation of the internal control systems of the Company and its subsidiaries.
4. In addition to reporting the audit results to the management to make them aware of existing or potential deficiencies, the internal deficiencies and anomalies found in internal audits are also regularly tracked and improved.
5. Review the internal control and inspection reports of our Company's departments, offices, and subsidiaries to ensure the efficacy of the internal control system and issue statements on the internal control system.
6. Execute project audits.

Operational status of the Audit Office in 2024

- The Company's independent directors, Chief Audit Executive, and CPAs have a sound working relationship. Key communications during 2024 are summarized below:

Date	Participants	Communication topics	Suggestions and corrections
2024/02/27 Communication Meeting	Independent Director x 3 CPA, Chief Audit Executive	2023 annual financial report inspection results report. Important legal updates. The Company's own financial report.	NA
2024/07/26 Communication Meeting	Independent Director x 4 CPA, Chief Audit Executive	2024 second quarter financial report review results report. Important legal updates.	NA
2024/11/01 Communication Meeting	Independent Director x 4 CPA, Chief Audit Executive	2023 Audit Quality Indicators (AQI). Important legal updates.	NA

- The Audit Office implements the Company's internal audits and controls. It has a sound working relationship with the independent directors of the Company. Key communications during 2024 are summarized below:

Date	Participants	Communication topics	Suggestions and corrections
2024/02/27 Communication Meeting	Independent Director x 3 Audit Supervisor	2023 Internal Control System Statement and Self-Assessment Results Report. 2023 October-December Audit Report and Follow-Up Inspection Instructions.	NA
2024/05/03 Communication Meeting	Independent Director x 4 Audit Supervisor	January-March 2024 Audit Report and Follow-Up Inspection Instructions.	NA
2024/07/26 Communication Meeting	Independent Director x 4 Audit Supervisor	April-June 2024 Audit Report and Follow-Up Inspection Instructions.	NA
2024/11/01 Communication Meeting	Independent Director x 4 Audit Supervisor	July-September 2024 Audit Industry Key Report and Subsequent Tracking Status Explanation. 2025 audit plan.	NA

1.2 Ethical Management and Legal Compliance

Commitment to ethical management and legal compliance

1.2.1 Ethical Management Policy

Ethical management is not only conducive to business operations and long-term growth but also represents the most fundamental social responsibility of an enterprise. Unethical conduct results in losses for the enterprise, low moral standards of its employees, and mistrust between the enterprise and its clients and partners. Even worse, it is often associated with illegal conduct such as influence peddling or bribery, damage to the corporate governance mechanism, and deteriorating business environments.

The Board of Directors must exercise the due care of a good administrator in monitoring the prevention of unethical conduct by the Company and thereby ensure the implementation of ethical management policies.

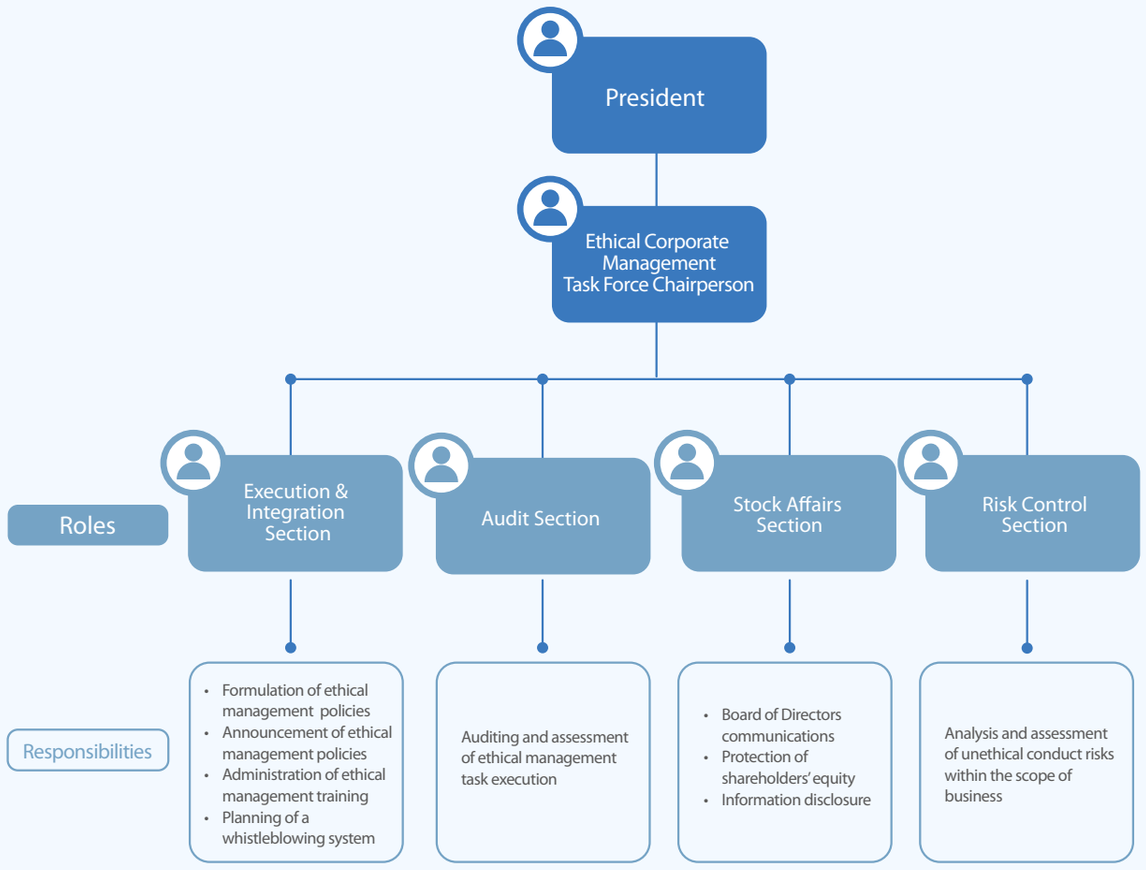
The "Ethical Corporate Management Best Practice Principles" and "Code of Ethical Conduct" were adopted by the Alpha Networks Board of Directors to ensure that customers, suppliers, debtors, shareholders and the general public are all treated in an ethical manner by the Company and employees. These rules govern all employee behavior and Board approval is required for their creation, revision, or abolition.

The Company has formed an Ethical Corporate Management Task Force, which is composed of professionals in the fields of finance, HR, and auditing. In accordance with the duties and responsibilities of each unit, it assists the Board of Directors and each management level in the monitoring and execution of corporate governance-related matters including the Ethical Corporate Governance Best Practice Principles, anti-corruption, anti-bribery, legal compliance, and prevention plans with the goal of guarding against unethical conduct and ensuring the implementation of Ethical Corporate Management Best Practice Principles. The Task Force reports the implementation status and results to the board on a regular basis.

Corporate governance is the cornerstone of corporate operations. Alpha Networks is fully committed to the disclosure of corporate governance information and the enhancement of management performance transparency. Organizational activities are promoted and monitored on an ongoing basis pursuant to national and international laws to ensure sound organizational development and safeguard stakeholders' interests.

1.2.2 Organization and Operations

Ethical management framework



Whistleblowing system/grievance mechanism

Alpha Networks is committed to ethical management and strictly prohibits any form of improper conduct. To safeguard the legitimate rights and interests of stakeholders, dedicated personnel have been assigned to respond and communicate with stakeholders. Whistleblowing channels and grievance mechanisms have been established by the Company in accordance with the Ethical Corporate Management Best Practice Principles and the Code of Ethical Conduct. Where stakeholders detect any activities in violation of corporate governance or any illegal conduct, they may file reports via available channels.

The Company has assigned dedicated personnel to handle stakeholder reports submitted via the whistleblowing mailbox and relevant complaint channels. Whistleblower identities and report contents are kept strictly confidential to protect whistleblowers/grievant. Where illegal conduct is detected, Alpha Networks conducts rigorous reviews and ensures strict confidentiality of investigation contents and results to guarantee that personnel rights and interests are not prejudiced in any way. Relevant mechanisms and procedures can be described as follows:

A. **Contact person or channel:**
Any conduct in violation of integrity or business ethics can be reported via the employee grievance mailbox (talk@alphanetworks.com) or the stakeholder whistleblowing mailbox (improvement@alphanetworks.com) or they can report the matter to the HR unit (anonymous reporting allowed).

B. **Investigation procedures:**

- Upon receipt of reports/grievances, the contact person initiates investigations of the report incident and determine the report/grievance category.
- Relevant units are summoned, a project task force is formed, and corresponding investigation procedures are established.
- Where reports implicate directors or senior executives, the matter is immediately forwarded to the independent directors.
- Records pertaining to the handling, investigation procedures and results, and relevant documentation of reported incidents are fully preserved.

C. **Reply method:**

- Upon completion of investigations, the task force submits the investigation details to the President for final decision including the handling of external related parties and units responsible for follow-up processing.
- Where material violations are detected or the Company is in danger of sustaining material losses, the management level and all independent directors should be notified immediately (the Board of Directors should also be informed in writing). A report should be submitted to the competent authority or the matter should be handed over to judicial authorities for investigation if deemed necessary.

D. **Incentive measures:**
Upon verification of reported matters, the whistleblower/grievant should be rewarded accordingly to encourage reporting of any improper conduct.

Status of operations in 2024

A description on the implementation status of ethical corporate management in 2024 is provided below. and a report was made to the Q1 Board of Directors meetings in February 2025.

A. **Training and Education:**
In 2024, integrity related education and training was held in accordance with the as per the Employee Code of Conduct, with 1,069 participants and a total duration of 224.4 hours.

B. **Employee Pledge:**
All employees signed the Honesty & Integrity Statement during onboarding in 2024.

C. **Employee Education:**
Employees are educated on the concept of integrity and their confidentiality responsibilities through internal informational materials.

D. **No whistleblower reports/grievances were received in 2024.**

1.2.3 Regulation Compliance

Ethics, fairness, compliance and adherence to business ethics have always been the overriding principles in the business activities of Alpha Networks. Company and employees are prohibited from bribery, corruption, receiving or giving of gifts, and hospitality out of proportion to business etiquette from/to suppliers, customers and stakeholders. In addition to complying with the laws on labor, labor safety, information security, environmental protection, finance, intellectual property rights, and trade secret as well as business regulations in Taiwan where we are headquartered, Alpha Networks also applies the same standard to comply with the laws and regulations of the country where our factories or offices are located during our business activities. Alpha Networks has established a Legal Affairs Office for legal compliance and advice. Proper compliance is enforced in concert with professional advice from external consultants, timely updates of internal rules, and employee communication on an ad hoc basis to reduce and control the risks in company operations. The aim is also to protect the rights and interests of our employees and shareholders.

In 2024, there was no record of violations of local laws or regulations, or major litigation involving the Company, its responsible person, the chairperson, or managerial officers as defined pursuant to the criteria laid out in Paragraph 2, Article 4, of the Taiwan Stock Exchange Corporation Procedures for Verification and Disclosure of Material Information of Companies with Listed Securities.

1.2.4 Regulation Compliance

As a global network communications DMS provider, Alpha Networks strictly abide by laws of nations and industry regulations. We further comply with market mechanisms and refrain from engaging in improper and unfair anti-competitive practices in the face of market competition. With a view to ensuring compliance with laws by the Company and its employees in the performance of duties, Alpha Networks embraces a philosophy of social responsibility characterized by integrity and self-discipline. Its Ethical Corporate Management Best Practice Principles contain clearly formulated provisions in the fields of anti-corruption, anti-trust, data protection, and political participation. All these concepts and provisions serve as the primary code of conduct that informs all business activities engaged in by Company members. In 2024, no anti-competitive or anti-trust practices or incidents occurred. In addition, Alpha Networks maintains political neutrality and encourages its staff members to fulfill their civic duties without engaging in political PR or make any political contributions under the Company's name. No expenses associated with political contributions were incurred in 2024.

As a publicly listed company on the TWSE, Alpha Networks adheres to stock listing regulations and complies with the rules of capital markets. The Procedures for Handling of Material Information and Prevention of Insider Trading in particular were formulated for the prevention of insider training. Current Board directors, managerial officers, and employees are also educated on the Procedures for the Prevention of Insider Training and related regulations at least once every year. A guidance manual compiled by the Company is distributed to every newly appointed directors when they take office. The manual covers the relevant laws (including the previously mentioned Procedures for Handling of Material Information and Prevention of Insider Trading) and precautions to help directors with compliance.
As of 2022, education and guidance pursuant to the provisions set forth in Article 157-1 of the Securities and Exchange Act is provided to insiders, managerial officers in specific roles, and other employees prior to release of quarterly operating results. Contents include "quiet period" reminders, applicable scope and parties of insider trading bans, scope and method of disclosure of information with a material impact on stock prices, penalties, and other applicable laws and regulations to ensure the effective implementation of insider trading prevention.
In 2024, a total of 936 newly appointed directors and managerial officers and newly hired employees attended educational courses on prevention of insider trading. Total training hours amounted to 128 hours.

The Company Corporate Governance Best Practice Principles restricts stock trading by insiders in the 30 days prior to the release of annual financial statements, and in the 15 days prior to release of quarterly financial statements. When conducting monthly investigations regarding changes in shareholdings of insiders, we remind directors by email that trading of stocks during the close periods 30 days prior to the release of annual financial statements and 15 days prior to the release of quarterly financial statements is strictly prohibited. We also provide education on common mistakes and omissions in insider equity reporting and regulations related to short-swing trading bans. Shareholding transfers must be carried out and declared pursuant to applicable regulations and insider and short-swing trading are strictly prohibited. Insiders are also reminded that gains derived from short-term trading are subject to disgorgement and must be handed over to the Company. There were no incidents of insider or short-swing trading by Company insiders in 2024.

Review procedures for the scope, representative character, and contents of public statements or disclosure of information on the Company, markets, products, services, customers, or suppliers are determined pursuant to Procedures Governing the Handling of Insider Trading-Related Material Information and Prevention of Insider Trading. Alpha Networks not only relies on its spokesperson system but also discloses the latest Company news and material information in the fields of finance and sustainable development and other areas in its annual reports, meeting handbooks, sustainability reports, and in the Investor Relations section of corporate website in a transparent manner.

1.3 Intellectual Property and Information Security

Alpha Networks respects intellectual property and adequately protects confidential and sensitive information.

1.3.1 Intellectual Property Rights

Training and education

Periodic/ad hoc education training as well as internal announcements are used to educate employees on compliance with laws and regulations on IP rights and trade secrets, the use of licensed software, and practical legal affairs. For new employees, orientation training and the employment contract are used to provide guidance and stipulate the ownership of IP and trade secrets as well as the rules relating to their management and use. In 2024, courses on intellectual property laws were attended by 106 people and totaled 114.5 hours; a course on "Drafting Patents and Examples Explained" was also held for R&D and engineering personnel, and this was attended by 12 employees, with a total duration of 18 hours.

Respect for intellectual property and boosting competitiveness

In the early stages of R&D, prior to formally committing the company's resources, a patent search of innovative technologies will be conducted in order to minimize the risk of infringement. Besides avoiding committing duplicate resources, Alpha Networks can also obtain information on the competitors through the patent search, thereby adjusting the company's R&D direction. During the R&D process and output, Alpha Networks will apply for patent, trademark and copyright in order to protect innovative technology and R&D output, in turn elevating the company's competitiveness and the values of our intangible assets.

Management and protection of confidential information

To ensure the reasonable protection of the company's and clients' confidential information, non-disclosure agreements are signed with external customers and business partners while employees undergo regular education and training on laws governing the protection of trade secrets. Employees are required to adhere to the terms of non-disclosure agreements in their use of confidential information. Messages shall also be transmitted through the legal and proper use of e-mail or other methods to ensure. These are to ensure confidential information owned by the company and clients are used legally during business activities without violating any of the relevant laws. No instances of customer complaints, information leakage or theft, or loss of customer data were occurred in 2024.

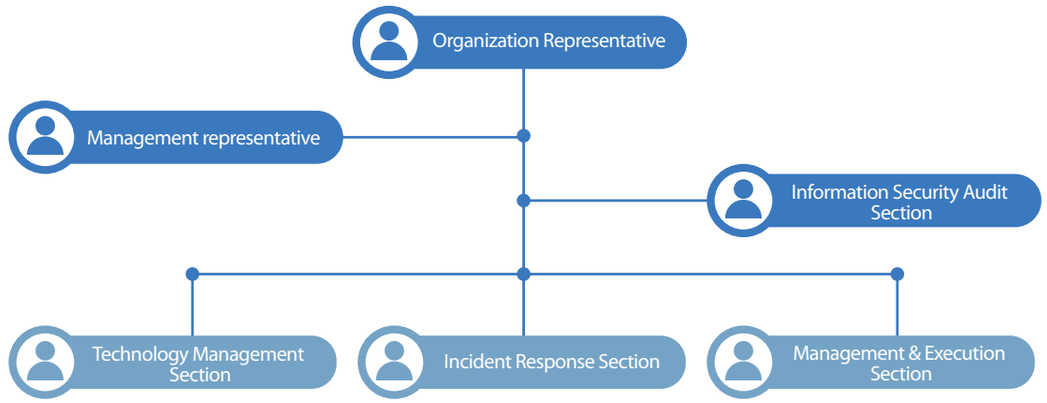
1.3.2 Information security management

Alpha Networks is committed to building a secure information environment for protecting the information security of the Company, our clients and partners. ISO/IEC27001 information security management system certification was obtained by the Company on December 14, 2019 (and updated to ISO 27001:2022 in December 2024). The relevant security policies and regulations were stipulated in accordance with the management system to maintain the validity of our certification. Information security is implemented and improved through the ongoing internal audit mechanism in order to effectively preserve the confidentiality, integrity and availability of information assets.

Information security management framework

Alpha Networks established an information security system in 2019 with the CIO serving as management representative. Internal and external information security risks are assessed and corresponding information protection measures are adopted in information security management & review meetings are convened annually. Information security functions are performed by the Information Security Management & Execution Section, Technology Management Section, Incident Response Section, and Information Security Audit Section. Dedicated task force leaders have been assigned to ensure effective implementation of information security management policies.

A Chief Information Security Officer and information security personnel were established in 2023 in accordance with FSC requirements. A report on the status of information security management operations must also be made to the Board of Directors at least once a year.



Information security policy

Internal and external issues are analyzed annually in accordance with the ISO/IEC27001 Information Security Management System. Special attention is paid to the requirements and expectations on information security. Information security management system parameters and objectives and risk improvement opportunities are defined and identified through risk assessments and business impact analysis.

Information security control procedures

Information security control procedures encompass protection systems such as external firewalls and third-party information security vulnerability scanning systems to prevent the risk of external intrusions. Internal control procedures include management and control processes for IT equipment usage, network communications, account permissions, removal of computer equipment, physical printing and remote connections to ensure rigorous management of information at each stage of use and to reduce risks in the fields of operational data leakage and information security.

Encrypted connections are used throughout internal and external information systems to ensure the security of information system connections and transmissions. Transmissions are logged for traceability and particular emphasis placed on the protection of personal information defined in the Personal Information Protection Act to avoid the inappropriate use or compromise of confidential company and customer data.

For physical security, environmental control systems provide real-time monitoring of the information system's environmental status and effectively maintain the stability of data center operations. An enterprise cloud platform was also set up to centrally protect the information security of our company's R&D, manufacturing and business systems. A redundancy mechanism is also in place for the cloud system to ensure the continuity of the information system. In addition, Business Continuity Planning (BCP) was carried out in accordance with ISO 22301 specifications to ensure the security of information systems and data. Regular backups and disaster recovery drills are conducted, and backup data stored off-site at a third-party data center to ensure that company data is not lost due to human action or natural disasters.

A software asset audit system has been introduced to ensure compliance on “intellectual property Rights”. “Software real-name system” management along with quarterly user audits are used to effectively enforce proper software licensing; to strengthen information security awareness, we not only hold information security classes for employees but also continue to use internal information security bulletins to distribute information on information security and software licensing. We hope these efforts will realize the goals of enterprise information security and continuity of operations.

Reinforcement of information security awareness

Alpha Networks educates its employees on information security policies and regulations and conveys relevant information and security incident reports on an ongoing basis via its internal website. Professional training courses for information security personnel and general courses on information security issues for all staff member are organized on an annual basis. The company also conducts social engineering drills on phishing e-mails to heighten the alertness and awareness of staff members to information security risks in their daily operations.

Online training courses on information security held in 2024 were attended by 243 employees and totaled 213 hours.

Strengthening of information security

To stay informed on information security, information security managers and employees have all joined TWCERT/CC to receive regular updates on information security developments and threat intelligence that improve their ability to mount effective information security defenses. Alpha Networks has noted that, in recent years, the industry has suffered from external attacks and that risks around operational data encryption and other information security aspects have increased. To strengthen our information security, a budget has been allocated to increase the active defense and monitoring of external attacks and enhance advanced protection of key operating systems. In addition, the 4 major operational systems have been scanned for vulnerabilities. An inventory of all information system management permissions was carried out to ensure decentralized management of access per system, improve password strength of privileged accounts, and force remote management connections to enable multi-factor authentication to strengthen security of our information systems and operational data.

1.4 Risk Management

Identification and management of corporate risks

Alpha Networks risk management operations focus on risk identification, risk mitigation, and risk transfer planning. Alpha Networks Risk Management Committee (RMC), as core unit in this field, utilize strategic analysis tools to assess the impact of various risks and achieve effective risk prevention and control. The goal lies in the effective management of risks above the tolerance level through the most cost-effective methods. RMC identifies and manages risks in the 4 major dimensions of strategy, finance, operations, and hazards.

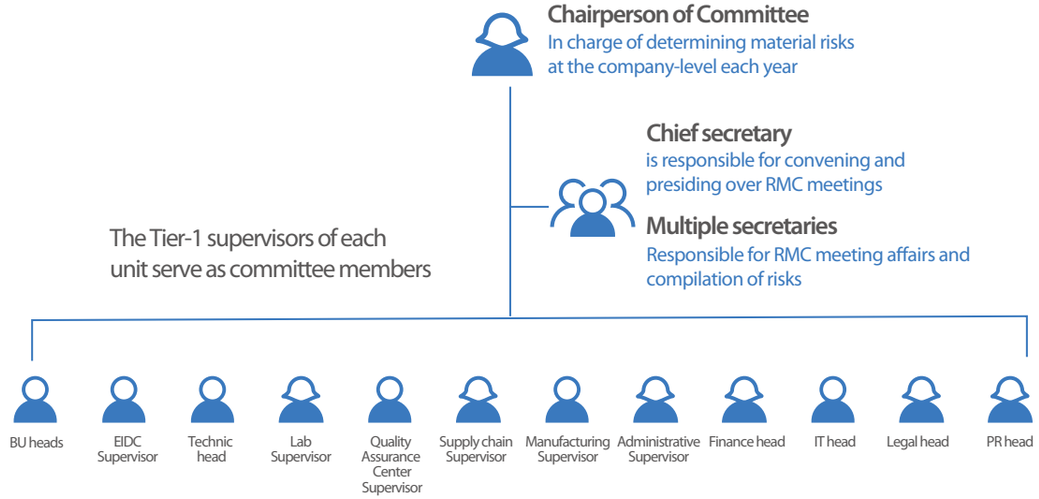
1.4.1 Risk Management Policy and Operations

The Board of Directors ratified the Risk Management Policies and Procedures in 2021 and established the Risk Management Committee (RMC) with the President serving as Chairperson and CSO serves as chief secretary. Committee members consists of head of all units RMC serves as committee members. Top level supervisors of each unit serve as committee members in charge of assessment of risk items affecting each unit by relying on a Risk Checklist, identification of high-risk items, and proposal of concrete risk improvement plans. A newly established administrator section is responsible for the monitoring of internal and external incidents, identification of potential risks, the overall planning of risk management meetings, and tracking of risk items and the achievement status of management plans. RMC is convened to formulate risk management strategies, set annual objectives and risk performance indicators, and request confirmation of material risks at the company level each year. RMC operations and risk management results are reported to Audit Committee of the Board of Directors each year.

A comprehensive structure for risk management operations has been established by Alpha Networks. Participants include the Board of Directors, Audit Committee, Risk Management Committee, the RMC Secretariat, and each business unit. The authority and responsibilities of each role is outlined in section 5. Responsibilities of the Risk Management Policy and Procedures.

* For more on risk management, please refer to Company Website > ESG > Risk Management.

Composition of Risk Management Committee



Risk management operating procedures and methods

Quarterly risk management meetings are generally convened by the chief secretary of RMC for periodic risk identification as well as tracking the progress of risk management goals and implementation of improvement plans. Extraordinary meetings may also be held in an emergency or when necessary.

Risk identification

1. Each RMC member uses tools such as the "Risk Checklist" to identify the risk relevant to their unit or specialization. They also propose response strategies or countermeasures for material risks.
2. Risk radar charts are created based on the 4 major risk categories (strategy, finance, operations, hazards) and compilation of internal and external risk factors. These are compiled and submitted to the RMC chairperson to determine which are considered the "top risks" at the company-level.
3. RMC members engage in reporting, discussions, decision-making, and tracking of implementation results during meetings. The RMC chairperson is then asked to determine company-level Top Risks for the year.
4. Risk information supplied by each unit is compiled by the RMC secretariat. A dynamic management mechanism is then used to forecast, monitor, track and respond to changes in the Company's internal and external environments in a timely manner.

Risk mitigation

- **Countermeasures**
  Affected units are requested to adopt the corresponding risk mitigation measures for top risk scenarios. They must also engage in business continuity management (BCM), implement business continuity planning (BCP), and conduct extensive drills for each risk scenario to ensure the business continuity of the Company.

- **Emergency response and reporting**
  Alpha Networks improves our ability to response to emergencies through BCP, risk scenarios and drills. This ensures that an effective and complete response can be mounted during an emergency. A Group-level reporting mechanism has also been established to facilitate rapid inter-unit coordination and integration of resources to resume operations as quickly as possible.

- **Risk transfer**
  "Zero" risk is not the goal of the risk management regime at Alpha Networks. Risk management cost is also taken into account to employ different management tools or methods for dealing with acceptable risks or risks that do not exceed our risk tolerance. For example, insurance can be used to make up for incident-related losses. However, following items are not tolerated.
  - Negatively impacts on the safety of employee lives.
  - Violation of laws and regulations.
  - Negatively impacts on the reputation of the Company.

- **Group joint defense**
  We are also integrated into the joint defense system formed by nearly 200 companies that are part of the Qisda Group. Periodic (quarterly) meetings, project discussions, sharing of practices, information exchange platforms, reporting channels and other methods are used to collate Group information, integrate Group resources, and reduce the risk to physical operations from environmental, safety, health and natural disasters in order to accomplish the goal risk management. In 2024, quarterly risk management meetings were convened by the Qisda Group. Meeting agenda included: heavy precipitation and flood prevention, loss prevention during power outages, property insurance compensation in practice (using power outage losses as an example), occupational injury and accident cases, typhoon and earthquake response, the Group's incident reporting mechanism and drills, and so on. The meetings helped to reduce the impact of disasters and business risks while enhancing the business' response ability and sustainability.

  The risk management meetings were also used for the sharing of ESG related information such as "ISO will incorporate climate change into multiple management system standards", "Declaration process for corporate ESG disclosures", and "Declaration process for Sustainability Reports."

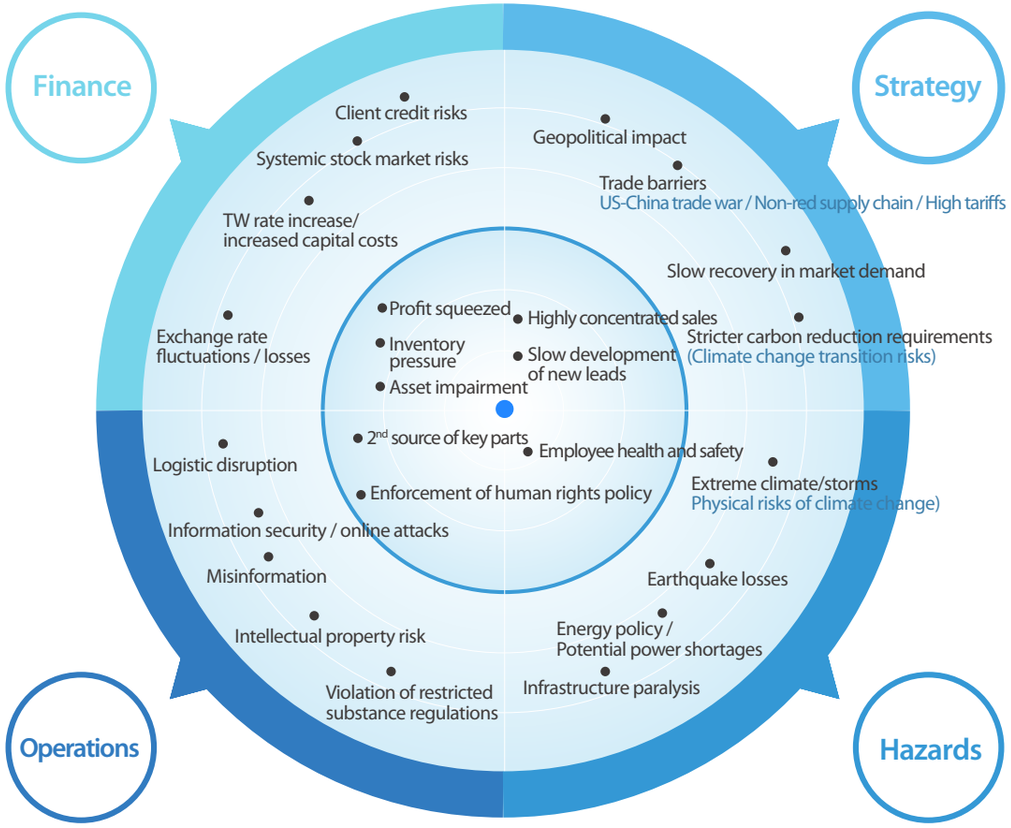
1.4.2 Risk Management Operations Process and Results

The Alpha Networks RMC was convened quarterly in 2024 to identify risk to the Company and devise countermeasures; no extraordinary meetings were held in response to major emergencies in 2024. Alpha Networks did activate our response mechanisms due to earthquake, storms, Red Sea Crisis (attack on merchant shipping by the Yemeni Houthi movement) and the US East Coast Port Strikes. to confirm that the earthquake and storms did not cause any serious damage, and that Red Sea Crisis and US East Coast Port Strikes did not materially impact on our raw material procurement and logistics. The follow-up tracking and coordination mechanisms were also activated to prevent any subsequent negative impacts from the above incidents.

Risk identification

The Risk Management Committee evaluates and identifies risks that may affect our KPIs. Based on risk examination forms and collected data on a quarterly basis, the committee draws a risk radar chart to provide relevant departments with risk response or prevention countermeasures.

▶ Risk radar chart



Outer circle represents **external risks** | Inner circle represents the Company's **internal risks**

▶ Major risks

According to the discussion and evaluation of Risk Management Committee in the 2024 Q4, our major risks on the 4 major aspects in the next year include:

▶ Top risks

The top risks for Alpha Networks in the coming year were discussed by RMC members then submitted to the chairperson, and determined to be as follow: "Profit squeezed", "Trade barriers", "Inventory pressure", "Transition risks of climate change", and "Enforcement of human rights policy."

Summary of risk identification

Top Risks	Related Factors	Description	Countermeasures
Profit squeezed	• Slow recovery in market demand • Highly concentrated sales • Slow development of new leads	The network communications market saw its first wave of replenishment demand in 2022 after the pandemic. There were even cases of overbooking in customer orders. As a result, demand shrunk in 2023 and 2024 instead. Despite our strong relationship with several key accounts, due highly concentrate sales, our revenue was affected. Market demand has not yet made a full recovery as yet. To prevent the pressure on revenue and profit squeeze, we will not only continue to engage with existing clients to win new orders but are also actively discussing partnership opportunities with new customers to expand our source of revenues. At the same time, we are actively developing new markets and moving into new fields to further expand our sources of revenue and open up the blue sea of long-term development for the Company.	• New product development - Innovative R&D to boost product functionality/quality/ specifications and stimulate demand for the original product line. • New customers - Actively develop new customers and diversify revenue streams. • New market - The subsidiary Indialpha Technet Private Ltd. was established in Mumbai, India, and the India business division was set up to develop the Indian market. • New fields – break into emerging fields such as LEO satellite, or into few applications such as AI. • Merges & Acquisitions - Jointly invested in Interactive Digital Technologies (IDTech), the leading domestic developer and manufacturer of digital microwave systems to break into the market for microwave communication solutions. • Aggressive cost down initiatives.
Trade barriers	• Geopolitical change • US-China trade war • Non-red supply chain	The topic of US-China disengagement has continued to intensify since Trump launched the US-China trade war in his first term. In response to the push from US-aligned customers for a non-red supply chain, Alpha Networks not only invested in the construction of our Vietnam Factory but also required the supply chain management unit to develop a complete plan for secondary sourcing that do not include Chinese suppliers or where production is not based in China. When Trump was re-elected as the US President in 2024, he immediately announced his plan to impose high tariffs on specific countries. Trump's Protectionist policies and anti-globalization stance is likely to trigger an international chain reaction and lead to trade barriers.	• Products intended for export to the US have now been transferred to the Vietnam plant with India as backup. • Actively monitor the direction of US trade policy. • Study the new global landscape to avoid potential trade barriers. • Launch BABA (Build America, Buy America) • Target of 85% non-China second sourcing set for supply chain management in 2025.
Inventory pressure	• Lack of 2nd source for key components • Logistic disruption	Market demand has not yet fully recovered so inventory pressure from excessing procurement must avoided. We must continue to satisfy customer requirements on safety stock levels even as we manage the overall level of inventory, especially for key materials without a second source. We must also watch out of logistic disruptions due to geopolitics and civil unrest.	• Reduce inventory by closely tracking order estimates/incoming materials to prevent excess raw materials. • Hold monthly inventory meetings to keep track of inventory levels. The introduction of parts Vendor-Managed Inventory (VMI) for parts is also planned. • Lack of second source for key components. • Logistic management.
Transition risks of climate change	• Physical risks of climate change	Increasingly strict laws on carbon emissions and climate change are now being passed by each country including CBAM (EU), CCA (USA), the Climate Change Response Act (Taiwan) and its 3 subsidiary regulations. Stakeholders (e.g. customers) have also issued their own requirements on energy-efficiency and carbon reduction.	Physical and transition risks arising from climate-related issues have been assessed in accordance with the TCFD framework as shown in 1.4.3 Risks and opportunities of climate change. Each physical risk was also linked to the BPC. For the linkage of transition risks to the ESG strategy, the formulation of the energy-efficiency and carbon reduction plan, and its ongoing implementation, please refer to Carbon Reduction Action.
Enforcement of human rights policy	• Employee health and safety	Stakeholders (e.g. customers) expressed their concern on human rights issues. In addition to human rights issues such as forced labor and anti-bullying, healthy and safe working conditions is now considered a human right as well and a sub-goal the UN 2030 Agenda for Sustainable Development. In 2024, there were no serious industrial safety accidents, or occupational injuries (Total Recordable Incident Rate (TRIR) was 0). Employees were however involved in travel and traffic accidents off-site.	• Identification procedure for human rights risks was carried out. Mitigation or remedial measures for human rights issues were formulated and will continue to be monitored. • Introduction of RBA at Hsinchu Factory (already completed at Changshu Factory and Vietnam Factory). • We continued to strengthen occupational safety and health as well as employee health management. Related operations and environments were also enhanced. We continued to issue reminders and guidance using cases involving employees that happened outside of the factory as examples.

Risk mitigation

I. Reduce operational impact

The economy showed signs of recovery in 2024 but market demand remained weak. The Company made operational adjustments and employed a variety of techniques to boost our revenues including the development of new products (e.g. WiFi-7, DOCSIS 4.0), expansion into new markets (e.g. India), and entry into new fields. The Company's 2024 revenue situation is described in 1.5 Operating Performance and the Company's Financial Statements).

II. Avoid physical losses

1. **Adoption of sound labor safety & health measures to safeguard the personal safety of employees**
   There were no production line stoppages due to serious industrial safety accidents in 2024. There were also no work-related accidents or injuries (TRIR was 0). There also no employee strikes or stoppages in 2024 (no. of stoppages and idle days were both 0).

   • New hires receive safety-related training during onboarding. In 2024, orientation training for new hires was conducted for 2,613 trainees; current employees receive general safety and on the-job (OTJ) training every year. In 2024, OTJ training was conducted for 300 trainees.

   • Internal fire drills, response drills, and organization of internal firefighting teams are held every 6 months. In 2024, we completed fire and evacuation drills for 934 trainees, defense team training for 65 people, as well as hazardous chemical operating training and spill drills for 5 trainees.

   • OTJ training on ionizing radiation is scheduled annually. Qualified testing and certification providers are commissioned to conduct on-site environmental monitoring every 6 months.

   • The Company has made an ongoing commitment to providing its employees with a safe & healthy work environment. Automatic inspections are carried out as prescribed by law (daily prior to operations, weekly, quarterly, annually).

   * Please refer to 3.5.2 Safety and Hygiene Training and 3.5.3 Occupational Incident.

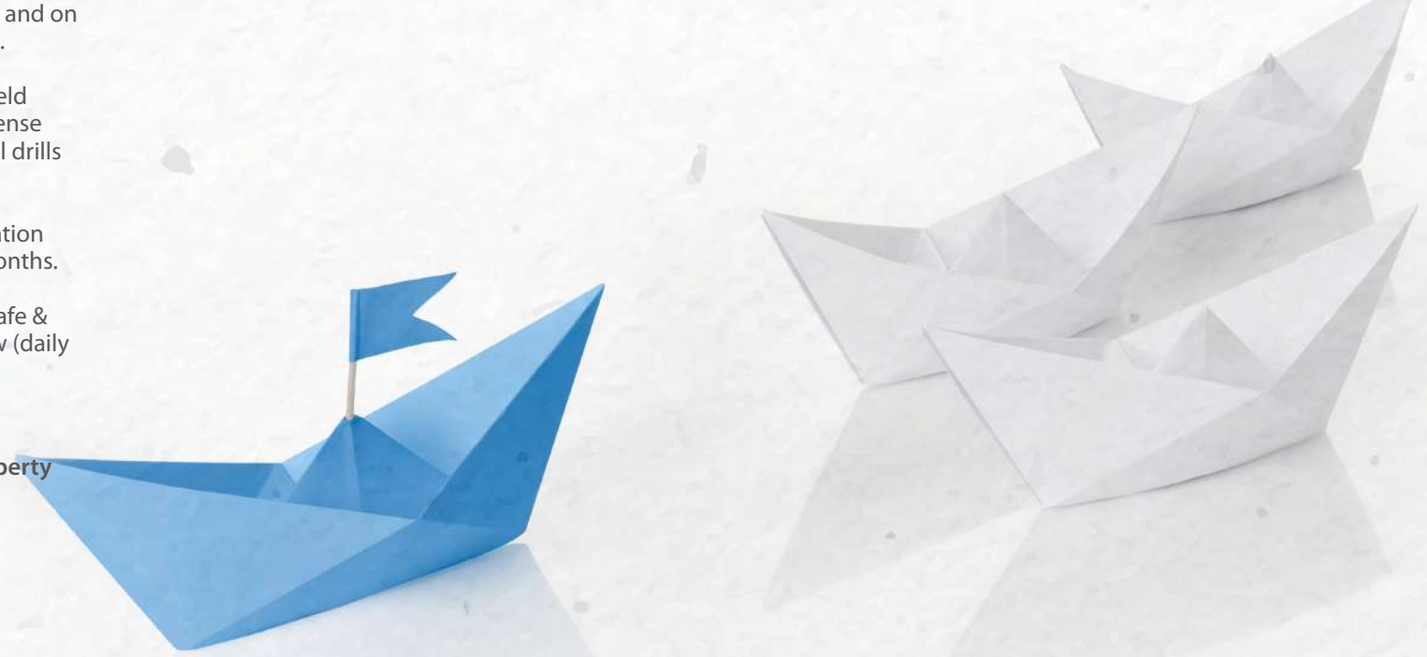
2. **The enforcement of BCP and risk prevention meant there were no incidences of property loss in 2024.**

   * Business Continuity Plan (BCP) drills and its outcomes, please refer to 1.4.4 Business Continuity Management.

III. Corresponding climate risks

Physical and transition risks arising from climate-related issues have been assessed in accordance with the TCFD framework. The corresponding risks are linked to the ESG strategy so that the relevant approaches and promotion plans can be formulated.

* Please refer to 1.4.3 Risks and Opportunities of Climate Change.



1.4.3 Risks and Opportunities of Climate Change

Global climate anomalies caused by climate change have become a source of concern for the sustainability of corporate business and production activities. The safety of every person's life and property is also under threat as well. Businesses and individuals should all confront this issue and work together to improve our ability to adapt to the impacts of climate change. The RMC is convened periodically (quarterly) to identify all the risks that may impact on the sustainable development of the Company including climate change issues. The RMC jointly reviews and identifies material climate risks and opportunities that may impact on our operations based on the TCFD framework (Transition risks: Policy/legislation, technology, market, business reputation, and physical risks). The RMC also proposes recommendations for climate change response based on corporate sustainable development issues. Please refer to the table below for a description of climate change risks and opportunities.

Identification of climate change risks

The climate risks and their potential final impacts faced by Alpha Networks were identified by in accordance with the TCFD framework as follow:

Transition Risk

Policy and legislation

In response to issues such as climate change and carbon disclosure, the government has passed laws and sub-laws on climate change response (Taiwan), introduced the CBAM (Europe), and implemented CCA (US) that may lead carbon fees or carbon tax expenses. Policies requiring the disclosure of carbon emissions may also lead to higher inventory, certification and other fees.

If the government imposes carbon fees/taxes or requires purchase of carbon credits (neutrality), operating expenses are bound to increase

- If full carbon emission inventories and certifications must be conducted for factories to satisfy carbon disclosure regulations then this may lead to an increase in expenses.

Technology

Low-carbon, high-performance products or technologies developed in response to climate change are now approaching maturity. Related improvements or innovations will affect business competitiveness.

- The development of low-carbon products and processes in response to carbon emission issues may lead to higher R&D costs.
- Improving energy efficiency may require equipment upgrades or replacement of legacy equipment leading to higher capital expenditure.

Market

Market change may shift once low-carbon, high-performance products become mainstream, leading to a change in supply-and-demand structure as well as product and service mechanisms.

- If a shift in market preferences means non-conformity with the market or customers' expectations on low-carbon and energy-efficiency, or products lag behind our competitors in energy-efficiency or carbon-reduction technology, customer interest may decline with the attendant impact on orders and revenue.
- Mandatory selection of suppliers with lower carbon emissions but higher costs in line with carbon reduction trends in the supply chain or lowered carbon footprints. Suppliers may also wish to increase prices in response to carbon reduction expenses. All of these may higher raw material costs.
- The provision of supplier platforms and mentoring of achieve the target of a 30% carbon reduction in the supply chain by 2030 may lead to increased operating expenses.
- Taipower changing its power generation methods in support of national carbon reduction goals may lead to higher electricity tariffs (rates) and increase costs.
- Switching to renewable energy in response to the carbon reduction requirements of customers and to achieve the RE 60 by 2030/RE 100 by 2050 targets may require the installation of solar power equipment (capital expenditure or revenue sharing fees) or the purchase of renewable energy certificates (cost increased).

Reputation

Poor carbon reduction performance may impact on the Alpha Networks' reputation and stakeholders' impression of the Company.

- If Company reputation is affected by poor carbon reduction performance, higher recruitment costs or compensation may be necessary to increase sign-on rates or retention.
- If Company reputation is affected by poor carbon reduction performance, this may affect our financial rating leading to higher borrowing or financing costs.
- If Company reputation is affected by poor carbon reduction performance, PR expenses may need to be increased to protect the Company's reputation.

Physical Risk

Extreme climate events such as heavy rains, typhoons, and flooding may damage property directly or disrupt the supply chain with short, medium and long-term impacts.

- Plant work stoppages - Heavy rainfall and typhoons can result in flooding, power outages, or production line shutdowns on the site, these will then negatively impact on orders and revenue.
- Financial or personnel losses - Heavy rainfall, typhoons, and earthquakes can lead to losses from damage to plant equipment or injured personnel.
- Restoration/rehabilitation expenses - Resulting from aforementioned equipment damage or personnel injuries.

Risk assessment and monetization

Our TCFD assessments mostly rely on the RCP4.5 scenario (in this so-called intermediate scenario emissions decline to roughly half of the current level by 2080, which is likely to result in a global temperature rise of no more than 2 °C by 2100). Hypotheses for each identified risk are reviewed, parameters are set, and variables are assessed in line with risk descriptions with the ultimate goal of calculating the potential financial impact on the Company caused by climate risks and determining the Company's risk endurance level.

Climate-related risks		Issues and scenarios	Estimation method
Transition Risks	Policies, laws and regulations	Carbon tax / fee	▸ Carbon Emission Amount (in tons) X Carbon Fee/Tax per Ton
		Carbon Inventory / certification fee	▸ Cost of carbon emission inventory and certification projects.
	Technology	Low-carbon product /technology R&D	▸ Increased R&D expenses: Increase of RD personnel x individual salaries
		Energy-efficiency equipment	▸ Capital expenditure from projects relating to energy-efficiency equipment.
	Market	Drop orders	▸ Projected Revenue × Impact on Orders (%) (Customer Churn).
		Increased cost	▸ Projected Revenue x Share of Raw Materials in Revenue (%) × Increase in Raw Material Costs (%)
		Carbon reduction in the supply chain	▸ Establishment of supplier platform and supplier counseling, and consulting fees
		Electricity cost	▸ Electricity consumption (kWh), × Increase in Electricity rate (kWh)
		Renewable Energy	▸ The quantity and cost of Renewable Energy Certificates (RECs) required to meet the RE30 by 2030 targets have been determined. Please refer to Carbon Reduction Action. ▸ The solar power equipment installed at Hsinchu Factory and Vietnam Factory were deployed by the supplier and for a share of the generated power-generation revenue.
	Reputation	Personnel expenses	▸ Increase in recruitment expenses (e.g. 104, recruiting event, and head hunter fees); or compensation expense x salary adjustment (%)
		Financing expenses	▸ Increase ▸ Amount of loan x higher interest rates (%)
		PR expenses	▸ Increase in PR expenses, or PR expenses x increase (9%)
Physical Risks	Short and medium-term Long-term	Factory stoppage	▸ Average revenue × No. of stopped days; or increase in insurance costs.
		Property damage or personnel injury	▸ Losses from equipment damage or personnel injury; or higher insurance costs
		Restoration/Rehabilitation Expenses	▸ Cost of equipment repair or rehabilitation of injured personnel; or increase in insurance costs.

Risk assessment list for climate change

The Alpha Networks RMC reviewed each assumption in accordance with the TCFD structure. The parameters, variables, the climate risks being calculated, and related information are provided below. Evaluations are periodically followed up on and reports adjusted accordingly.

Climate-related risks		Risk scenario	Description	Financial Impact	Amount or Percentage (%)	Response method
Transition Risks	**Policies, laws and regulations**	Imposition of carbon tax/fee	Increase in expenses due to imposition of GHG fees or purchase of carbon allowance.	Increased expenses	NT$800K	• Carbon emission hot spot analysis was employed to analyze the source / specific gravity of carbon emission sources. Reduction measures were evaluated in accordance with the manufacturing, air conditioning, and compressor equipment. • Periodically examine the compatibility of climate change-related laws. Laws with higher risks are included in the assessment of the RMC and ESG Committee.
		Carbon inventory/ certification	Increase in expenses due to carbon emission inventories and certifications.	Increased expenses	NT$5,000K	• The schedule for each location was organized by the FSC "Sustainability Road Map." ISO 14604-1 carbon inventories were carried out and certified.
	Technology	Low-carbon product/ technology R&D	Increase in R&D Expenses due to development of low-carbon products and processes in response to carbon emission issues.	Increased expenses	No incremental R&D Expenses se for now	• Development of pioneering technologies to continue improving the product's energy-efficiency design as well as strengthen the Company's competitiveness and product value. • Continue to improve the understanding and techniques of RD personnel through education and upgrade the product's energy efficiency.
		Replacement/Upgrade of energy-intensive equipment	Improving energy efficiency may require equipment upgrades or replacement of legacy equipment, leading to higher capital expenditure.	Capital expenditure	NT$12,000K	• Continue to invest in energy-efficiency measures and equipment, set equipment service lives, replace old and worn equipment with high-efficiency equipment, and improve energy efficiency. • Purchase equipment with energy-efficiency labels. • Apply for subsidies on energy-saving equipment.
	Market	Drop orders/revenue impact	Due to changes in market preferences, failure to meet market or customer demands for low carbon and energy efficiency, or poor energy-saving performance or product technology lagging behind competitors, customer willingness to place orders may be affected, leading to a decline in revenue.	Revenue decline	Churn1.0%	• Track product development trends and continue to improve the energy-efficiency of product designs. Please refer 4.1.7 Energy Efficiency Design. • Product carbon footprint calculations to reduce product carbon emissions and respond to customer requirements. • Continue to implement carbon reduction actions as described in Carbon Reduction Action and provide full disclosure of related carbon reduction outcomes. • Continue to engage in in-depth communication and exchange of opinions with customers, and provide disclose of related carbon reduction outcomes.
		Increased costs due to use of low-carbon raw materials	Increase in costs due to using raw materials with lower carbon emissions but higher costs in response to the target of a 30% reduction of carbon emissions from supply chain, or suppliers raising their prices due to carbon reduction expenses.	Increased costs	Raw material costs increased by 2.8%	• Strengthen 2nd source in the supply chain and use cost reduction to offset some of the impact from higher raw material costs, or increase the ability to pass on costs. • Continue to improve the product design ability of RD personnel and design for reduced material consumption through CIP.

Climate-related risks		Risk scenario	Description	Financial Impact	Amount or Percentage (%)	Response method
Transition Risks	Market	Carbon reduction in the supply chain	Increase in operating expenses due to provision of supplier platform and mentoring to achieve the target of a 30% carbon reduction in the supply chain by 2030.	Increased expenses	NT$4,500K	• Encourage suppliers to provide carbon emission information over the platform and continue organizing carbon reduction related mentoring for suppliers to strengthen supply chain engagement and boost carbon reductions in the supply chain.
		Higher electricity rates	Taipower changing its power generation methods in support of national carbon reduction goals may lead to higher electricity tariffs (rates) and increase operating costs.	Increased costs	NT$4,500K	• Employe carbon emission hot spot analysis and plan reduction measures in accordance with the manufacturing, air conditioning, and compressor equipment. • Continue to reduce the pressure from higher electricity rates through energy-efficiency initiatives, and use cost reduction to offset the impact or increase the ability to transfer costs.
		Renewable energy certificates	Increase in expenses due to purchase of the Renewable Energy Certificates (RECs) in response to carbon reduction target, RE 100 and customer requirement to transition to renewable energy.	Increased expenses	NT$6,000K	• The quantity and cost of RECs required to meet the RE30 by 2030 targets have been determined. • Continue to promote energy-efficiency measures to reduce electricity consumption. • Collective procurement to obtain RECs at better prices.
		Solar power	Deployment of solar power equipment (current model is outsourced deployment + revenue sharing).	Increased expenses	NT$5,300K	• Deployment of solar power equipment at the Hsinchu Factory and Vietnam Factory planned for completion in 2025. Deployment will be handled by the supplier and a revenue-sharing model based on amount of power generated used to reduce capital expenditure.
	Reputation	Recruitment or employment expenses	If reputation is affected by poor carbon reduction performance, higher recruitment costs or compensation may be necessary to attract new employees.	Increased expenses	NT$1,000K	• Enforce carbon reduction initiatives/performance and provide transparent disclosure. • Enforce human rights policy and provide transparent disclosure. Continue the effort in happy workplace. • Highlight employee satisfaction, strengthen employee communication, and maintain employee relations.
		PR and marketing expenses	If reputation is affected by poor carbon reduction performance, PR expenses may need to be increased.	Increased expenses	NT$1,000K	• Strengthen stakeholder interactions and communication. • Monitor information related to the Company so that the public is not misled by misinformation, and provide clarifications in a timely manner.
		Loan costs and financing expense	If financial rating is affected by poor carbon reduction performance, this may increase loan costs and financing expense	Increased expenses	No impact at present	• Enforce carbon reduction initiatives/performance and provide transparent disclosure to prevent the downgrading of financial ratings. • Strengthen stakeholder interactions and communication.
Physical Risks	Market	Stoppage/business disruption	Heavy rains or typhoon may cause flooding or a power outage at the factory forcing the production line to shut down.	Revenue decline	Insurance costs increased byNT$100K	• Enforce routine inspections, maintenance, and drills to strengthen BCM. • Mitigate related physical risks through the Group's joint defense mechanism. • Diversify or transfer risks through insurance.
		Property damage and personnel injury	Factors such as heavy rains, typhoon, or earthquake may result in damage to plant equipment or injured personnel.	Losses		
		Restoration/ Rehabilitation Expenses	Restoration/compensation expenses arising from aforementioned equipment damage or personnel injuries.	Losses		

Climate change opportunity assessment list

Opportunities	Description	Related practices
Energy Efficiency	Improving the efficiency of production processes, equipment, and transportation will help reduce operating costs while also contributing to energy-efficiency and carbon reduction.	• Introduction of ISO 50001 energy management system to monitor all energy-efficiency performance and reduce operating costs. • Development of energy-saving processes, energy consumption improvements in plants, and reduced manufacturing costs • Use CIP to optimize the production process, reduce the carbon footprint, while also reducing production manpower (reduced operating costs)
Energy Source	Adopt low-carbon alternative energy sources such as wind, solar, and hydro to avoid dependence on a single energy source and reduce carbon fee/tax expenses.	• Use renewable energy or purchase RECs. • Installation of rooftop solar power equipment.
Product	Support transformation through technological innovation, develop innovative low-carbon products, and reduce product carbon emissions during the production phase to prepare for potential changes in future customer and supplier preferences as well as improve our product image and competitiveness.	• Highlight the international market trend of energy-saving. • Improve the energy-efficiency of product design through R&D to boost the Company's competitiveness and product's added value. The following items have already been included in the R&D KPIs for the year: a. Introduction of low-carbon plastics (KPI is quantity ÷ no. new projects created during the year) instead of PC for plastic structural parts in products. The use of recyclable and reusable consumables and packing materials is also encouraged. b. Number of models with optimized fan RPM design ÷ Total number of models designed during the year. c. Reduction (%) in the power consumption of switch and new antenna products. • Introduction of product carbon footprint calculation mechanism and methodology. From 2025 onwards, Alpha Networks will calculate the carbon footprint of all products with a mass production run longer than 3 months. • Expand inventory and deploy carbon inventory categories by adding categories 3~5 related to transportation, raw material use, waste and other carbon emissions inventory items.
Market	Evaluate new markets or new assets to diversify our business; seek partnerships with governments, enterprises, and groups as well as opportunities to enter new markets.	• Assess investments in the renewable energy market. • Assess green financing and green bonds.
Resilience	♦ Improve ability to respond to transition risks and physical risks. ♦ Strengthen supply chain resilience.	• Strengthen sustainable development strategy and enforce carbon reduction actions to reduce transition risks; enforce the practice of BCM to reduce and respond to the impacts of physical risks. • Expand cooperation with supply chain partners and encourage suppliers to use renewable energy. • Development of a low-carbon supply chain and reinforcement of the reliability and operating capacity of the supply chain under any circumstances.

Transition plan

Climate change transition risks are already linked to the Company's ESG strategies. Alpha Networks is committed to the 2030/40/50 Sustainability Vision which aims to achieve RE 60 and a carbon reduction by 30% in the supply chain by 2030, achieve RE100 by 2040, and realize Net Zero by 2050. 5 carbon reduction strategies and actions (please refer to Carbon Reduction Action) have been devised to realize the '30/40/50' vision:

♦ **Green energy**

To achieve the targets of RE 60 by 20230 and RE 100 by 2040, we will start with "Reduce" by investing in energy-saving measures and reducing our electricity consumption. We will also deploy solar power and purchase renewable energy certificates every year. The amount of traditional electricity we use every year will be progressively reduced so that the percentage of renewable energy (RE%) exceeds 60% (RE60) by 2030, and hits 100% (RE100) by 2040.

♦ **Green supply chain**

To achieve the target of a 30% carbon reduction in the supply chain by 2030, Alpha Networks is leveraging our leadership role in supply chain management. To encourage suppliers to engage in carbon reduction, the "Supplier Energy Conservation & Carbon Reduction Conference" was held at our Hsinchu Headquarter on November 17, 2023 to underscore our pledge to partner with our suppliers in our sustainability initiatives. We also invited experts from the Industrial Development Bureau and Institute for Information Industry to share practical experiences and global trends in the field of carbon reduction. The ultimate goal is to partner with our suppliers in the creation of a sustainable, low-carbon supply chain.

Through the continued sharing of carbon reduction practices with suppliers as well as the provision of mentoring and carbon reduction causes, we are continuing to promote carbon inventories among suppliers. A supplier sustainability information platform (cloud edition) was also set up so they can register and upload their carbon emissions to the platform. Alpha Networks is therefore taking concrete actions to encourage and help suppliers on carbon reduction, and also working together to formulate future carbon reduction pathways and actions.

♦ **Green initiatives**

We planed to join the SBTi Initiative in 2024 and are committed to reaching the Net Zero target by 2050. We have therefore formulated concrete, science-based carbon reduction targets and carbon reduction pathways in accordance with the SBTi guidelines. Carbon reduction initiatives have also been launched. Alpha Networks submitted our commitment letter to SBTi in August 2024. Follow-up development was also carried out in accordance with SBTi procedures including carbon inventory using the GHG protocol and preparation of the carbon reduction plan. The plan will be submitted in 2025 and SBTi review completed by the end of that year.

♦ **Product carbon footprint**

Alpha Networks calculated the product carbon footprint of two products in 2024. From 2025 onwards, Alpha Network will calculate the product carbon footprints of all products with a mass production run longer than 3 months. We are also planning to introduce a carbon footprint management platform that will enable the rapid calculation of carbon footprints for different products. This will not only improve customer satisfaction, but also facilitate the development of low-carbon products and improve product competitiveness.

At the same time, we are rethinking product development by examining carbon emissions and reduction opportunities throughout the product life cycle using the Life Cycle Assessment (LCA) method. Green design is also being emphasized through non-use of hazardous substances, incorporation of design for disassembly guidelines, and energy-efficient design. Environmental impact and carbon reductions are considered from the very beginning of the design process. For more information, please see 4.1 Green Products.

♦ **Organizational carbon inventory**

For organizational carbon inventories, Alpha Networks will adhere to the Sustainable Development Roadmap issued by the FSC to progressively carry out organizational carbon inventories and third-party verification (ISO 14064-1) at all domestic and overseas locations (including all production locations, business locations, RMA & R&D centers). Obtaining a full picture of carbon emission sources and hot spots at all locations will be fundamental to achieving the Net Zero by 2050 targets because it allows the Company to quantitatively assess and plan our carbon reduction plan.

In addition to the proactive implementation of carbon reduction actions to avoid transition risks due to climate change, trends driven by climate change issues will guide the strengthening of each internal unit's core functions, stimulate the transformation of the Company's business constitution and create new opportunities for Company growth.

♦ **Customer relationship management**

As a provider of OEM services for network communications equipment, the building of strong customer relationships or partnerships is critical to Alpha Networks' orders and revenue. We are therefore continuing to strengthen our customer communications and exchange of opinions. In addition to disclosing our carbon reduction projects and related outcomes to customers, we also communicate to establish a consensus on industry trends and growth direction. We not only engage in joint development of energy-efficient, high-performance products but also seek to collaborate on the development of new economic models.

♦ **Product research and development**

Forward-looking technologies form the core of Alpha Networks while R&D capabilities define our core competitiveness. Our R&D strategy has always been focused on the development of energy-efficient and high-performance products. We have also set up an aggressive patent strategy to establish our niche. Please refer to 2.1.3 Development and Innovation.

♦ **Supply chain management**

Alpha Networks actively leads by example in the supply chain. We also encourage and assist suppliers with carbon reduction. As a provider of OEM services for network communication products, we select the best raw materials in terms of quality, cost, delivery time, and technology for the customer as they remain crucial to the industry value chain and the Company's profits. The Company will continue to optimize our supplier management, establish the 2nd sources (especially critical parts and components), and strengthen supply chain resilience. We will work together to build a more robust, mutually beneficial, and sustainable industry chain.

♦ **Stakeholder interactions**

In addition customers and suppliers, we also strengthened our business operations as well as stakeholder communication and interactions:

- Employee relations-We enforce the human rights policy and continued to invest in happy workplace initiatives to improve employee satisfaction. Employee relations must be fostered and employee relations handled with care to build up a pool of talent for the Company's long-term development.

- Investment relations-Investor communication channels and interactions with financial ATM. The who is red and blue in color. The Company's fund-raising activities have stabilized after sustainable investments in green financing and other issues to protect the Company's, long-term funding needs.

- Public relations-PR is responsible for ensuring unobstructed communication with the Japanese public and for maintaining the corporate and personal images of Alpha Networks, as well as void the interference from mass transit and farmers.

1.4.4 Business Continuity Management

Business continuity policy

Alpha Networks is committed to the provision of high-quality network communication products. We are also continuing to develop and intensify partnerships with our customers conducive to mutual growth. Our ultimate objective in the field of business continuity management lies in the provision of diversified, top-quality, and uninterrupted manufacturing services for networking devices.

The following procedures are strictly observed and executed in case of operating environment changes to ensure effective implementation of the business continuity policy:

- Carrying out business impact analysis and risk assessment, formulation of business continuity strategy, and resumption of normal operations as quickly as possible
- Allocation and investment of necessary resources in the event of a disaster or serious impact and ongoing review of further improvements and corrective action
- Safeguarding the best interests of customers and other stakeholders

Description of operating processes

With a view to ensuring the continuity of operations, the Company conducts drills for disaster events (including power outages, natural disasters, infectious diseases, IT failure, supply chain disruptions, and major production line incidents, etc.) on an annual basis as required to mitigate the impact of such disasters on our operations. The results of all disaster drills conducted in 2024 met the set targets.

To practice business continuity management, develop different kinds of environmental impacts and draw up BCP. The goal is to guarantee the restoration of normal operation modes to a certain degree within the shortest time possible in case of natural or man-made disasters. In 2024, the Hsinchu, Changshu, and Vietnam factories prepared 8 BCPs and completed the exercise.

Status of drills in 2024

Hsinchu Factory

- Abnormal power supply from the server room damages equipment and can cause the internal circuit fail from stress.
- Heavy tremors in Taiwan that disrupt the Memory supply chain.
- Personnel in the night shift of the assembly & parking section caught tuberculosis. Some employees from the night shift for tuberculosis (TB) were unable to return to work as they had been infected with tuberculosis (TB).
- Earthquakes cause the 3F product ion line equipment to randomly fail.

Changshu Factory

- Fire damaged some of the production lines.

Vietnam Factory

- Fire at Vietnam Factory interrupts production.
- Fire at Vietnam Factory experienced a chemical spill.
- Fire during night shift at Vietnam Factory interrupts production.

Fire drill

Chemical Spill

Evacuation drill

1.5 Operating Performance

Last year was filled with many unfavorable factors including war, global inflation, and slower than expected inventory adjustments on the customer side. Thanks to the combined efforts of every employee and the management team, Alpha Networks nevertheless reported consolidated revenue of NT$ 21.444 billion (entity income of NT$ 13.35 billion for Alpha Networks); consolidated gross margin was 18.3%, a decrease of 0.1% on 18.48% from last year. Operating income amounted to NT$110 million; net earnings after tax was NT$ 340 million. Profits attributable to the parent company amounted to NT$ 220 million and earnings per share was NT$ 0.40 per share.

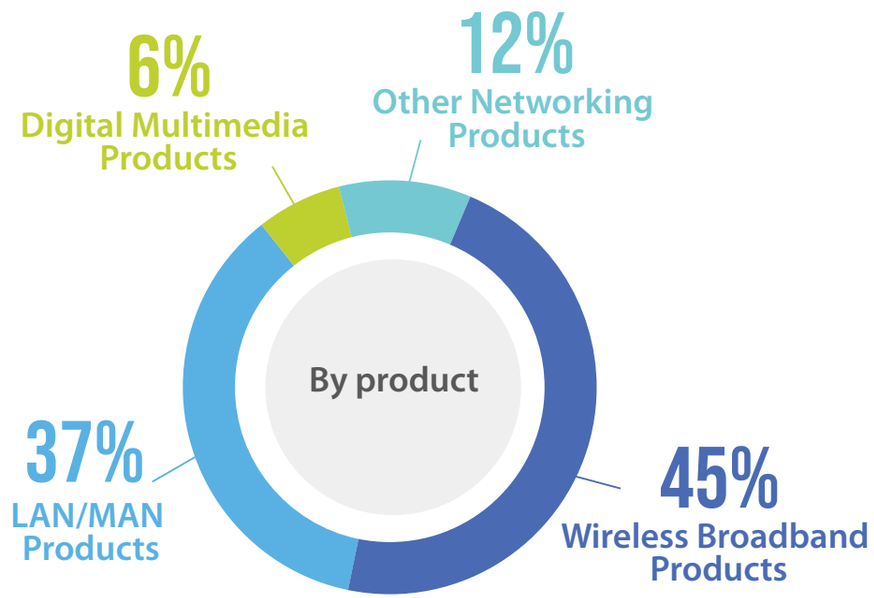
The consolidated operating performance, related financial information, profit analysis of Alpha Networks over the last 5 years as well as its 2024 revenue portfolio are presented below. For more information about Alpha Networks' operating performance and finances, please refer to our Annual Report. Related information also can be queried under in the website of "Market Observation Post System".

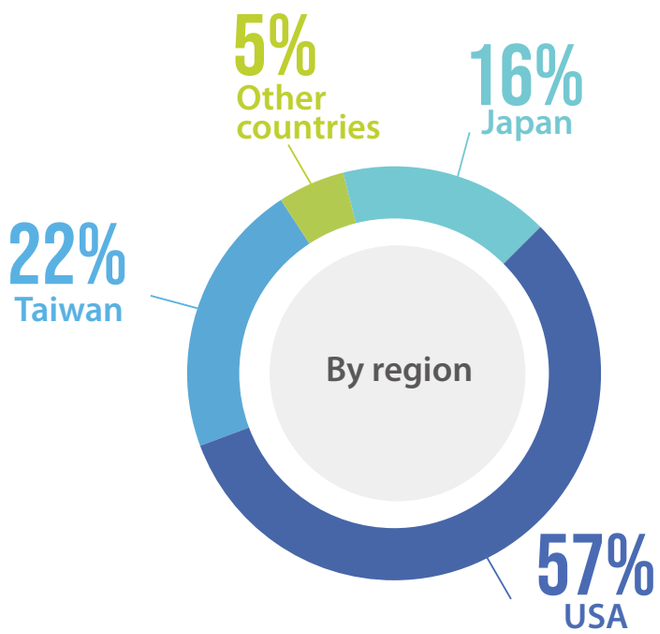
Income Statement

Unit: Thousand NTD

Operating performance	2020	2021	2022	2023	2024
Operating revenue	32,170,649	27,862,336	33,634,197	28,272,191	21,443,625
Operating costs	27,164,356	23,276,437	27,380,956	23,061,018	17,514,226
Gross profit	5,006,293	4,585,899	6,253,241	5,211,173	3,929,399
Operating expenses	4,108,686	3,876,226	4,538,709	4,381,903	3,821,812
Operating profit & (Loss)	897,607	709,673	1,714,532	829,270	107,587
Non-operating income and expenses	21,899	45,189	(180,521)	(21,873)	407,369
Income (loss) before tax	919,506	754,862	1,534,011	807,397	514,956
Income tax expenses	194,403	214,450	375,840	167,530	172,957
Income (loss) after tax	725,103	540,412	1,158,171	639,867	341,999

Share of revenue





Financial information

Unit: Thousand NTD

Related Financial Information	2020	2021	2022	2023	2024
Total assets	27,005,583	24,730,784	27,133,014	23,798,843	23,244,516
Ordinary share capital	5,417,185	5,417,185	5,417,185	5,417,185	5,417,185
Total equity	12,738,331	12,559,104	13,556,619	13,330,079	13,982,701
Cash dividend (Note 1)	238,692	108,344	379,203	915,504	547,136
Book value per share/ Dollar	17.91	17.73	19.15	18.48	18.30
Cash dividends per share/ Dollar (Note 1)	0.44	0.20	0.69	1.69	1.01
Average closing price per share/ Dollar	25.26	30.34	29.64	36.48	35.12

Note 1: The information of cash dividend and cash dividends per share is show the information of previous year.

Profitability analysis

Profitability	2020	2021	2022	2023	2024
Return on assets (%)	3	2	5	3	2
Return on equity (%)	5	4	9	5	3
Profit Before Tax to Capital Stock (%)	17	14	28	15	10
Net profit ratio (%)	2	2	3	2	2
Earnings per share (NTD)	1.03	0.80	1.69	1.01	0.40

Project grants

Technology development at Alpha Networks focuses on the development, manufacturing and support for network communications equipment. Alpha Networks is now actively engaged in the development of 5G mobile communications technologies and products. Alpha Networks is now leveraging its outstanding R&D and technology integration capability along with support for the government's "industrial innovation upgrade" and "Promotion of Innovative Communication Technology Applications" to secure related grants and tax deductions from the government.

Company	Item	Grant Type	Grant Basis
Alpha Networks	Investment credit	Tax credits obtained	Statute for Industrial Innovation - Industrial Development Administration, MOEA
Alpha Networks	**Industrial Upgrading and Innovation Platform Mentoring Program -** "Smart Manufacturing for New-Generation 5G Private Networks, Netcom Factory's Global Supply Chain Resilience Strengthening Plan"	Subsidy obtained NT$ 9,675,000	Statute for Industrial Innovation - Industrial Development Administration, MOEA
Alpha Networks	**Low-Carbonization and Smart Transformation of the Manufacturing Industry through Mentorship Subsidies -** "Alpha Networks Program to Drive Low-Carbon Transformation of the Supply Chain Through Smart Energy Upgrades"	Subsidy obtained NT$ 12,967,000	Guidelines for the Promotion of Industrial and SME Transformation by the Ministry of Economic Affairs - Industrial Development Administration, Ministry of Economic Affairs
Alpha Networks	**Industrial Upgrading and Innovation Platform Mentoring Program -** "Project to Develop a Main Control System with Smart Sensors for Locally Produced Electric Bus"	Subsidy obtained NTD$ 9,949,000	Statute for Industrial Innovation - Industrial Development Administration, MOEA
Alpha Networks	***Industrial Upgrading and Innovation Platform Mentoring Program -*** "Smart Manufacturing for New-Generation 5G Private Networks, Netcom Factory's Global Supply Chain Resilience Strengthening Plan"	Subsidy obtained NT$ 9,675,000	Statute for Industrial Innovation - Industrial Development Administration, MOEA

Sustainable Value Chain

Visionary Products and Responsible Procurement and Production as a Driving Force for Sustainable Industry Chain Development.

Annual Accomplishments

2.1 Sustainable Products ***2.2*** Resilient Supply Chain ***2.3*** Customer Satisfaction

Annual Accomplishments

Sustainable Products

- In 2024, Alpha Networks submitted **28** cases of patent. We plan on filing a total of **86** patent applications in different countries.
- We participated in Mobile World Congress (MWC) 2024, COMPUTEX Taipei, and 2024 OCP Global Summit.
- **No** violations of regulations governing product and service information and labeling or marketing communication laws (incl. advertising, promotion, and sponsorship) occurred in 2024.

Customer Satisfaction

- The overall customer satisfaction score reached **87** in 2024 (exceeding the target score of 85). Out of 5 material topic areas, satisfaction with "Delivery Performance" and "Green Product Implementation" exceeded **90**.

Supply Chain Management

- A total of 569 suppliers were evaluated in 2024. The average percentage of excellent (A)/good (B) suppliers and poor (E) suppliers was **98.42%** and 0.35%, respectively.
- **None** of the 204 suppliers evaluated in 2024 were listed as non-recommended suppliers (scored lower than 70) and **no** suppliers were suspended from new material transactions.
- In 2024, corporate social responsibility audits were conducted for 68 suppliers (45 suppliers audited in the context of annual audits and 23 new suppliers audited prior to adoption).
- In 2024, 50 CMRT surveys were sent to suppliers, all of which were completed and returned (**100%** completion rate).

2.1 Sustainable Products

Complete and visionary network communication product line

The mission of Alpha Networks is to "be a globally recognized, professional networking supplier of design, manufacturing and services (DMS). With forward-looking technology as the core, we seek the best solutions for our customers to create the greatest overall value". We provide customers with the most comprehensive product line in the industry to meet their needs and create maximum value.

2.1.1 Current Product Lineup

Alpha Networks currently has 3 product lines as below:

LAN/MAN
High-Speed Reliability Efficiency & Flexibility

A. Data Center Network
- 400G Data Center Switch
- 100G Data Center Switch
- 25G Data Center Switch
- 10G Data Center Switch

B. Enterprise Campus Network
- L3 Multi-Gigabit Ethernet Switch
- L3 Managed Switch
- L3 Multi-Gigabit Ethernet Switch

C. Small Business Network
- SMB L2 Managed Switch

D. Carrier Access Network
- Broadband Aggregation Switch
- XGSPON OLT
- Mobile Backhaul Switch
- Fronthaul Switch

E. Industrial Ethernet Network
- L2 Managed Switch

Wireless Broadband
Connecting Life through Technology

A. Mobile Broadband
- 4G Router
- 5G Router
- 5G Small Cell*

  * 5G RU (Radio Unit)/5G CDU (Centralized and Distributed Unit)

B. Fixed Broadband Acces
- xDSL IAD
- FTTx ONT/ONU
- FTTx HGU
- FTTx SFU

C. Wireless Networking
- Enterprise Wireless AP
- Wireless Router

Digital Multimedia & Automotive
Smart Home & Mobile Enterprise Solutions

A. Video Doorbell
- 3MP Radar Doorbell

B. Smart Doorbell
- Industrial-Grade Smart Door Bell Monitoring System

C. Home Security
- 2MP Wireless Camera

D. Video Surveillance
- 5MP Surveillance Camera

E. R151 SYSTEM SOLUTION
- 77GHz Radar System for N2, N3, M2, M3 Vehicles

F. Radar Sensor
- 24GHz Short Range Radar
- 79 GHz Short Range Rada
- 77 GHz long Range Radar
- 79 GHz Mid Range Radar
- 79GHz BSD Radar

G. ADAS SOLUTION
- 79GHz BSD Radar System for Commercial Vehicles
- 79GHz BSD Radar System for Commercial Vehicles
- 79GHz BSD Radar System for Commercial Vehicles
- 79GHz BSD Radar System for Commercial Vehicles
- 79GHz Universal Parking-Assistant BSD Radar System

H. AVM SOLUTION
- Universal 360° AVM + Radar Monitoring System

I. T-BOX
- T-BOX COMMERCIAL VEHICLE SYSTEM

2.1.2 Trend of Sector

Industry competition

Global advances in technology have led to breakthroughs in both wired and wireless product technologies. The rapid evolution of new technology also translates into shorter product life cycles and uncertainty during new product development. Some vendors are now seeking to compete on price to reduce costs or bring their products to market. In the long term, the network communications industry will continue to develop in the direction of smart applications and integration. Networking technology will also become faster. The Company boasts the most comprehensive product lines in the domestic market. We can leverage our many years of experience in product design and development to meet customer demand for the latest and most comprehensive solutions.

Network communication

With regard to Ethernet switches, the technology of high-speed data center switches requires long-term research and development and large investments. Therefore, just a handful of equipment manufacturers has completely surpassed almost all competitors in the market and become leaders in these technologies or products. Being and remaining a leader requires continuous improvement of product specifications, causing upward cost pressure for equipment manufacturers like us. Telecom-grade switches need to reliably interact with telecom customers for a long period of time. Only with integrated software and hardware solutions does anyone have a chance to enter the telecom switch market. In the market for switches for big corporations and small and medium-sized enterprises, hundreds of equipment manufacturers compete. To do so, they must constantly improve their technology and product competitiveness in response to rapid changes and demands in the market.

Multimedia product

With regard to smart surveillance solutions, Alpha Networks relies on its R&D capabilities in video and communication software and hardware, combined with its superior hardware chip/component cost control capabilities when compared with other manufacturers. We're also able to provide international manufacturers with better flexibility and cost-efficacy. It has been determined that it is sufficient to cope with fierce industry competition in the future.

Automotive electronics

1. Carside blind spot detection angle radar: several Taiwanese companies have developed 3 technologies: 1) Radar, 2) Camera 3) Radar + Camera to meet the international specification of UN-ECE R151.
2. ADAS Domain Controller: Alpha Networks and international tier-1 vendors for AAEB/KA sub-control units are now making plans for joint implementation and lab verification.
3. 4D Image Radar: Only a few companies in Taiwan are developing this technology. Manufacturers in Europe and the United States have already developed the second generation, and Chinese manufacturers have begun shipping as well.

Product development trends

❖ Ethernet switches with even faster transmission speeds

The demand for high-speed switching equipment from enterprise users will continue to increase. Growth in cloud computing services and high-quality multimedia content traffic will drive the construction and upgrading internal networks at data centers. The bandwidth requirements of switches will be upgraded from 10Gbps and 40Gbps to 25Gbps and 100Gbps. Demand for a new generation of Ethernet networking technology with speeds of up to 400Gbps will also grow. The next wave of demand will be for the 800Gbps standard, or speeds in excess of 1 Tbps.

AI entails high processing loads and traffic as well. At the end of 2024, the market research firm Dell'Oro Group reported that spending on AI-related cloud and enterprise center infrastructure is expected to reach compounded annual growth rates (CAGR) of up to 24% by 2028, which will drive further growth in the 800G/1.6T data center switching market. By 2027, more than half of all data centers are expected to adopt switches with a transmission rate above 400G. The market for 800G switches will also surpass that of 400G.

❖ Mobile broadband roll-out and upgrade

The surge in mobile multimedia traffic generated by the rising number of mobile broadband users on social networking platforms and multimedia channels worldwide has catapulted the demand for high-speed mobile network access. Against the backdrop of the constantly growing 5G market, all countries have taken the initiative in the deployment of 5G network infrastructure and gradual development of terminal equipment. Flexible 5G networks will give rise to a rising number of emerging application services, which will foster the development of applications characterized by high bandwidth, low latency, and wide connectivity and diverse application solutions for consumers, the telecom sector, enterprises, and vertical markets.

❖ Demand for fixed bandwidth to continue increasing

Copper line broadband has been upgraded from ADSL to VDSL and G. fast, while fiber optics broadband has been upgraded from GPON to 10G PON. Since the users' need for the network applications has expanded from simple data transmission to mobile audio-video content and interaction, therefore the demand for higher bandwidth has increased as well. Moreover, MSO operators will expedite the deployment of fiber optical networks based on 10G-PON technology.

❖ Increase in Wi-Fi transmission speed and applications

With the upgrading of fixed networks and mobile broadband standards moving toward the next generation, the speed of Wi-Fi in local area networks (LAN) will be increased to meet the demand for high-speed Internet connection experience in different environments. MESH Network and Wi-Fi 6/6E now dominate the wireless network market. Current development is now trending toward the even faster Wi-Fi 7 standard. As the mobile data traffic increases rapidly, the ratio of bypassing mobile data traffic via Wi-Fi will rise along with the need to deploy Wi-Fi hotspots.

❖ Smart home development trends

The trend toward smart home surveillance and smart family will see AI developments incorporated into the design of smart family products. The evolution of voice control and image recognition technologies as well as millimeter-wave and visible image fusion technologies will bring with them even more smart applications.

❖ Automotive electronics trends

The development of radar has evolved from back-end parking assistance to rear/front side/corner assistance and front radar in the future. Detection distances have evolved from the past SRR (Short Range Radar) to the current popular MRR (Middle Range Radar), and are progressing toward the future LRR (Long Range Radar). Around View Monitoring (AVM) has evolved to Sensor Hubs, and even ADAS Domain Controllers have emerged.

2.1.3 Development and Innovation

R&D focus

❖ LAN/MAN BU

The development of Alpha Networks in the field of Ethernet high-speed network switches comprises switches for data centers, enterprises, telecom providers and industrial players. The huge data traffic in data centers will continue to drive the penetration rate of 25G and 100G switches. The demand for 400G high-speed switches has begun to sprout, and a new era of 800G or even 1TB switches is also dawning.

The Company is continuing to focus on technological innovations and market strategy for switching products. We are targeting the 3 main markets for telecommunications-grade switches, data center switches, and enterprise switches. R&D focus included:

1. Telecommunications-grade switches
   - Continue the research and development of communication protocols for core switches used in the telecommunications market.
   - Continue the research and development of Sync-E and IEEE 1588v2 switch technologies to ensure the high synchronization performance.
   - Greater application of Secure Boot technology and Hardware Root of Trust (HWRoT) to improve product security and support deployment across different platforms.
2. Data center switches and AI data center switches
   - The application and integration of SONiC network operating system technology was strengthened to increase the efficiency of network operation and management, and to supply customers with agile software-hardware solutions.
   - Push for greater use of SONiC in AI data center switches. Integration with smart computing and network operations will satisfy the construction requirements for future smart data centers.
   - Development of high bandwidth and high density products as well as 800G and 1.6T high-speed switching technology to meet the needs of AI computing and large data center application.
   - Improve the integration and cooling design for high-speed signals. Performance will be optimized even further and its energy consumption reduced.
   - Greater customization and smart design of the Baseboard Management Controller (BMC) to enhance product management performance.
   - Focus on the development of technologies required for the application of AI.Smart exchanges and high-performance solutions can be trade of intelligence and performance evaluations.
3. Enterprise-grade switches
   - Development of PoE switches with all 10G ports. The Copper and Fiber ports are now supported to meet different application scenarios.
4. Continue develop custom functions and communication protocols in response to customer requirements for satisfying different markets and domains.

❖ Wireless Broadband BU

We are focusing on the development of xPON fiber communications and Wi-Fi 6/Wi-Fi 7 wireless networking technologies for enterprise and home use in response to wireless broadband trends. We are also developing new antenna shape design and applying for related patents to optimize the performance of Wi-Fi router, Wi-Fi optical gateway and Wi-Fi AP products. The 5G FWA (including mmWave) platform and XGSPON platform are being fully developed as well to flesh out the wireless broadband product line.

Mobile products include CPE, 5G O-RU and 5G small cells.

1. CPE: The Company uses modules supplied by module vendors for the modem part of the CPE. R&D for CPE therefore emphasizes rapid software-hardware integration. In 2024, another key R&D focus was the design of outdoor and mmWave products, as well as the accumulation of production technology.
2. 5G-NR RU: Competition on price is expected to intensify for low-wattage (<1W) RU as SOC continues to mature. The end goal of R&D is therefore to achieve RU with relatively higher wattage (≥5W) based on the O-RAN architecture.
3. 5G-NR small cell: R&D focus targeted at customers of private networks and their customization requirements.

As for the Data Over Cable Service Interface Specification (DOCSIS), the technology has evolved through several iterations, progressing from supporting basic broadband Internet to offering symmetric multi-gigabit broadband services. DOCSIS 4.0 is the latest generation of the cable broadband technology standard and was issued by CableLabs in 2019. The standard is optimized to meet the needs of high-speed broadband and future network performance. To cater to this new technology and meet the needs of the market, development in 2024 focused on DOCSIS 4.0 modems and the integration of a router with the latest wireless (Wi-Fi) technology.

❖ Digital Multimedia & Automotive BU

Driven by the growing demand for IoT and 5G, smart home and home security cameras will be the driving force behind the continuous growth of digital multimedia moving forward. In addition to vertically integrating new key technologies such as millimeter waves and near-field communication (NFC), AI deep learning and software-related algorithms such as facial recognition, motion detection, and connectivity to public and private clouds will be important projects to improve our product differentiation and ODM/OEM competitiveness. In addition to IP Cameras, the proportion of video surveillance in the horizontal part of our product portfolio will continue to increase, including the integration of NVR systems and offering enterprise security and surveillance solutions. The digital multimedia business experience also acts as a solution provider for smart homes and home security monitoring within our Group.

With the development of the advanced driver assistance system (ADAS) market, our 24GHz, 77GHz, and 79GHz millimeter-wave radar sensors are now successfully mass-produced and shipped to overseas markets. Our R&D will focus on the development of carside blind spot detection angle radar that complies with UN/ECE R151, AI Dash Cam on L3, Radar+AVM Sensor Fusion and industrial embedded radar. Our Company has independent development and algorithm technology capabilities for millimeter wave radar, and can adjust customized products for various customer scenarios. We will further combine radar sensing, network cameras and network communication technologies to seize business opportunities in the development of the Internet of Vehicles (IoV).

R&D focus includes

1. Development of web cams for baby monitors.
2. Integration of radar detection for upgrading or expanding webcam applications.
3. Improved the yield of optical stations on the production line.
4. Improve the uniformity of projected light sources.
5. Standardized optical testing process.
6. Research and development of 24GHz Radar 1T1R/1T2R targeted mainly at the bike market. The technology aims to provide bike riders with consistent rear collision warning (RCW) with a detection range of up to 150m.
7. Testing and R&D of mmWave 60GHz Radar EIRP, as well as the design and development of a chamber for production verification on the production line. Development focus is on the placement of radar jigs and angle reflectors, as well as millimeter-wave MIMO radio-frequency response at corresponding approach distances. such as Power/Angle/Distance value.
8. R&D into advanced production processes for low earth orbit (LEO) satellites. R&D focus is mainly on using jig design and control of reflow chart parameters to prefer deformation of panels within the reflow oven. Calibration of part positioning is also used to reduce the ratio of displaced parts.
9. 77GHz forward radar, 77GHz side radar, and domain controller system for the E-BUS ADAS technology project. These provide auxiliary driving alerts for ACC, AEB, BSIS, and BSD. At the time, a joint application to the mentoring program of the Industrial Development Bureau* was filed in conjunction with TRON, the electric bus coachwork company. All system components and supporting vendors are local businesses pushing for the indigenous production of all functions.
10. R&D of AI-Dashcam technology. A collaborative research project involving three parties is being conducted with the pioneering technology center of a Japanese car manufacturer and another vendor.
11. Development of automatic testing technology for automotive products.

* The MOEA Industrial Development Bureau has now been upgraded to the “MOEA Industrial Development Administration.”

R&D achievements

LAN/MAN BU

- The telecommunications-grade switch that we developed successfully entered the Indian telecommunications market. We overcame the market's entry threshold to enter an emerging market and boost our competitiveness.
- Developed the 32-port 400G SyncE/1588 data center switch for expanding the North American market. Collaboration with customer was strengthened by satisfying the data center's requirements of high bandwidth and precision timing.
- Developed the Chassis 400G SyncE/1588 data center switch targeted at the premium North American market. We offer a modular design and high-performance solution that will boost our market share.
- Developed custom software functions and communication protocols for enterprise-grade switches that were successfully introduced to the Japanese market.
- Developed communication protocol for core switches targeted at the North American telecommunications market. Our advanced product technology caters for the needs of high-performance applications in the telecommunications market.
- Baseboard Management Controller (BMC) was successfully integrated with the telecommunications-grade switch to improve the switch's administrative and management functions.
- The time synchronization function of the switch now meets Sync-E and IEEE 1588v2 Class D standards. This ensures the precision of the synchronization function.

Wireless Broadband BU

- WiFi7 tri-band Home Router and XGSPON HGW products entered mass production.
- WiFi7 tri-band Enterprise AP with integrated RFID transmitter module entered mass production.
- Outdoor XGSPON ONT product for North American customer entered mass production.
- Wi-Fi 6 HGW product development project for Indian customer in emerging market slated to enter mass production in early 2025.
- 5G FWA (including mmWave) product slated to enter mass production in early 2025.
- CPE: In 2024, Outdoor FR1 + FR2 were developed for a Japanese customer's ODM project and entered mass production at the end of February. Samples of the "point to point" CPE for the POC of an Outdoor mmWave were submitted to the Indian customer.
- RU: 5W RU now supports up to 256QAM and satisfies the O-RAN C/U/M/S interface standard. SONIC Lab IoP testing was completed and it is now compatible with hTC and Pegatron CDU.
- 5G-NR Small Cell:
  A. For the base stations of split systems, the Aespula baseband program was successfully migrated. The two main base station architectures (All-in-one and Split) can now share a common code base to reduce duplicated investment of R&D resources.
  B. B. Code base was upgraded using All-in-one as the base to support the development of Hand Over functions. Support for 4.6550 GHz center frequency was added at the request of the Japanese customer and passed TELIC certification.
- CODA5730: A DOCSIS 3.1 router with integrated WiFi-6 router. Mass production commenced in 2024 Q3 and the target is MSOs in Taiwan.
- CODA60V: A Docsis 4.0 eMTA targeted at tier-1 and tier-2 customers in the USA. Now in the PVT phase and undergoing DOCSIS certification at CableLab. Sales are expected to commence in 2025 Q1.
- CODA60UV: An Ultra Docsis 3.1 eMTA. The product is targeted at tier-1 and tier-2 customers in North America. Now in the PVT phase and undergoing DOCSIS certification at Cable Labs. Mass production is expected to start in 2025 Q1.

❖ Digital Multimedia & Automotive BU

- Development of web cams for baby monitors.
- Development of stand-alone module for detecting respiration and heart rate with the radar, or its integration with web cams.
- Improved the yield of the Swallow program. The LPY at the F1.6 focus adjustment station was increased from 90% to 94.8%, while the F4.6 IQ test station improved from 95% to 100%.
- Filed patent for variable-angle projection light. The application passed internal company review and is now applying for a US patent.
- Proposed method for measuring displacements in the imaging system's light axis. The proposal passed the internal review and is now applying for an US patent.
- Development and high-level integration of the E-Bike 24GHz radar. The ebii E-bike model was introduced to the European market in collaboration with the brand name vendor ACER.
- Joint development of the Traffic monitor 60GHz Radar. The JDM method was used to collaborate with Sumitomo, a leading Japanese vendor from the POC stage to the current PVT stages. The main application is safety warning and monitoring for disadvantaged road users. The main market is the USA.
- Forward and side radars were supplied to the E-Bus ADAS technology development project. The technology is mainly used to provide auxiliary driving alerts relating to ACC, AEB, BSIS, and BSD for e-bus operators driving on the road.
- mmWave Radar patent output: Patent no. 113110099 on radio antenna structure and its electronic equipment provides an antenna design concept that effectively reduces interference from millimeter signals.
- Collaborative research on AI-Dashcam technology with a certain Japanese car maker has so far produced application functions such as Forward Collision Warning (FCW), Lane Departure Warning (LDW), and Driver Monitoring System (DMS). These results have won the approval of the car maker's pioneering technology center. More samples have now been ordered to expand the real-world vehicle testing and validation program.
- Production automation testing technology was introduced for the existing In-Vehicle Data Center product line. Testing time was successfully reduced by 60% and production line efficiency improved.

Future R&D plans

❖ LAN/MAN BU

Looking to the future, the Company will continue to focus on technological innovation. We will also push to upgrade our switch product technology and expand its application scenarios. The plan covers:

1. Telecommunications-grade switches
   - Strengthen time synchronization R&D to further enhance the performance and applications of SYNC-E and IEEE 1588v2 standards.
   - Upgraded Secure Boot technology to support deployment across multiple platforms.
   - R&D into design of OpenLAN switch to improve compatibility with international cloud controllers. We will also construct a complete, open network solution through in-depth collaboration with ecosystem partners that will expand our market penetration through greater interoperability and extend ability.
   - Continue the research and development of communication protocols for core switches used in the telecommunications market to maintain our technological leadership.
2. Data center switches and AI data center switches
   - Strengthen application of the SONiC network operating system technology to realize its in-depth integration with high-speed switch hardware and provide customers with a more agile, high-performance solution. We are also applying SONiC technology to AC data center switches to realize automated network administration resource optimization.
   - Development of AI-driven switch application technologies to support the construction and upgrading of smart data centers.
   - We plan to release a number of high-performance switch products including 64-port 1.6T, 32-port 800G, 24-port 400G + 8-port 800G hybrid switches.
   - We will continue to develop switch technologies that support AI applications with an emphasis on high-bandwidth, low-latency solutions that satisfy the diverse requirements of smart data centers.
   - R&D on high-speed signals and cooling design will be strengthened to meet the cooling challenges of super high-performance computing and reduce the system's energy consumption.
   - Further develop the smart functions of BMC for value-adding of enterprise-grade products.
3. Enterprise-grade switches
   - Develop smarter POE switch technology to continue expanding in the enterprise application market.
   - Continue develop custom functions and communication protocols in response to customer requirements for satisfying different markets and domains.
   - We plan to release a range of high-performance switch products including POE switch with all 10G ports, 10G + 40G stacked switches with 90W POE support, as well as support of hybrid application scenarios with Copper and Fiber ports to satisfy the demand for high-performance and multi-functional devices from modern enterprises.

We will further consolidate our global leadership in the network communications market through ongoing technological innovation and market-oriented product planning in order to create long-term value for shareholders.

❖ Wireless Broadband BU

1. Compete for new projects from North American customers and continue expanding the application of Wi-Fi 7 (Wi-Fi 7 HGW/Wi-Fi 7 EAP /Wi-Fi 7 xPON HGW) for the emerging market in India.
2. Develop new 25G/50G xPON ONT product.
3. Refine the Wi-Fi 7 EAP product and Wi-Fi 7 router/extender product platform.
4. Actively develop the hostless 5G FWA platform to secure a price advantage.
5. CPE: Begin developing SDX72 (or more advanced) CPE in accordance with the BU roadmap as soon as possible. Focus on developing for the outdoor mmWave "point to multiple point" product requirements issued by an Indian customer and send samples.
6. RU: Use the existing 5W RU as the basis to obtain resources for the development of high-power massive MIMO RU for Japanese customers.
7. 5G-NR Small Cell: Optimize the hardware cost of small cells.
8. North America: The product specifications are more advanced so the profit margins are higher than other regions. We therefore plan to release a high-end EMTA router that combines DOCSIS 4.0 with Wi-Fi 7 for North America in the future.
9. Europe: European specifications are more exacting than North America, but there are multiple countries with non-identical market requirements, so we'll launch products similar to those in North America. There is more pressure on price however so product specifications will be adjusted to suit different customers. The emphasis will still be on EMTA router with integrated Wi-Fi 7 however.
10. South America: Lags behind North America by about one generation. In the short-term, product development will still be centered on EMTA router with DOCSIS 3.1 and WiFI-6.

❖ Digital Multimedia & Automotive BU

1. Product development aimed at enterprise-grade surveillance webcam systems, access control and alarm products.
2. Development of Wi-Fi HaLow wireless networking technology offering long range with low power consumption to expand the potential applications for IoT products.
3. Active focus adjustment system R&D: On high-resolution systems, a shift in the optical axis of the camera lens often degrades the resolution around the image. The active focus adjustment system is needed to rectify this situation.
4. Variable focus system R&D: We plan to develop algorithms for controlling and automatic focusing of the variable focus lens often found in professional surveillance systems. The environment and capability for verification and testing of variable focus lenses will also be established.
5. Light projection system R&D: Customers requirements on the uniformity, color temperature, and brightness of light sources are becoming increasingly exacting. A standard process for measurement and testing must be established.
6. Sensor Fusion for 60Gz Radar Module with Camera multiple detection
7. Radar surround view system
8. 77GHz MIMO 4D Radar with concretization
9. AI-Dashcam R&D: Development of functional technologies and reduction of mass production costs.
10. Vehicle Data Center R&D: Cloud connectivity, vehicle signals, application technologies etc.

Approved patents of the year

Since our spinoff from D-Link and official inception, we have accumulated close to 30 years' experience in the manufacture of network communication products. The product lines of the LAN/MAN, Wireless Broadband, Digital Multimedia, and Automotive business units are combined with a global patent strategy centered around key technologies to build core technology portfolios in Wireless Technology (4G/5G/6G), Wired Technology (Fiber), and Edge Computing/AI. We also began developing communications equipment for LEO satellites in 2021. Patents obtained by Alpha Networks this year encompassed today's core network communication sectors such as 5G, small cell, cloud technology, and automotive products. These demonstrated the Company's industry-leading R&D capability and its ability to protect core technologies with patents.

In 2024, Alpha Networks submitted 28 cases of patent. We plan on filing a total of 86 patent applications in different countries. The number of patents approved by the competent authorities of various countries in 2024 was as follows (including applications before 2024):

Patent name	Country	Category	Certificate issuing date	Certificate number
Radio network gateway and radio system	China	Invention	2024/10/18	CN114390636
Voice signal relay transmission method and radio network gateway	China	Invention	2024/8/6	CN114520961
VOICE SIGNAL RELAY AND TRANSFER METHOD AND RADIO NETWORK GATEWAY	USA	Invention	2024/8/27	US12075005
MIMO ANTENNA SYSTEM AND ELECTRONIC DEVICE USING THE SAME	USA	Invention	2024/4/9	US11955705
Photographic device and system for detecting social distance	China	Invention	2024/3/29	CN114537834
MIMO ANTENNA SYSTEM CAPABLE OF PROVIDING ENHANCED ISOLATION FOR BACKGROUND SCANNING ANTENNA, AND ISOLATOR MODULE THEREOF	USA	Invention	2024/1/9	US11870126
Photographic device and system for detecting social distance	China	Invention	2024/5/31	CN115473998
METHOD, SYSTEM AND IMAGE-CAPTURING DEVICE FOR PHYSICALDISTANCING DETECTION	USA	Invention	2024/10/22	US12125366
ROTATING MECHANISM FOR ORIENTATING CAMERA IN MULTIPLE DIRECTIONS WITH SINGLE MOTOR	USA	Invention	2024/1/16	US11874586
LOUDSPEAKER CONTROL SYSTEM	USA	Invention	2024/5/7	US11979720
SCREW HAVING STACKED SCREW HEADS	USA	Invention	2024/9/17	US12092141
Apparatus for Synchronous Ethernet	USA	Invention	2024/10/29	US12130770
ALUMINUM OR COPPER FOIL HEAT DISSIPATOR AND ELECTRONIC DEVICE HAVING THE SAME	USA	Invention	2024/1/2	US11864356
MOUNTING SEAT FOR DOORBELL AND DOORBELL ASSEMBLY	USA	Invention	2024/3/12	US11927209
METHOD FOR UPLINK TRANSMISSION IN RADIO ACCESS NETWORK, RADIO ACCESS NETWORK AND SYSTEM THEREOF	Japan	Invention	2024/2/9	JP7434617
Circuit system capable of digitally adjusting speed of DC fan	Taiwan	Invention	2024/5/21	TW I843322
MICROSTRIP ANTENNA	Japan	Invention	2024/6/17	JP7506123
COMPUTING DEVICE WITH A VIRTUAL NETWORK LAYER INSTALLED WITH USER PLANE FUNCTION (UPF) PLUGIN AND METHOD FOR PROCESSING UPF PACKET	USA	Invention	2024/6/18	US12015504
COMPUTING DEVICE WITH A VIRTUAL NETWORK LAYER INSTALLED WITH USER PLANE FUNCTION (UPF) PLUGIN AND METHOD FOR PROCESSING UPF PACKET	Japan	Invention	2024/9/11	JP7554892
Multi-band antenna	Taiwan	Invention	2024/3/1	TWI834231
MULTIBAND ANTENNA	USA	Invention	2024/10/1	US12107342
MULTIBAND ANTENNA	United Kingdom	Invention	2024/8/7	GB2621001
RADOME CONFIGURED WITH DUAL-LAYER DOUBLE-RING CIRCUITRY	USA	Invention	2024/11/12	US12142825
RADOME CONFIGURED WITH DUAL-LAYER DOUBLE-RING CIRCUITRY	Japan	Invention	2024/6/5	JP7499368
INTELLIGENT TEMPERATURE CONTROL SYSTEM FOR NETWORK APPARATUS	Japan	Invention	2024/9/20	JP7559097
Millimeter wave radar detection method and millimeter wave radar detection system	Taiwan	Invention	2024/9/21	TWI856411
Separated heat dissipating device having suspension mechanism and optical module system thereof	Taiwan	Invention	2024/4/11	TWI839032
Easily mountable device bracket assembly	Taiwan	Invention	2024/1/1	TWI828564
Configurable modular block packaging material	Taiwan	Invention	2024/8/11	TWI852351
METHOD FOR DETERMINING LOCATION OF WIRELESS NETWORK	Taiwan	Invention	2024/11/11	TWI861980
RADOME CONFIGURED WITH A PLURALITY OF METAL PATTERNS AND RADAR USING THE SAME	Taiwan	Invention	2024/7/11	TWI848728
I2C BUS MONITORING DEVICE	Taiwan	Invention	2024/3/21	TWI837031
SUBSTRATE INTEGRATED WAVEGUIDE HAVING MULTIPLE	Taiwan	Invention	2024/12/1	TWI864996
RADOME AND RADAR USING THE SAME	Taiwan	Invention	2024/11/21	TWI863321
Heat dissipation structure and electronic device	Taiwan	Invention	2024/4/1	TWI838259
ANTENNA ARRAY AND A DUAL-FEED CIRCULARLY POLARIZED	Taiwan	Invention	2024/11/21	TWI863405
Testing device and method for network switch	Taiwan	Invention	2024/11/11	TWI862262

2.1.4 Marketing and Promotion

Participation in trade shows

Strong global demand for 5G set to drive rapid growth in the network communications and data-intensive content industries. Alpha Networks has been actively involved in the R&D, commercial operation, validation and support of 5G private networks. We participated in the Mobile World Congress (MWC) 2024, COMPUTEX Taipei, and the 2024 OCP Global Summit.
In February, we participated in MWC 2024 as part of the MWC Taiwan Pavilion organized by the MOEA Industrial Development Administration where we showcased the "Next-Generation O-RAN Radio Unit (O-RU) for 5G Base Stations Product Solution," a Radio Unit (RU) product for 5G base stations that complies with the O-RAN interface standard. In addition to O-RAN support, 5G Massive MIMO technology was also introduced in response to future demand for 5G/6G technology. The increased coverage and greater domain flexibility will help cities with high network traffic increase the transmission capacity and efficiency of their communication systems. Telecommunications operators or system integrators can then tailor their rollout to local requirements. The solution is now being rolled out and tested in multiple application domains with international customers in Europe, the US, and Japan.

In June, we participated in the BenQ/Qisda Group Computex AI NOW exhibition to showcase our 5G Micro Radio Unit, high-speed 800G switch, radar video doorbell, and other products. The 5G Micro Radio Unit product was developed by Alpha Networks in response to the surge in market demand for high-speed mobile connectivity. This compact 5G micro radio transmitter and receiver device can be installed on urban infrastructure such as buildings, street lights, and advertising signs. They can also be controlled over the network to ensure stability and reliability, or used to fill small gaps in existing base station coverage. Applications include industrial manufacturing, IoT, agriculture, and smart city. In addition to our ongoing commitment to the development of innovative 5G technologies and the promotion of communication infrastructure upgrades in line with the requirements of Industry 4.0, we have ventured into the field of diversified new service applications based on the smart city concept. The products displayed during this exhibition also conform to SDG 9 on sustainable industry and infrastructure, helping to unlock new business models while upholding the ESG spirit of sustainable development.

In October, we attend the 2024 OCP Global Summit at the San Jose Convention Center where we presented our solution on "Empowering AI connectivity for the future." The networking requirements of data centers have continued to increase in recent years due to the rapid growth of AI and machine learning (ML). The newest generation of 400G and 800G high-performance Ethernet switches from Alpha Networks supports custom software functions and hardware modifications based on customer requirements. They offer a cost-effective solution where high port density and high-bandwidth connections are required.

Looking to the future, the new generation of Alpha Networks 400G and 800G high-performance Ethernet switches will provide high availability and secure network transmission quality services for building an AI-powered network data center that delivers high-performance networking and low-latency.

Marketing and labeling

Alpha Networks puts clients' values and needs first and commits to deliver and refrains from engaging in false marketing. As an OEM manufacturer of network communications products, Alpha Networks is not involved in the sale of products to end customers and has no direct contact with them. Product labels are manufactured and attached in accordance with clients' requirements in compliance with applicable laws and regulations. No violations of regulations governing product and service information and labeling or marketing communication laws (incl. advertising, promotion, and sponsorship) occurred in 2024.

2024 COMPUTEX Taipei

2024 OCP Global Summit

2.2 Resilient Supply Chain

Implement supplier management to fulfill corporate social responsibilities

Alpha Networks requires all suppliers to fully comply with all relevant laws and regulations. We also take a close interest in the management of labor rights, environmental protection, and safety and health risks within the supply chain. Alpha Networks used the Code of Conduct – Responsible Business Alliance (RBA) to develop the Basic Supplier Code of Conduct. All suppliers are required to comply with the relevant commitments on social responsibility and ethics. We are also continuing to conduct annual audits and introduce new suppliers. All suppliers are required to conform to the relevant standards on labor rights, health and safety, environmental protection, ethics, management systems and social impact.

Suppliers are not only required to conduct quality, cost, delivery, service, and technical assessments, but they are also expected to practice purchasing management based on the Green Supply Chain. Hazardous substance controls have also been incorporated into the incoming material verification procedure. For raw materials that violate the controlled substance rules, suppliers are required to propose corrective and preventive measures right away. Alpha Networks develops its own trading platform with suppliers to manage orders to suppliers. We strictly abide by the Personal Data Protection Act and confidentiality agreements and seek to create a secure and smooth platform by working together. We have also signed procurement contracts with suppliers, conducted audits on corporate social responsibility, strengthened supplier partnerships, and due diligence on conflict minerals. The assessment on the supplier environment has become more comprehensive.

2.2.1 Supplier Management

Supplier selection / evaluation / reward and punishment

The selection of suppliers is based on set criteria. Qualified suppliers must also undergo on-site audits or host review meetings to examine their performance. A high-priority supplier management list is maintained by Alpha Networks based on each department's evaluation of vendor performance in 5 domains: quality, cost, delivery, service and technical. The evaluation outcomes are used as the basis for adoption of key parts and to motivate suppliers.

Monthly / quarterly supplier evaluations

1. Supplier quality performance evaluation

- Evaluation timing: An evaluation of supplier performance during the preceding month must be provided by the end of each month.

- Supplier evaluation standard:
  Supplier quality is graded in the following manner as defined in the "Incoming Material Management Procedure": Excellent (A): ≧ 95, Good (B): 94–90, Acceptable (C): 89–85, Inferior (D): 84–80, Poor (E): <80. Approved suppliers must achieve a supplier evaluation score >80.

In 2024, the average ratio of excellent (A) and good (B) suppliers was 98.90%, and the ratio of inferior (E) suppliers was 0.31%. Alpha Networks offered guidance to Poor (E) grade suppliers and demanded that they make improvements. Ongoing guidance was also provided to Acceptable (C) and Inferior (D) suppliers to address their issues and improve the overall quality of the products delivered.

2024 evaluation of supplier quality performance

Factor\Rating	Excellent(A)	Good (B)	Acceptable(C)	Poor (D)	Terrible (E)
Hsinchu Factory	204	3	1	2	1
Changshu Factory	145	5	0	0	1
Vietnam Factory	195	8	3	1	0

2. Supplier status evaluation

The Supplier Evaluation Operation Guidelines set the quarter as the statistical interval. The evaluation results are reported in the following month of each quarter.

All Alpha Networks' key suppliers (involving large quantities and transaction amounts) are evaluated by the Purchasing, Engineering, and QA units in terms of quality, cost, delivery time, service, and technical capability (see Table below). Those with a score of less than 70 will be listed as disqualified or non- recommended supplier. In 2024, 204 suppliers were evaluated, and 0 suppliers were listed as non-recommended suppliers. In 2024, no suppliers were suspended from new material transactions.

Supplier quality performance evaluation Form

Content	Score distribution			Total Score
	SQE	Supply Chain Management	Engineering Technology	
Quality	30			**30**
Cost		20		**20**
Delivery		15		**15**
Service		5		**5**
Technical			30	**30**
Total score	**30**	**40**	**30**	**100**

2.2.2 Supplier Education and Training

In order to let the suppliers accurately deliver the green Material Composition Declaration (MCD) information, quarterly supplier training course "GPM Green Product Management Information Platform: Completing and Uploading the Declaration Form, Test Report, and Material Composition Form" is conducted at Alpha Networks (Hsinchu Factory), Alpha Networks (Dongguan Factory), Alpha Networks (Vietnam Factory). The supplier is expected to upload the MCD in order to comply with international regulations.

2024 training schedule for suppliers

Class location/Time	Q1	Q2	Q3	Q4
Hsinchu Factory (No. 8 Li-hsing 7th Rd., Science-based Industrial Park, Hsinchu City)	3/13(Wed)	6/19(Wed)	9/11(Wed)	12/11(Wed)
Changshu Factory (No.369, Yintong Road, Southeast Development Zone Changshu, Jiangsu Province)	3/15(Fri)	6/21(Fri)	9/20(Fri)	12/13(Fri)
Vietnam Factory (Lot CN03, Dong Van 4 Industrial Park, Dai Cuong Commune, Kim Bang District, Ha Nam Province, Vietnam)	3/15(Fri)	6/14(Fri)	9/20(Fri)	12/13(Fri)

We also work with suppliers to build a sustainable low-carbon supply chain and realize carbon reduction targets together. During 2024, Alpha Networks continued to share carbon reduction practices with its suppliers. We also provided mentoring and carbon reduction courses. On April 8, 2024, we invited around 30 suppliers to take part in the supplier carbon inventory cadre training course held at our Hsinchu Headquarter. We will continue hosting supplier carbon reduction courses in 2025.

2.2.3 Supplier Procurement Contracts

To build a green supply chain, Alpha Networks' suppliers are required to adhere strictly to our "Hazardous Substance Guidelines." Test reports from independent third-party bodies must be submitted when necessary. Source management is practiced in supplier production processes, green product design and hazardous substance management. Green management principles have also been incorporated into the supplier management system. In 2024, the "Supplier Procurement Contract" was signed with 49 suppliers including 16 local suppliers that were added to realize our short supply chain targets and reduce carbon emissions due to the transfer of Alpha Networks' key production capacity to Vietnam. In the future, we will continue to sign purchasing contract guarantees with the suppliers we work with to ensure that the products we design and manufacture comply with our customers' RoHS-related international regulatory requirements and fulfill our goal of building a Green Supply Chain.

2.2.4 Supplier Audit and Due Diligence

Corporate social responsibility audit

Alpha Networks aspires to form a sustainable partnership with our suppliers; besides valuing the suppliers' product quality, shipping date, and price, we also stipulated the Supplier Corporate Social Responsibility Management Operational Regulations based on the Code of Conduct - Responsible Business Alliance (RBA), hoping to fulfill corporate social responsibilities with our suppliers, implement risk management and operational sustainability. New suppliers must sign a supplier statement of commitment to ensure compliance with RBA requirements and fill in the Supplier RBA Self-Evaluation Questionnaire. The aim is to understand the suppliers' performance in labor, health and safety, environmental protection, management system, and business ethics before launching on-site audits according to the supplier category and follow-up supervision, in turn making sure that the shortcomings are adequately improved. In 2024, corporate social responsibility audits were conducted for 68 suppliers (45 suppliers audited in the context of annual audits and 23 new suppliers audited prior to adoption).

Conflict minerals due diligence

Alpha Networks is committed to monitoring the issue of conflict minerals, and to investigate the sources of gold (Au), tin (Sn), tantalum (Ta), Tungsten (W) and Cobalt (Co) minerals to ensure they are "conflict-free." We promise to form long-term partnerships for mutual success with our suppliers. We expect and require suppliers to disclose the refineries and mines they work with. Suppliers are also asked to comply with the RBA Code of Conduct in fulfilling their corporate environmental and social responsibilities together. Suppliers have been required to sign the "Declaration on Non-use of Conflict Minerals" since 2013. CMRT conflict mineral surveys are also conducted on a regular basis.

A total of 50 Conflict Minerals Reporting Template (CMRT) applications were submitted by the end of December in 2024 and 50 CMRT surveys were completed, for a completion rate of 100%.

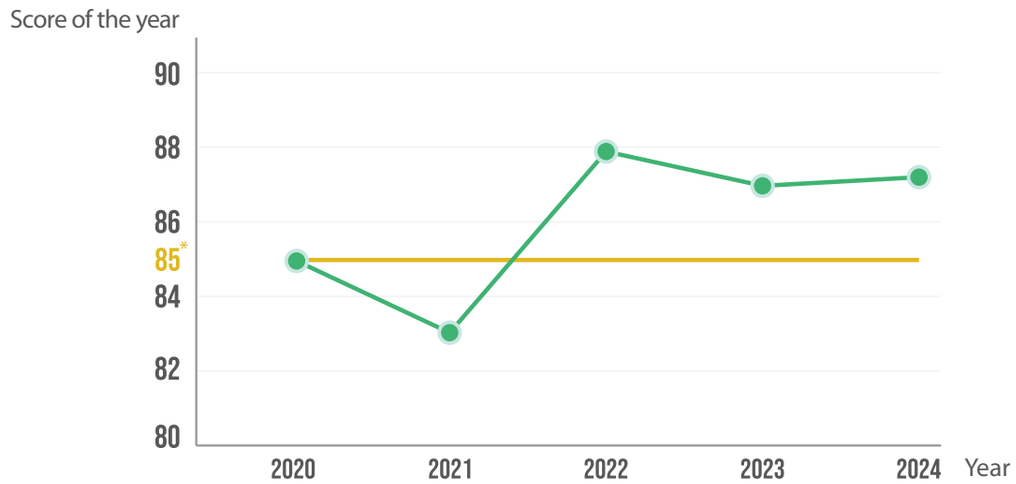
2.3 Customer Satisfaction

Customers' satisfaction is the top priority.

Customer satisfaction surveys

Alpha Networks relies on annual customer satisfaction surveys or customer feedback scores in the context of QBR to gain a better understanding of whether or not the products and services provided by the Company meet the needs of different customer groups. This feedback also serves as a key reference for ongoing improvements.

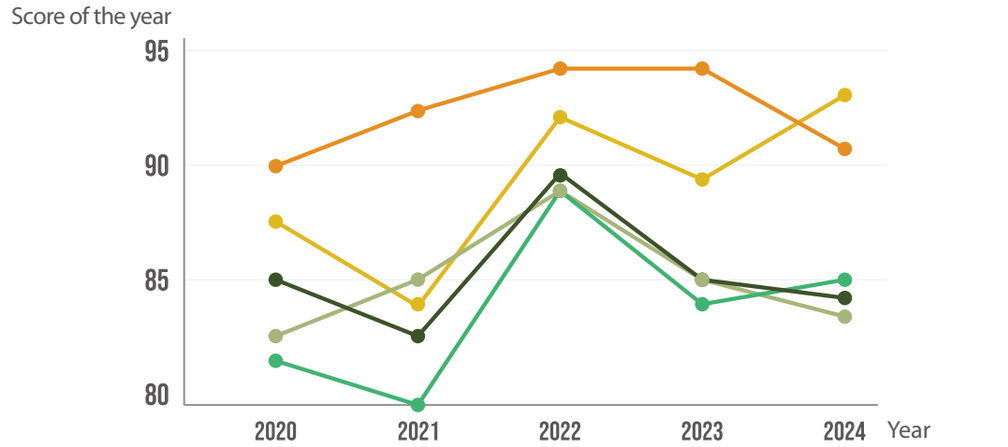
- **In 2024, the overall customer satisfaction score reached 87, exceeding the target score*.**



* Target score: 85

	2020	2021	2022	2023	2024
Score of the year	84.9	82.9	87.9	86.9	87

- **In the 5 material topic areas, satisfaction with "Delivery Performance" and "Green Product Implementation" both scored over 90.**

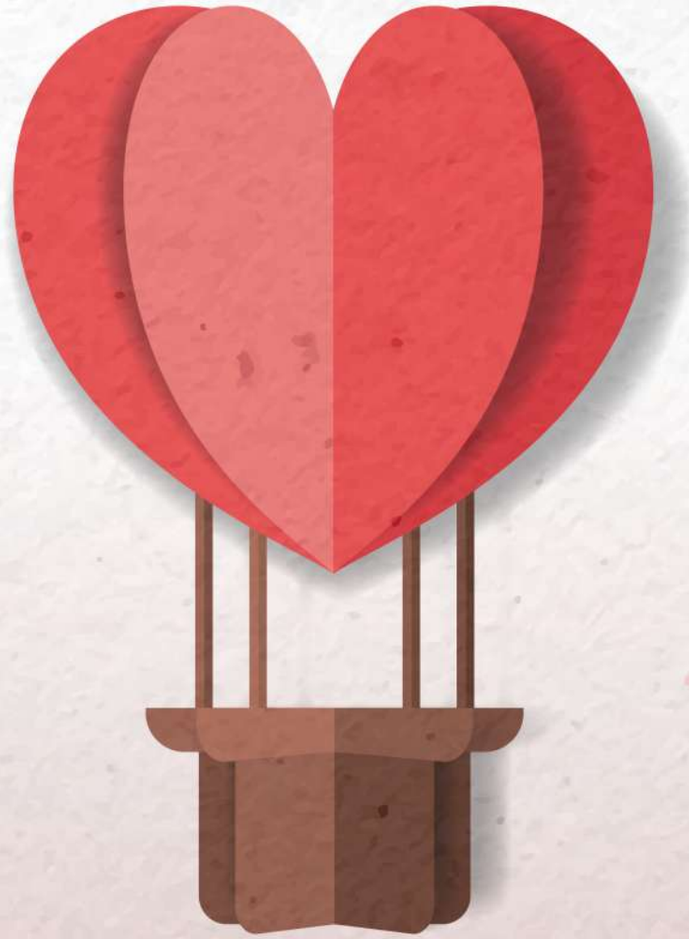


Topic areas	2020	2021	2022	2023	2024
Quality Measurement	82	80	88	84	85
Delievery Performance	87	84	92	89	93
Engineering Support	85	83	89	85	84
Product development and Realization	83	85	88	85	83
Green Product Implementation	90	93	94	94	91

There was a slight improvement in the 2024 satisfaction scores compared to 2023, but the Company must still continue to maintain our performance in areas where we achieved good customer satisfaction. For topics with lower satisfaction scores, we must actively investigate their causes and identify solutions so that we can continue to optimize our products and services. Looking back on 2024, this was a year when international political turmoil sent shockwaves through the global economy. Other unknown challenges and risks may still await us in the future. Customers may also adjust their requirements based on changes in the environment. Everyone at Alpha Networks must therefore exercise even greater caution when dealing with all customers and their feedback. In the future, sustainable development will undoubtedly be the inherent responsibility of every enterprise. We hope that the Company will continue to create social value so that we can become a trusted global supplier of professional R&D, manufacturing, and support services for network communications equipment. We will continue to pursue optimal solutions for our customers, maximize overall value, and strengthen the long-term business competitiveness.

Creating an Inclusive Society

Building a Friendly Workplace and Promoting Social Welfare



Annual Accomplishments

[Topic] Enhancing Employee Satisfaction

3.1 Human Rights
3.2 Talent Acquisition
3.3 Salaries and Benefits
3.4 Talent Development
3.5 Safety and Health
3.6 Social Engagement

Annual Accomplishments

Human Rights

- Alpha Networks was awarded the **"Talent Sustainability Award" hosted by CommonWealth magazine** in 2024.
- In 2024, Alpha Networks had **no** incidents of child labor, forced labor, gender discrimination, or other violations.
- Completed the identification of human rights risks.

Salary and Benefits

- In 2024, the average salary of full-time non-management employees was NTD 1,144 thousand (a growth of **1%** compared to 2023), and the median was NTD 1,132 thousand (a growth of **6%** compared to 2023).
- In 2024, 7 female employees took maternity leave, while 11 male employees took paternity leave. Both genders received **the same leave benefits**.

Training and Education

- In 2024, the total training hours came to 48,851 hours, with a total of 21,792 participants trained throughout the year;
- Talent cultivation for 5G, 6G, and various research and development fields amounted to 967 hours of R&D training in total. Trainees completed on average 3.47 hours of training.
- Sustainability-related courses were conducted in 2024 to promote the ESG culture. Training totaled 1,556 hours, with 3,480 participants.

Occupational Safety and Health

- In 2024, safety and health education and training were conducted for employees at these facilities: 599 employees at the Hsinchu Factory, 72 employees at the Changshu Factory, and 3,261 employees at the Vietnam Factory.
- Total Recordable Incident Rate (TRIR) - The TRIR at the Hsinchu, Changshu and Vietnam factories were **all "0"**; Near Miss Frequency Rate (NMFR) - The NMFR at the Hsinchu, Changshu and Vietnam factories were **all "0"**.

Health Promotion

- We provided health check-up items that exceeded regulatory requirements and check-up rate reached 97% in 2024.
- Health promotion seminars: 7 sessions were held with 280 participants.
- Implemented special health management measures (for personnel engaged in hazardous operations, including noise operations and hexane operations. The list of such employees has been compiled by responsible occupational safety personnel and submitted for verification); compliance with health checks in these categories reached 97% in 2024.
- Analyzed the top ten health issued based on health examination results and implemented individual health grading management. Different management measures were provided based on the severity of issues. 56 individuals sought health consultations from physicians in 2024.
- Organized voluntary influenza vaccination activities for 118 participants in 2024.
- Blood donation drive: A total of 144 people took part over 2 sessions and donated 200 bags of blood.
- Lactation Room Certification: Presented with the "Friendly Lactation Room - Outstanding Performance Award" from the Public Health Bureau of Hsinchu City.
- Entered the "Corporate Health Responsibility (CHR) Awards" (Large Enterprises - Manufacturing) hosted by the CommonHealth magazine and was recognized as a "99 Healthy Enterprises."

Topic

Enhancing Employee Satisfaction

The greater the employee satisfaction with their work, the better they are at providing good customer service and producing high-quality work. Employee turnover is reduced as well making talented people more willing to stay with the Company and provide greater value over the long-term.

We wanted to understand how satisfied employees were with the Company and their opinions on different aspects including education and training, remuneration and benefits, leadership style, and teamwork. These included both tangible and intangible employee needs. An employee engagement survey (including employee satisfaction items) was therefore conducted in April 2024.

For this survey, questionnaires were distributed to employees at the Hsinchu HQ. A total of 1,037 valid responses were recovered (including 218 responses from direct personnel and 819 responses from indirect personnel). Total response rate was 89.5% and the average score was 4.47 (out of 6).

Open-ended questions were also included for employees to offer their suggestions in each area. These were compiled for confirmation and response by the relevant business units. The responses were also published on the intranet for all employees to see. The results were compiled as follow:

Category	Question and Responses
Quality	2
Information & Systems	7
Finance & Accounting	2
Production & Manufacturing	6
R&D	11
General Administration	7
HR - Recruitment	3
HR - Career development	2
HR - Attendance	4
HR - Business Travel	1
HR - Compensation	5
HR - Training	4
Welfare Committee	7
Subtotal	**61**

Information from employee surveys in 2024 were compiled and used by the Company as a reference for ongoing improvements to employees' work environment. For example, HQ is located in the Hsinchu Science Park where space is at a premium and there is a great deal of traffic. Parking is therefore a major issue for employee commutes. In response to employee feedback, the employee car park was re-drawn and car park entry/exit routes adjusted to make parking and vehicle access more convenient for employees; maternity parking spaces were also added near the elevators for the convenience of pregnant employees.

• Redrawing of parking spaces in the employee car park

• Maternity parking space

3.1 Human Rights

Alpha Networks sets great store with human rights

Alpha Networks supports and abides by the “United Nations Universal Declaration of Human Rights”, “United Nations Global Compact”, “United Nations Guiding Principles on Business and Human Rights” and the “Declaration on Fundamental Principles and Rights at Work” of the International Labor Convention, and follows standards consistent with the Responsible Business Alliance (RBA)) Code of Conduct, abides by the laws and regulations of the jurisdictions where it is active, to protect the human rights of employees. With regard to policy, Alpha Networks has policies and other internal management measures in place that arrange for the protection of employees’ rights and good care for employees.

* Human rights protection is important to Alpha Networks. Please refer to our website ESG > Social Responsibility for description of “Human Rights Protection”.

3.1.1 Human Rights Policy

Prohibition of child labor and protection of underage employees

Alpha Networks does not employ youth under the legal minimum employment age (i.e. under the age of 16) at its Taiwan headquarters or its overseas branches. According to the RBA Code of Conduct Manual, the “prohibition of child labor” is the default standard. Our “Administrative Measures for the Appointment of New Personnel” require new employees to provide proof of identity when starting work to ensure that the Company does not employ any workers under the age of 16. In 2024, Alpha Networks conducted an internal audit and found no minors employed at any of its locations.

Elimination of forced labor working hours that comply with the law

Alpha Networks does not use forced, bonded, indentured or involuntary labor, and is committed to providing employees with good working conditions and reasonable working hours. For the work content, employees’ wishes are taken into account. All employees have the right to resign freely under the law. All Alpha Networks locations are required to maintain work hours in accordance with the labor standards laws of the jurisdiction where the plant or operation is located. Alpha Networks reminds supervisors and staff that work overtime or work without days off for too long through its “Announcement regarding Overtime Working Hours" and “Announcement regarding False Work Hour Reporting”, and will also send "Monthly Abnormal Working Hours Reports” to unit supervisors to remind them to take care of their staff working conditions. The production line raises awareness of overtime related labor laws among supervisors through production management meetings.

Gender equality

To promote gender equality at work, and prevent gender discrimination/pregnancy discrimination at Alpha Networks in accordance with the "Labor Standards Act" and the "Act of Gender Equality in Employment ", female employees may apply for menstrual leave, pregnancy check-up leave, maternity leave, abortion leave and breastfeeding leave according to their physiological needs. Male employees can apply for paternity leave when necessary, and the number of applicants for parental leave without pay (“parental leave” for short), i.e. employees who need to take care of infants and young children, can be viewed in 3.3 Salaries and Benefits - Leave System. The Company will inquire about the employee’s intention to return to work one month before the parental leave is to expire, and assist with the return. Alpha Networks also provides legally required facilities and various other friendly measures for employees who are pregnant, breastfeeding, or need childcare, such as dedicated parking spaces for pregnant employees, upgraded nursing rooms, occupational nurses, medical consultation services, etc., to provide employees with a safe working environment.

Transparent and smooth policy - proposals and communication channels

Alpha Networks provides equal job opportunities to applicants and employees, and does not discriminate against employees based on race, skin color, age, gender, sexual orientation, race, disability, pregnancy, religion, political convictions, membership or marital status. The Company is committed to fairly treating and respecting every employee, and does not treat employees in inhumane, cruel, degrading or abusive ways. We respect employees' legal rights to freedom of association and protect employees who wish to communicate openly with management about working conditions without fear of reprisal, intimidation or harassment.

Alpha Networks provides employees with diverse, open and transparent channels for proposals and communication. In addition to voicing their opinions through labor-management meetings and Employee Welfare Committee meetings, employees can also go through physical mailboxes or e-mails as well. We therefore provide employees with convenient channels for communication and are continuing to strengthen our two-way, real-time communication with employees. The main communication channels at Taiwan HQ are the labor-management meetings, the Employee Welfare Committee, and physical suggestion boxes.

Diverse Internal Communication Channels

Labor-Management Meeting	Welfare Committee	Human Resources Unit	Audit Office	Employee Suggestion Mailbox
Company information and reminders are announced to employees at the quarterly labor-management meetings.	The Employee Welfare Committee is convened every month to provide measures that enhance employee welfare.	We have dedicated email addresses for sexual harassment complaints and employee complaints.	We have a dedicated email address for complaints about business integrity.	We have a physical mailbox for opinions and feedback.

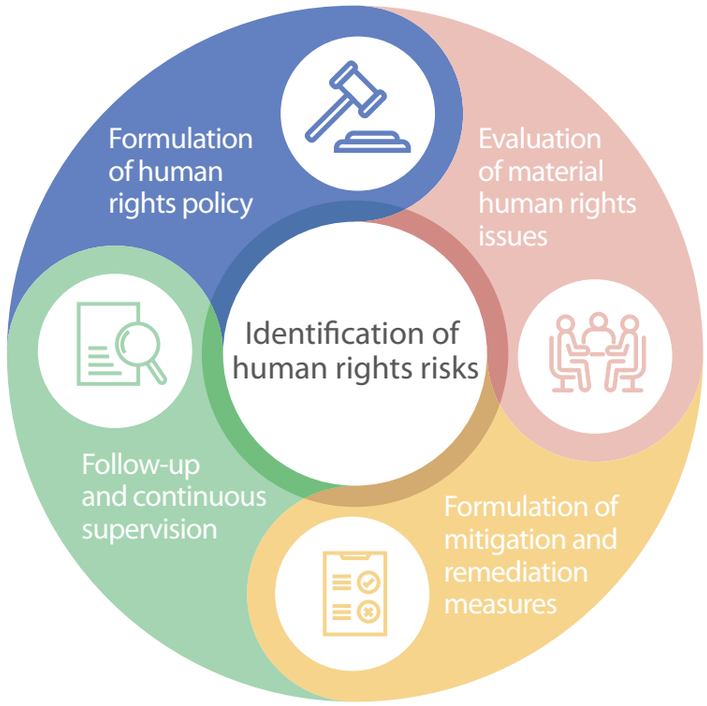
The main e-mails include: Employee Complaints Mailbox (talk@alphanetworks.com), Employee Sexual Harassment Complaints Mailbox (care@alphanetworks.com), and the Stakeholder Complaints Mailbox (improvement@alphanetworks.com). All complaints are handled in accordance with the Whistleblower and Complaints Management Regulations to protect the rights of whistleblowers or complainants.

▸ There were no whistleblower or complaint cases relating to human rights at Alpha Networks in 2024.

3.1.2 Identification of Human Rights Risks

Alpha Networks is committed to fulfilling corporate social responsibility and implementing human rights policies. Through human rights issue assessments and risk identification, the company formulates management measures and risk mitigation strategies, implements improvements, and conducts follow-up monitoring to effectively reduce the impact and repercussions of human rights risks.

Alpha Networks' human rights risk identification process



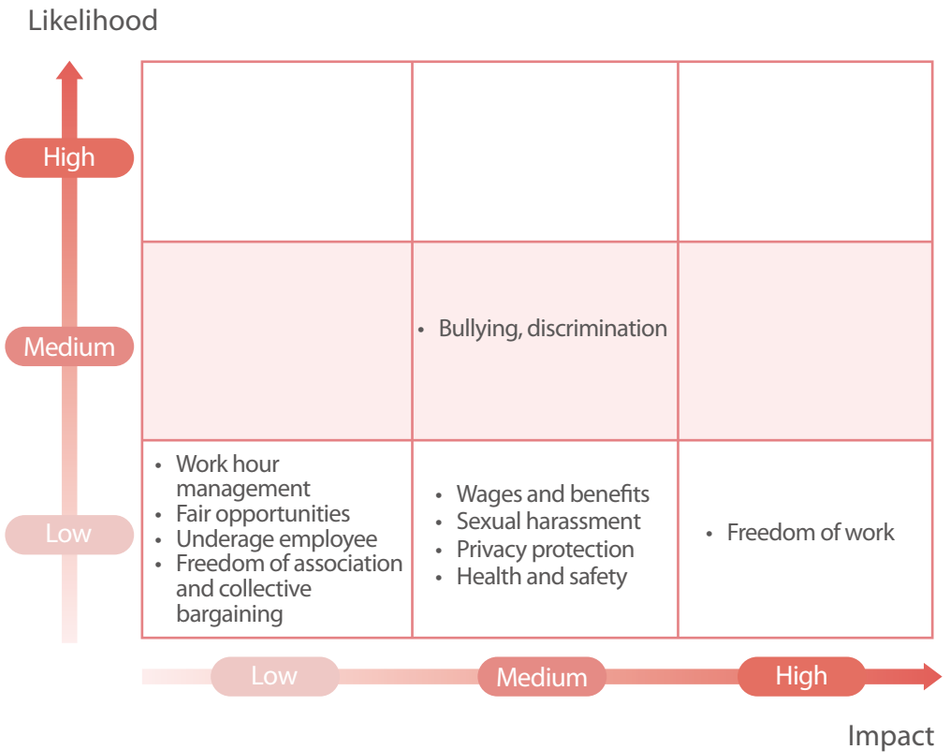
Material human rights risk issues

Referring to the RBA (Responsible Business Alliance) Code of Conduct and various international human rights policies, we have identified 10 key areas of concern to serve as focal points for our human rights risk assessment. Following the PDCA process, we have conducted evaluations of human rights risks and potential impacts through an internal expert voting process.

Item	Risk description
Freedom of work	1. Worker is forced to perform a certain kind of work and cannot leave or change professions at will (e.g. debt bondage, agreement trap, illegal confiscation of passports). 2. Businesses use excessive non-compete clauses to restrict an employee's career choices after separation. 3. Businesses that impose gender, race, national or age-based restrictions on job applicants.
Work hour management	1. Overtime exceeds the statutory limits set by the local government. 2. Work for more than 7 consecutive days. 3. Work schedule delays and requiring employees to arrive early without pay.
Wages and benefits	1. Business did not calculate employees' statutory insurance contributions based on their full salary. 2. Salary paid to employees is lower than the statutory minimum wage. 3. Overtime rates are lower than the statutory rate. 4. Overtime not paid at the statutory overtime rates for working on holidays and weekends. 5. Wages not paid in full and in a timely manner. 6. Improper withholding of employee wages.
Fair opportunities	1. Business does not provide employees with equitable training opportunities. 2. Differences in development opportunities such as promotions and rotation due to gender or other similar factors. 3. Opaque reward scheme.
Underage employee	1. Employment of minors during peak production periods, and arranging for them to work overtime or night shifts. 2. Work for more than 7 consecutive days.
Sexual harassment	1. Any unwelcome sexual advances in the workplace or other work environments. 2. Failure to define clear rules or a zero-tolerance policy for sexual harassment in the workplace culture. 3. Opaque reporting mechanism for sexual harassment, or the whistleblower may be subjected to retaliation. 4. Lack of employee training on gender equality or codes of conduct in the workplace.
Bullying and discrimination	1. Unfair treatment of individuals or groups on the basis of gender, race, age, religion, nationality, sexual orientation, disability, or other attributes that impact on their employment, promotion, compensation, training, or work opportunities. 2. Hostile behavior over a long and sustained period of time including verbal abuse, malicious insults, isolation, impossible expectations, or unfair treatment. 3. The lack of a clear grievance and reporting mechanism for discrimination or bullying, or the whistleblower may be subjected to retaliation. 4. Failure to address incidents of discrimination and bullying against employees or responding to employee reports or incidents with a passive or negative attitude.
Privacy protection	1. Unauthorized disclosure of personal information that results in the violation of employee/customer/supplier privacy. 2. Inappropriate collection and processing of personal data. 3. Information security vulnerability: Failure by the Company to provide adequate protection for personal data resulting in hacker attacks or leakage of information. 4. Surveillance and violation of personal liberty: A business may sometimes engage in inappropriate surveillance under certain circumstances.
Health and safety	1. Health hazards that happen to employees in the workplace that require treatment for full or partial recovery. Example: Work injury, occupational injury, use of hazardous substances, working in hazardous environments etc. 2. Inadequate occupational safety and health training and measures exposing employees to risks of occupational injuries or diseases.
Freedom of association and collective bargaining	1. Workers' right to freedom of association is suppressed by the business, restrictions imposed on the establishment and operation of trade unions, and denying workers the right to collective bargaining on working conditions. 2. Threatening, coercing, or retaliating against employees for setting up unions or engaging in collective behavior; restricting employees from exercising their right to freedom of association through re-assignment, pay cuts, dismissals and other methods. 3. Failure to implement labor-management communication channels in accordance with local government laws. 4. Employer forcing employees to take part in political or social activities against their will.

Results of human rights risk assessment

The results of the human rights risk assessment involve a matrix-style risk evaluation using two vectors: “likelihood of occurrence" and "extent of impact”. After calculating composite scores to form risk coefficients, they are used to determine the severity of potential risks. Corresponding mitigation or remediation measures are then implemented based on the identified risks.



Formulation of mitigation and remediation measures

No	Human rights risk issue	Status of risk assessment	Mitigation and remediation measures
1	Freedom of work	Low likelihood High impact	1. Formulation of human rights policy to ensure that will work is voluntary and employees Thave the right the resign or end their employment contract at any time. 2. All employees must sign an employment contract when joining the Company to confirm that they are here of their own free will to eliminate sources of forced labor. 3. The Hsinchu Factory was certified by a third-party notarization unit in 2024 and will implement the foreign worker repayment program from 2025 onwards. We will enforce the policy of zero fees for migrant workers in the future.
2	Work hour management	Low likelihood Moderate impact	1. Monitoring attendance status through HR attendance system. 2. Regular issuance of abnormal alerts and warnings to employees and their supervisors. 3. Issue reminder to employees who have reached the daily working hour quota to avoid overtime situations. 4. Strengthen communication within the factory management system and plan appropriate workforce reserves.
3	Wages and benefits	Low likelihood Moderate impact	1. Payment of employee compensation should comply with all local regulations, including basic wages and overtime fees. 2. Review internal and external environmental changes, participate in wage surveys to adjust wage policies and compensation planning schemes to optimize the overall competitiveness of the company's compensation.
4	Fair opportunities	Low likelihood Low impact	1. Establish and implement performance appraisal and promotion systems. 2. Integrate employee performance with bonus and salary adjustment systems.
5	Underage employee	Low likelihood Low impact	1. Strict scrutiny of personal data during recruitment and selection. 2. Implementation of third-party security consultation for personnel hiring.
6	Sexual harassment	Low likelihood Moderate impact	1. Establish of human rights policies at Alpha Networks. 2. Enhance internal training and prevention advocacy on related issues. 3. Establish and implement "Workplace Sexual Harassment Prevention, Complaint and Punishment Measures". 4. Establish diverse internal communication channels and complaint mechanisms. 5. Optimize employee counseling and guidance measures.
7	Bullying and discrimination	Moderate likelihood Moderate impact	
8	Privacy protection	Low likelihood Moderate impact	1. Establish information security management policies to protect employees, customers, suppliers, and operational-related information assets. 2. Establish "Ethical Corporate Management Best Practice Principles" and "Code of Ethical Conduct" to clearly demonstrate the protection of stakeholders' information privacy.
9	Health and safety	Low likelihood Moderate impact	1. Specify the accident and occupational hazard reporting procedures. 2. Conduct regular safety evacuation drills. 3. Provide suitable and compliant protective equipment for employees in special working environments. 4. Implement various safety advocacy and protective equipment inspections. 5. Provide regular occupational health check-ups for employees engaged in hazardous work. 6. Specify investigation and handling procedures for all safety and health incidents.Record each incident in detail for proper review.
10	Freedom of association and collective bargaining	Low likelihood Low impact	1. Establish of human rights policies at Alpha Networks. 2. Enhance internal training on related issues. 3. Ensure effective labor-management meeting functions to provide effective communication channels.

3.2 Talent Acquisition

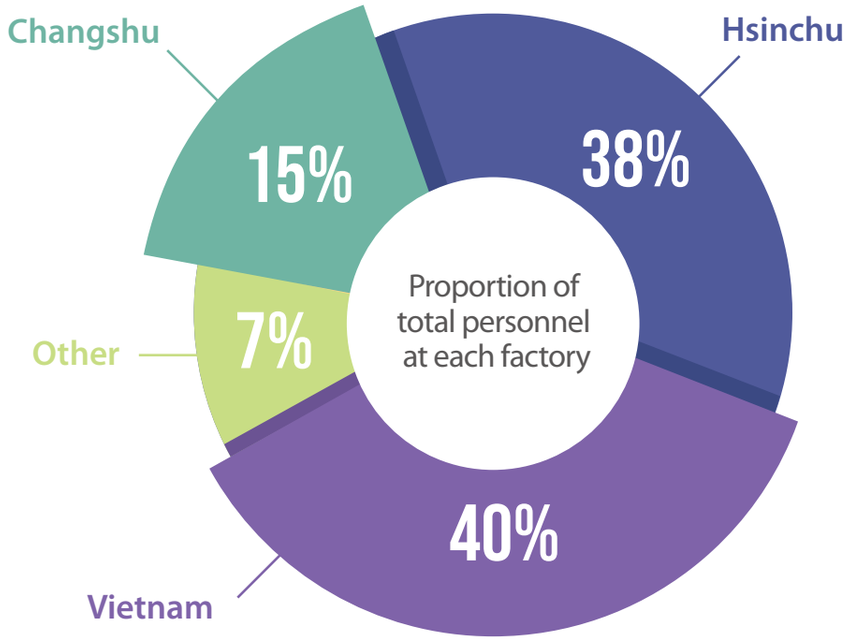
Attract, develop and engage global talent needed by Alpha Networks.

Alpha Networks was established in Hsinchu Science Park in 2003, and its locations have expanded to North America, Japan, China, Vietnam, and India. As of the end of 2024, our global workforce numbered nearly 3,000.

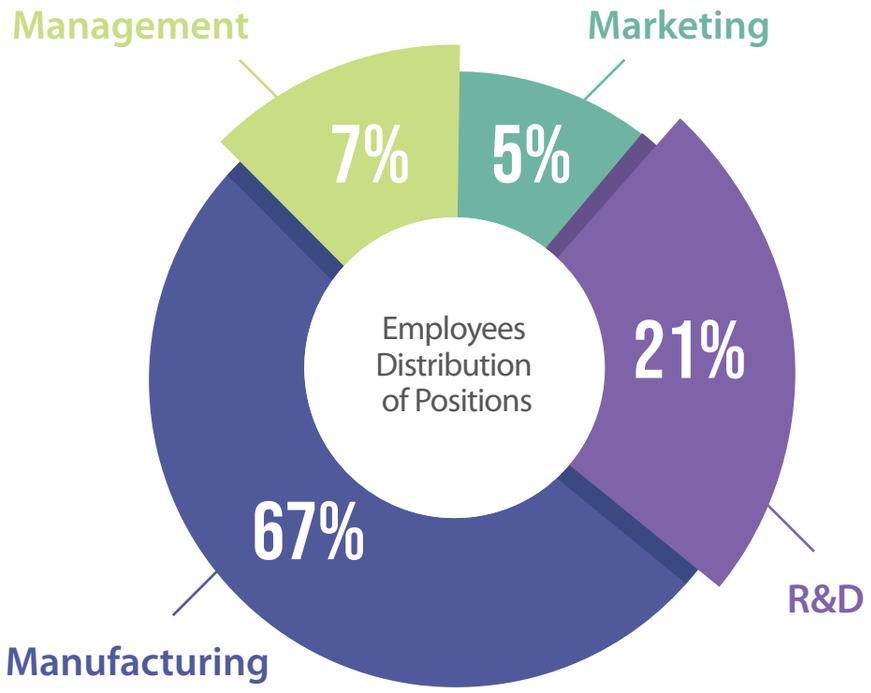
As we believe that talents are our most valuable assets, Alpha Networks is committed to a diverse and equal workplace internally and competitive organizational power externally, to attract and recruit the talents it needs for its sustainable development and global expansion.

3.2.1 Manpower Allocation

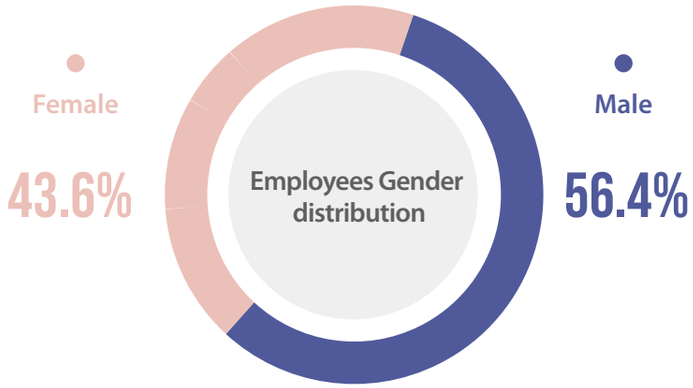
The Alpha Networks' headquarter is located in Hsinchu Science Park. HQ staff accounted for 42% of the total workforce. Responsibilities include product design and development, marketing and routine operations. Alpha Networks is committed to staying in Taiwan so it's primary R&D location is located here As for our main production sites, apart from our Hsinchu HQ, they are located in Changshu (China) and Hà Nam (Vietnam). The 2 overseas factories accounted for approximately 55 % of our total workforce while other overseas business units constituted about 7% of the total company workforce.

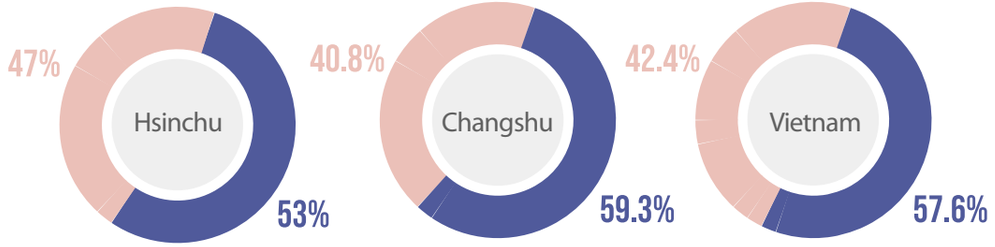


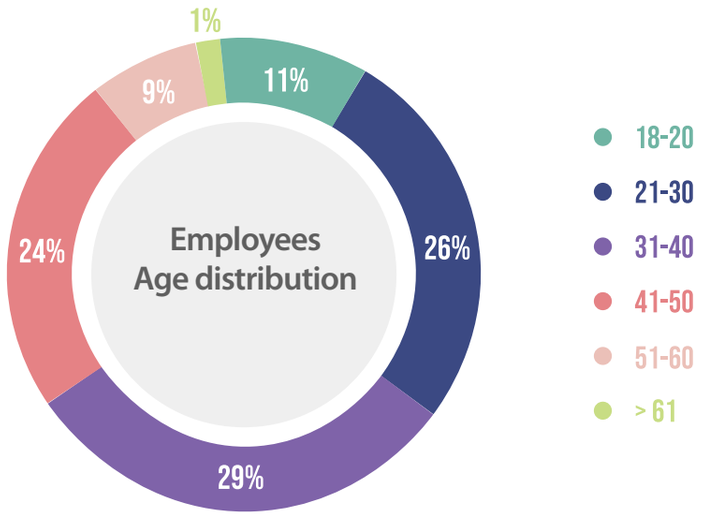
As a network communications OEM service provider, the bulk of Alpha Networks' employees, stands for 67%, attributes to manufacturing related personnel. Extensive R&D resources have been invested towards the building of high-performance/high value-added network communications products. R&D personnel stands for 21% of the total.



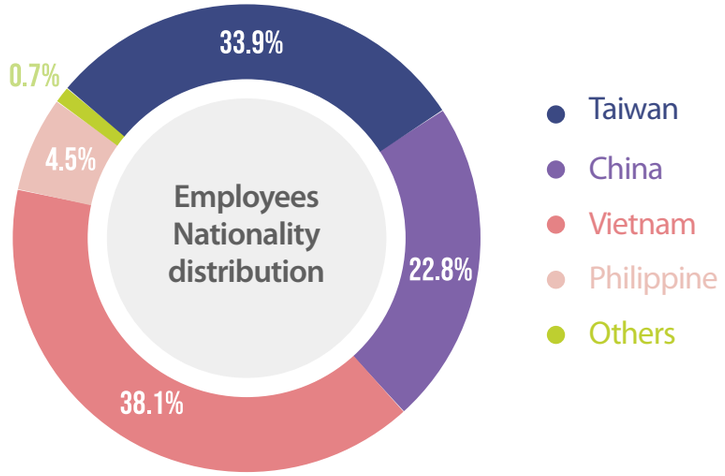
To uphold the spirit of the "Responsible Business Alliance's Code of Conduct", Alpha Networks formulated a company hiring policy based on the "New Employee Hiring Regulations" to make sure that our employees are not discriminated against based on "ethnicity, skin color, age, gender, sexual orientation, race, religion, pregnancy and other conditions protected by the law."

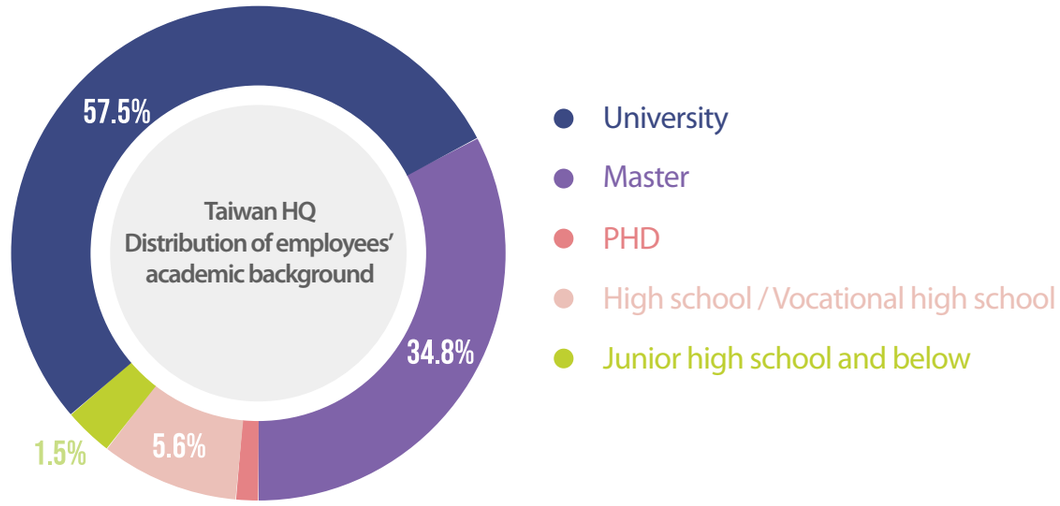






Workplace diversity is promoted throughout the Alpha Networks group. Men accounted for 56.4% of the global workforce while women accounted for 43.6% in line with industry attributes. In terms of employee nationality, bulk of our employees can from Taiwan, China, and Vietnam where we set up factories. We also foreign nationals from the Philippines, US, Japan, India, Malaysia, and South Africa.





3.2.2 Talent Recruitment and Retention

The age distribution of new Alpha Networks employees in 2024 were as follows:

New	Number %	Age						
		18~20	21~30	31~40	41~50	51~60	61~	Subtotal
Taiwan HQ	Number	0	13	43	55	22	0	133
	%	0.00%	9.77%	32.33%	41.35%	16.54%	0.00%	100.00%
Changshu (China)	Number	0	0	2	0	0	0	2
	%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%
Chengdu (China)	Number	0	1	0	1	0	0	2
	%	0.00%	50.00%	0.00%	50.00%	0.00%	0.00%	100.00%
Vietnam	Number	4	10	2	5	0	0	21
	%	19.05%	47.62%	9.52%	23.81%	0.00%	0.00%	100.00%
USA	Number	0	0	0	0	0	0	0
	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Japan	Number	0	0	0	0	0	0	0
	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
India	Number	0	1	4	0	0	0	5
	%	0.00%	20.00%	80.00%	0.00%	0.00%	0.00%	100.00%
Europe	Number	0	0	0	0	0	0	0
	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total	Number	4	25	51	61	22	0	163
	%	2.45%	15.34%	31.29%	37.42%	13.50%	0.00%	100.00%

The distribution of ages for permanent employees that separated from Alpha Networks during 2024 are as shown in the following table:

Separation	Number %	Age						
		18~20	21~30	31~40	41~50	51~60	61~	Subtotal
Taiwan HQ	Number	0	23	31	19	13	1	87
	%	0.00%	26.44%	35.63%	21.84%	14.94%	1.15%	100.00%
Changshu (China)	Number	0	0	2	1	0	0	3
	%	0.00%	0.00%	80.00%	20.00%	0.00%	0.00%	100.00%
Chengdu (China)	Number	0	2	2	4	0	0	8
	%	0.00%	25.00%	25.00%	50.00%	0.00%	0.00%	100.00%
Vietnam	Number	0	3	6	7	0	0	16
	%	0.00%	18.75%	37.50%	43.75%	0.00%	0.00%	100.00%
USA	Number	0	0	0	0	0	0	0
	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Japan	Number	0	0	0	0	0	1	1
	%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
India	Number	0	0	0	0	0	0	0
	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Europe	Number	0	0	0	0	0	0	0
	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total	Number	0	28	41	31	13	2	115
	%	0.00%	24.35%	35.65%	26.96%	11.30%	1.74%	100.00%

3.2.3 Talent Sustainability

Alpha Networks received the “Talent Sustainability Award” in the large enterprises - manufacturing division presented by CommonWealth magazine in 2024.

The workplace is where employees spend most of their day in today’s society so it exerts a great influence on them as well. Beyond the facilities that make up the hardware, intangible factors such as the atmosphere also plays a very important part. The issue of mental health has attracted growing attention from government agencies and businesses in recent years. In addition to growing emphasis on employee awareness and understanding of mental health, mental state also affects physical health as well. The physical and mental well-being of employees are therefore closely connected to business development. Maintaining positive physical and mental health not only helps employees cope with the challenges at work but also boosts their productivity, making it the foundation of talent sustainability at the company. Employees that maintain good physical and mental health will also perform better in personal interactions, enhancing their communication and problem-solving skills. Business innovation and development benefits as well. The Company hosts a variety of activities to promote the physical and mental well-being of employees to expand the positive effects beyond individuals to work and life.

We are developing in different dimensions to co-create a happy workplace for “leisurely life, fun life, and happy life.”

I. Leisurely Life - Start from the “Heart”

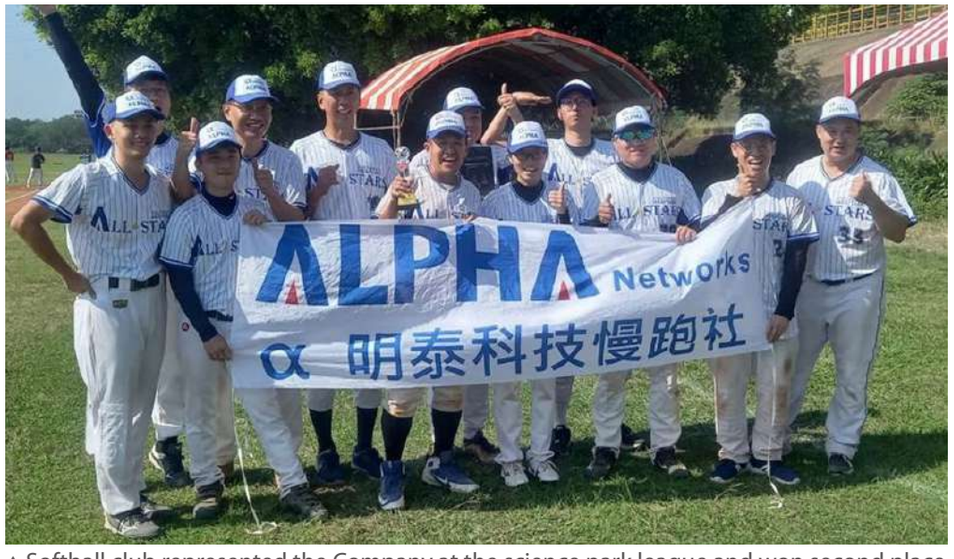
Modern life is very stressful so the Company pays particular attention to the mental health of employees. The monthly "Spiritual Retreat Article” covers topics such as workplace communication, spiritual growth, and next-generation communications. The “Alpha Networks Academy” purchases books that employees like through a combination of market survey and employee voting. The books can be borrowed by employees to go on an inner journey. The “Mental Health Seminars” help employees understand how to better handle their emotions and pressures. If all the negativity is about to go critical, the “Mental Heath Hotline” offers immediate assistance available at any time.

II. Fun Life - Joy of food and participation

Every employee is unique. Employees are presented with a dessert box and birthday card signed by the chairman on their birthday. This warms everyone’s heart and makes them feel valued on their special day. The dessert box is supplied by the Children Are Us Foundation charity’s sheltered workshop to make the birthday all the more meaningful. The Company has 18 clubs including the more sedate flower arrangement and Ukulele clubs, as well as the very dynamic aerobics and ball sports clubs. The softball club in particular represented the Company at the science park league and won second place. Our people not only work hard but also feel a sense of tremendous achievement.

▼ Birthday gift box

▼ Flower Arrangement Club



▲ Softball club represented the Company at the science park league and won second place

III. Fun Life - Sharing and caring together

Enhancing the happiness of our employees has always been a goal of the Company. The Employee Welfare Committee provides more than 200 partner merchants for food, clothing, accommodation, travel, education, and recreation. Electronic gift vouchers are also given out on holidays to give employees more options. Physical health is the most important asset a person may have. A healthy body is necessary to enjoy a better life. "On-site physician consultations" offers preliminary consultations for health concerns to identify the direction for further treatment. Neck and shoulder pain is now a disease of civilization for people today. The Company has collaborated with the Hsinchu City Development Association for the Visually Impaired to offer massage services 3 days a week. Massages not only help to relax the body but also relieves stress. The Company organizes periodic visits from the blood donation bus. Everyone then rolls up their sleeves to donate blood to Taiwan's blood banks and fulfill our corporate social responsibility.

IV. Fun Life - Continuing education and learning through play

The Company set up a foundation to promote environmental sustainability and education. Volunteers were initially recruited at HQ to organize a variety of events that made a difference in society and helped recharged people's inner batteries. For "popular science education", the Company leveraged the power of network communications to help students engage in diversified learning that aligns technology education with the rest of the world. October is the fall harvest season and we traveled to Xizhou for the rice harvest. Through the event, volunteers could appreciate the hard work involved in harvesting rice. Knowledge learned through personal experience leaves a far stronger impression than those read in a book. The event also made volunteers appreciate the value of food and the important of sustainability in Mother Nature.

❖ For more information on related ecological activities, please refer to 4.2.4 Biodiversity.

▼ Massage services provided by the visually impaired

▼ On-site blood donation drive

▼ Volunteers' trip

3.3 Salaries and Benefits

Improve the salary and welfare system to retain talent for the Company's development

3.3.1 Salary Level

To recruit and retain outstanding talent, Alpha Networks takes into account market standards and compliance with labor laws and regulations of the jurisdictions where its plants are located, regularly reviews its salaries and welfare measures in relation to the market to remain competitive in the labor market. Alpha Networks upholds a fair salary and benefits policy where employee remuneration is not influenced by personal factors such as gender, ethnicity, nationality, or age. Salary determination is based on professional competence, education, and experience. After joining, salary adjustments and bonuses are made annually based on individual performance and the company's overall operational status.

Comparison of average salaries of new Alpha Networks employees

Region	Category	Female	Male
Taiwan	Direct personnel	1.07	1.07
	Indirect personnel	1.85	1.85

Note: Starting salary / Statutory minimum wage

Comparison of starting salaries of new Alpha Networks employees

Region	Category	Female	Male
Taiwan	Direct personnel	1	1
	Indirect personnel	1	1

Note: Starting salary of new female employees vs Starting salary of new male employees

To improve the quality of corporate governance information disclosure and fulfill its social responsibility, Alpha Networks discloses the "average" and "median" salaries of its full-time employees who are not in supervisory positions, to make its employee salary statistics more informative, reliable, and comparable.

In 2024, the number of non-management full-time employees was 1,100 with an average salary of NTD 1,144,000 and a median salary of NT$ 1,132,000. A comparison with the previous year is shown below.

Item	2021	2022	2023	2024
Number of non-supervisory full-time employees	1,249	1,137	1,197	1,110
Average salary of non-supervisory full-time employees	NT$ 902 thousand	NT$ 1,116 thousand	NT$ 1,132 thousand	NT$ 1,144 thousand
Median	NT$ 825 thousand	NT$ 1,050 thousand	NT$ 1,066 thousand	NT$ 1,132 thousand

* For more information on our remuneration, benefits, and leave system, please refer to the Alpha Networks website> Career.

3.3.2 Welfare Measures and Employee Insurance

Welfare measures

Alpha Networks offers bonus and vouchers to employees in 3 Chinese traditional festivals. To help employees find their work-life balance, employees travel subsidies are disbursed every year. We provide free indoor parking spaces for cars and motorcycles so that staff do not have to worry about the weather when they commute. The staff cafeteria provides varied and nutritiously balanced meals. there are chain convenience stores on-site.

Through these welfare measures, we aim to provide our staff with life conveniences after work.

Employee insurance

Alpha Networks (Hsinchu Factory) processes retirement and pension applications in accordance with the Labor Standards Act and the Labor Pension Act. Monthly pension contributions are also paid to the statutory bank accounts. Under the new and old pension systems, employer contributions amount to 6% and 2% of the monthly salary, respectively. According to the Labor Pension Act, only vocational school students and foreign colleagues are exempt from making pension contributions. 100% of permanent employees are enrolled in the pension plan with only 7 still on the old system. In addition, the permanent and contract employees at Alpha Networks (Hsinchu Factory) join the coverage of group insurance that is superior to the insurance required by the law since their first day at work in order to protect the safety of their work and life. For overseas Alpha Networks (Chengdu Factory), Alpha Networks (Changshu) and Alpha Networks (Vietnam Factory) all employees join the coverage of social insurance according to the local regulations from Day 1, and other social security measures such as monthly contribution to retirement pension and medical care are also implemented.

3.3.3 Leave System

In order to implement the leave management system at Alpha Networks (Hsinchu Factory), employee annual leave and remaining compensatory time notification will be delivered at the beginning of each month to remind the employees to plan their leave accordingly, thereby promoting the concept of a healthy workplace. For overseas factories, leaves are granted in accordance with local regulations.

Alpha Networks (Hsinchu Factory) offers maternity parking spaces, lactation rooms, prenatal exam leave (for both parents), family leave, marital leave, and Welfare Committee's baby bonus to encourage employees to start a family. At the same time, the Company complies with the labor rights stipulated by the Act of Gender Equality in Employment, where both male and female employees are entitled to apply for prenatal exam leave, maternity leave and paternity leave: In 2024 (Jan ~ Dec), 7 female employees applied for maternity leave, and 2 of them returned to work after their leave ended. Reinstatement rate after maternity leave was therefore 71.43%. 11 male employees applied for prenatal exam leave and paternity leave. Reinstatement rate after their leave ended was 100%.

Hsinchu Factory	Female				
	Number of People on Maternity leave	Number of People on Returned to work after Maternity leave	Percentage of Returned to work after Maternity leave	Number of People on leave without pay after maternity leave/ Resignation	Percentage of People on leave without pay after maternity leave/ Resignation
2021	11	7	63.6%	4	36.4%
2022	11	9	81.8%	2	18.2%
2023	5	3	60.0%	2	40.0%
2024	7	5	71.43%	2	28.57%

Hsinchu Factory	Male		
	Number of People on Paternity leave	Number of People on Returned to work after Paternity leave	Percentage of People on Returned to work after Paternity leave
2021	6	6	100.0%
2022	12	11	91.7%
2023	17	15	88.2%
2024	11	11	100.00%

3.4 Talent Development

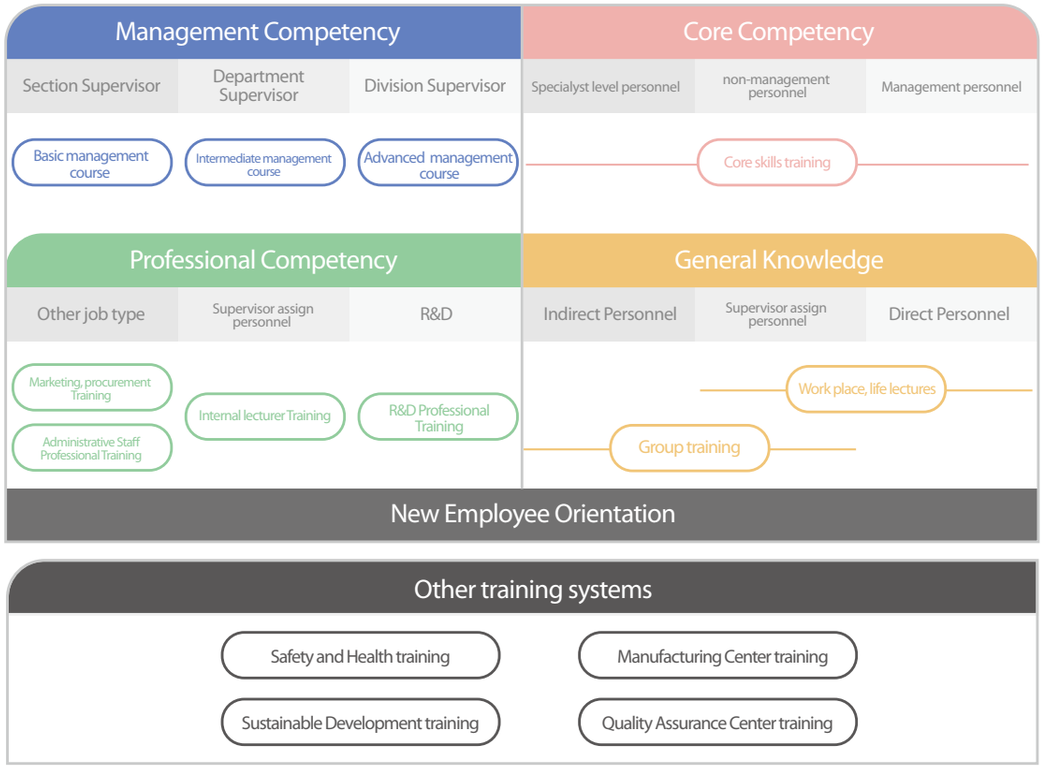
Our growth as a company depends on the development of our talents

3.4.1 Training and Development

The sustainable development of the Company is based on continuous talent development. Alpha Networks is aware that training and development is essential for the long-term thriving of any enterprise, and talents are its most valuable asset. So the Company spares no effort in employee training and career planning. Every year, we invest a tremendous amount of time, money and manpower in providing them with the best learning opportunities, resources and development platform, while comprehensive training systems are designed to cater to the needs of our colleagues during various stages:

* Alpha Networks' talent development related information can also be found on the Alpha Networks website > Carrer.

A comprehensive training system supports the learning needs of employees at different stages. Based on their roles, we create learning blueprints for our staff:



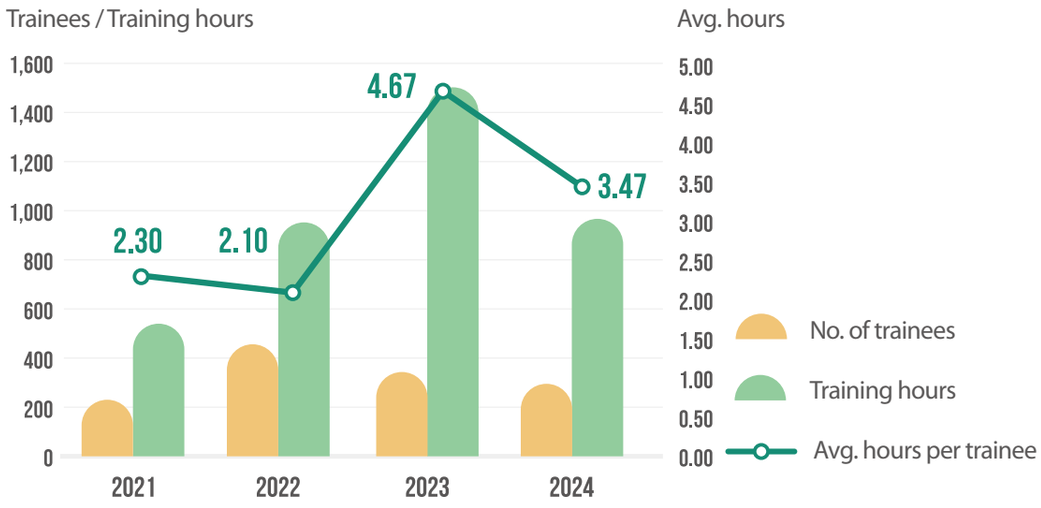
For indirect staff, upon joining, they begin to undergo systematic training under the human resources training system. The main contents include:

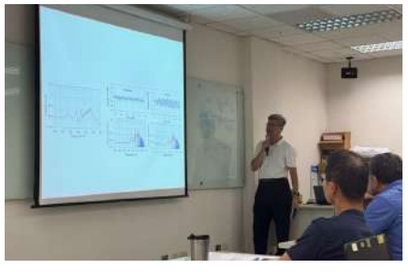
- Orientation training: Providing each new employee with comprehensive introductory training, including both physical and online courses. The content covers company introduction, organizational structure, values and goals, rules and benefits, operation of internal systems, environmental safety and health, and other common courses. Additionally, there are individualized professional courses tailored according to different job categories. This helps employees quickly understand the company and integrate into its culture.
- Management training: Relevant management courses are developed based on the management competency required by different levels of executives in order to reinforce their management ability.
- Core skills training: Alpha Networks believes that alignment with organizational beliefs and developing employees' integrity, positive mindset and friendliness are essential to driving our long-term development. Therefore, we offer employees courses and seminars on positive thinking and self-motivation every year.
- Specialized training: For different job categories, various professional skill courses are planned to promote the enhancement of professional abilities across different departments and facilitate technical exchange. Additionally, in conjunction with the instructor training management system, instructor training sessions are conducted to improve teaching quality and internal knowledge transfer.
- General education and training: Group courses aim to provide consistent training for all employees to enhance their understanding and concepts. Workplace life seminars focus on achieving work-life balance and cover topics such as parenting, health, and personal growth.

In addition to the existing curriculum system, Alpha Networks has implemented newly developed courses in response to various internal and external needs:

- R&D technology training: We cultivate our own 5G, 6G and other R&D talents, we also invite expert lecturers (6-8 times a year) for technical seminars in line with our technology development direction and the latest trends including AI and LEO satellites.

  We conducted 967 hours of training in 2024 with each trainee undertaking on average 3.47 hours of training; average satisfaction rating for learning was 4.5 (out of 5).





- ESG course: To enrich ESG knowledge and make sustainable development a common issue among all employees, since 2022, Alpha Networks has incorporated "ESG Sustainable Development" and "Integrity Governance" modules into its new employee training curriculum. Training on material issues such as "human rights" and "prevention of insider training" was strengthened as well.
- The Company conducted 1,556 hours of annual ESG training during 2024 with a total attendance of 3,480.
- To encourage staff to pass on their professional knowledge and valuable experience, Alpha Networks runs an internal lecturer system. Every year on the anniversary of Confucius's Birthday in September, lecturer awards are held to encourage internal talents to join the lecturer system.
- Alpha Networks encourages self-study by employees. In addition to the "Alpha Networks Academy" at headquarters, an annual budget enables the purchase of best-selling books and management magazines, which are available to staff for free to enrich themselves after work. Fixed rewards are given for employees learning foreign languages and passing foreign language proficiency tests.
- In addition to HR training, annual courses are conducted for different job categories or business functional personnel in areas such as manufacturing technology, quality systems, safety and health, and sustainable development. These courses aim to ensure operational safety, stable production quality, and the promotion of important policies.

In 2024, the Company conducted 48,851 hours of training in total. Total training attendance during the year was 21,972.

Participants / Hours	Participants		Hours	
Training type	Internal Training	External Training	Internal Training	External Training
Direct personnel	12,007	0	30,232	0
Indirect personnel	9,706	79	17,550.5	1,068.5
Subtotal	21,713	79	47,782.5	1,068.5
Total	21,792		48,851	

3.4.2 Performance and Promotion Management

Performance management

To achieve the company's short, medium, and long-term goals, department heads need to set performance objectives that align with the company's development goals. They must also establish clear metrics and action plans, review progress midway through the year, and focus on performance targets for the second half of the year to ensure alignment between departmental objectives and company development goals. At the end of the year, managers should review the results and use employee performance as the basis for promotions, salary adjustments, bonus distribution, and training and development opportunities.

Promotion management

Alpha Networks offers both management and non-management tracks to personnel that demonstrate outstanding performance and potential. Those willing to take on greater challenges and responsibility can do so, while specialists can also demonstrate their skills in their chosen field. Alpha Networks provides supervisors with a list of personnel who satisfy the criteria for performance and seniority. Supervisors can then nominate candidates for promotion. The candidates are then reviewed by the authorized manager. If an employee is slated for promotion to management roles, the supervisor will evaluate their management competencies and arrange for them to attend management competency courses if necessary.

3.4.3 Employee Activities

With diverse employee activities such as year-end banquets, birthday parties, clubs, family days, sports competitions, the company also organizes various lectures from time to time, covering popular topics such as health care, parenting, and stress relief. Alpha Networks provides substantial subsidies for group travels each year, allowing them to strike a balance between work and personal life.

When the pandemic ended, employee activities could once again be held as normal. People actively took part in all kinds of activities to release all their pent-up stress. In addition to active participation in internal clubs and employee activities, participation in group or external events or competitions has also repeatedly achieved excellent results.

▼ Wide variety of recreational activities

▲ Engineers Day Puzzle Games

▲ Sports competition

▲ Family day

▲ Dress code activities

▼ Exciting and diverse club activities

Pilates Club

Badminton Club

Zumba Club

Flower Arrangement Club

Softball Club

Street Dance Club

Tennis Club

Yoga Club

Aerobic Boxing Club

3.5 Safety and Health

We focus on safety and hygiene to provide a good working environment

3.5.1 Safety and Health Policy

Alpha Networks places great store by safety and health. The following 5 safety and health policies were formulated to provide employees with a sound working environment:

- Each unit supervisor participates in daily safety and health management.
- We prevent occupational disasters to protect employee safety and health.
- We comply with domestic safety and health regulations and other relevant norms.
- We continuously review and improve the efficacy of our safety and health management.
- Safety, production and quality are equally important.

To promote the above policies, Alpha Networks Hsinchu Factory has a Safety and Health Committee in accordance with the "Occupational Safety and Health Management Measures". The committee meets every quarter with formal worker representatives from internal operations and workers accounting for 100%. These meetings are the channels for safety and health communication between staff and the Company to maintain and improve its safety and health management.

The Changshu Factory has a Production Safety Committee, which holds quarterly production safety management meetings. Unit supervisors attend the meeting to discuss occupational safety and health management issues. All units must appoint staff to serve as safety officers, participate in externally approved safety officer training courses, and obtain safety officer certificates to ensure that they have sufficient occupational safety and health knowledge and competences.
Every unit at the Vietnam Factory must nominate an employee to serve a volunteer firefighter and participate in training from the Labor Safety Department to ensure that the volunteer firefighters possess adequate firefighting knowledge and competences.

In 2024, the Alpha Networks Hsinchu Factory focused on the following safety and health management items:

1. **Automatic inspections:**
   The environment, facilities and special operations of each unit are automatically inspected on a regular basis.
2. **Safety observation and audits:**
   Safety observations and audits are carried out from time to time to reduce unsafe situations and behaviors to protect employee safety and prevent occupational incidents.
3. **Chemical classification management:**
   In accordance with hazardous chemicals assessment and classification management methodology, we carry out chemical investigations, classify and manage chemicals according to their health hazards, and arrange hazard courses to strengthen safety awareness around working with chemicals.
4. **Determination of hazard factors in the plant area:**
   In accordance with our labor operating environment measurement management procedures, we monitor the working environment in the plant, evaluate employee exposure situations and compliance laws and regulations. Every 6 months, Alpha Networks' Hsinchu Factory commissions a qualified company to inspect the plant's environmental status (including the offices and the production area), covering carbon dioxide emissions, organic solvents and other concentrations, illuminance and noise levels to ensure employee safety and health.

The Changshu Factory conducts labor safety management in accordance with the Chinese government's Atmospheric Pollution Prevention and Control Law and Law on Prevention and Control of Occupational Diseases. Hazardous substance monitoring and environmental monitoring is conducted in the workplace once a year.

The Vietnam factory complies with the Vietnamese government's "Environmental Protection Law" and "Labor Safety and Hygiene Law" to ensure labor safety, with an occupational site hazardous substance monitoring and environmental monitoring conducted on a yearly basis.

3.5.2 Safety and Hygiene Training

To comply with laws and regulations on safety and health, Alpha Networks gives various types of safety and health training every year:

- **Fire prevention training:**
  Fire disaster prevention, emergency response drills and internal firefighting team exercises are held every quarter. Seminars and practical drills are used to prevent disasters.
- **Trespassing and suspicious mail package simulation exercise:**
  For staff engaged in security, warehousing and shipping, simulation drills for trespassing and suspicious mail packages are held to improve employees' ability to prevent and deal with disasters.
- **Safety and hygiene training for new and current employees:**
  Safety and hygiene training help strengthen safety and health awareness among new and existing employees, prevent disasters, implement safety and health management regulations, and develop occupational safety and health management knowledge and competences.
- **Emergency team training:**
  To strengthen their safety awareness, staff on the emergency response team participate in emergency response training every year to enhance their emergency competences.
- **On-the-job training on ionizing radiation:**
  To increase the safety awareness among ionizing radiation operation staff, specific ionizing radiation training is given every year.

Statistics on safety and health education and training at Alpha Networks Hsinchu Factory in 2024:

Type	Number of Trainee
Safety and hygiene training for new employees	132
On-the-job employee safety and health training	300
Fire (Evacuation) Training	87
Emergency response team training	65
On-the-job training on ionizing radiation safety	15

Record of safety and hygiene education and training:

▼ Emergency response team training

▼ Evacuation drill training

◀ Fire extinguisher usage training

Statistics on safety and hygiene education and training at overseas factories in 2024:

Type	Factory	Number of Trainee
Hazardous chemical handling training and drills	Changshu	5
Safety training for new employees	Changshu	16
	Vietnam	2,465
Evacuation drill training for all employees	Changshu	51
	Vietnam	796

3.5.3 Occupational Incident

Alpha Networks has a system to report, handle and investigate occupational incidents. It conducts investigations into the root causes and potential causes of occupational injuries, diseases and incidents, to identify failures of the safety and health management system and take corrective and preventive measures to prevent reoccurrence.

Statistics on disabling injuries among employees at the Hsinchu, Changshu, and Vietnam factories in 2024:

The occupational injury statistics at each factory in 2024

Type/site	Hsinchu		Changshu		Vietnam	
	Male	Female	Male	Female	Male	Female
Amount of disabling occupational injury	0	0	0	0	0	0
Lost days of disabling occupational injury in total	0	0	0	0	0	0
I.R.	0	0	0	0	0	0
L.D.R.	0	0	0	0	0	0
OD.D.R.	0	0	0	0	0	0
A.R.	0.89	1.47	3.52	4.49	3.13	3.54
Amount of death on duty	0	0	0	0	0	0

Note 1: The Occupational Accidents Industrial Injury Records describe occupational incidents occurred during operations at the plant, and exclude employees' traffic accident injuries during their commute.
Note 2: Injury/Illness Rate (I.R.) = number of incapacitating injuries/total working hours × 200,000
Note 3: Long-Term Disability Rate (L.D.R.) = Total Lost Days of Disabling Injury / Total Working Hours × 200,000
Note 4: Occupational Disability Rate (O.D.R.) = total number of occupational diseases/total working hours × 200,000
Note 5: Absence rate (A.R.) = total absence hours (sick leave and personal leave) / total working hours × 100%

Labor working conditions

The Hsinchu Factory, Changshu Factory, and Vietnam Factory all reported Total Recordable Incident Rate (TRIR) and Near Miss Frequency Rate (NMFR) as 0 for permanent and contract employees.

Type/site		Hsinchu		Changshu		Vietnam	
		Full-time staff	Contract staff	Full-time staff	Contract staff	Full-time staff	Contract staff
Total Recordable Incident Rate (TRIR)	Number of events	0	0	0	0	0	0
	Percentage	0	0	0	0	0	0
Near Miss Frequency Rate (NMFR)	Number of events	0	0	0	0	0	0
	Percentage	0	0	0	0	0	0
Total working hours		2,279,512	9,888	427,511.5	1,324,798	1,234,674.5	733,026

Remarks: The above ratio is calculated based on 1,000,000 working hours

Contractor's safety and hygiene management

During 2024, the safety and health management outcomes of Alpha Networks' contractors were as follows:

The Hsinchu Factory received 377 applications for construction permits. These included 123 cases for high-risk special operations on-site, as well as notification of on-site hazards and health and safety education for personnel entering the site for the first time for 1133 people. The Changshu Factory received 59 applications for construction permits. These included 8 cases for high-risk special operations on-site, as well as notification of on-site hazards and health and safety education for personnel entering the site for the first time for 12 people. The Vietnam Factory received 122 applications for construction permits. These included 61 cases for high-risk special operations on-site, as well as notification of on-site hazards and health and safety education for personnel entering the site for the first time for 886 people.

▶ During 2024, there were no occupational accidents with losses of more than one day across all Alpha Networks' factories.

3.5.4 Food Hygiene and Safety

To provide safe, hygienic and healthy meals for staff, all factories of Alpha Networks implement a number of food safety management measures:

1. The "Food Committee" was set up to review and improve catering, and supervise food safety and hygiene for employees.
2. Caterers are required to hold HACCP certificates and have qualified nutritionists on their staff. On-site cooking staff are also required to undertake 8 hours of hygiene training for chefs every year.
3. To ensure our people's peace of mind, the staff at all on-site food & beverage vendors must undergo annual health exams in accordance with the food & beverage worker regulations. The exam includes chest X-rays, Hepatitis A antibody, cholera, and skin diseases. All 19 contractor personnel passed their exams in 2024.
4. The contracts signed with each catering company clearly specifies management rights, responsibilities, and measures from ingredient delivery and inspection to food processing, tableware safety, catering staff management, and maintenance and control of environmental equipment.
5. Qualified caterers are selected using a strict criteria. Meal services are inspected daily. Caterers are also required to comply food safety and hygiene regulations.
6. Fruit boxes are supplied daily for employees to choose from to ensure balanced nutrition.
7. Menu was adjusted to reduce fried foods and use vegetable oil. Caterers were also required to use healthier cooking methods for employees peace of mind.
8. The Food Committee and the occupational safety unit conduct monthly inspections and audits of kitchen safety and hygiene to ensure compliance with food safety and hygiene regulations.
9. We conduct questionnaire surveys every quarter to make adjustments and improvements based on employee feedback.
10. With regards to diner numbers/satisfaction in 2024, average monthly diner numbers from Q1 to Q4 was 488. Average satisfaction was 72.5 and met the contractual requirement of 70.

2024	Q1	Q2	Q3	Q4
Group Meal Satisfaction Score	73.7	72.7	71.8	71.9
Average number of diners/day	554	487	465	445

▼ Bright and airy cafeteria

▲ Cleanliness and hygiene emphasized during food delivery and by serving staff

3.5.5 Health Promotion

To foster a friendly workplace, Alpha Networks provides employees with a platform for personal development through equality in the workplace, comprehensive training, and a sound promotion system. We also set up a comprehensive benefits scheme, paying particular attention to the safety and health of employees. The physical and mental well-being of employees is our top priority. It takes healthy employees to take care of families and support the Company's growth. Even more importantly, healthy "individual" is the building block of a healthy and harmonious society.

Alpha Networks' lower employee turnover and longer years of service compared to the rest of the industry means that our employees are also aging even as the Company continues to grow. Middle-aged people have more health concerns than younger people. People over the age of 45 in particular are at higher risk of "metabolic syndrome." Most of the top ten anomalies found during annual health exams were related to the metabolic syndromes of "high blood pressure, high blood sugar, high blood lipids, large waistline, and insufficient good cholesterols."

- **Employee health exam**

a. General employee health exams
Every year, Alpha Networks cooperates with Taoyuan Minsheng Hospital and Hsinchu Science Park Clinic to conduct health exams for new, general, and special employees. The general health exam for current employees includes more tests than the statutory requirements. General health exam coverage was 97%.

With regards to employee health risks, we use the Framingham Cardiac Risk Score assessment tool on a yearly basis for the assessment, which considers 6 indicators: age, cholesterol levels, high-density lipoprotein cholesterol, blood pressure, diabetes, and smoking. It helps assess the risk of developing ischemic heart disease over the next ten years for different groups and sends email reminders accordingly.

b. Special health exams and management
Every year, personnel in units exposed to special health hazards, including noise, ionizing radiation, or n-Hexane operations. A list of at-risk personnel in eligible categories are submitted by industrial safety staff for conducting physical and health exams on related hazards. Exam coverage was 100%. No major anomalies were detected in the health exam results.

- **Healthcare in the workplace**

a. Our medical room has 2 occupational health nurses and 3 times a month, specialist physicians come to the plant to promote health care, health promotion and special protection.

b. The nurses analyze abnormal patterns and manage personal health in a tiered system based on the results of health inspections. They also hold health care and health promotion activities to help staff improve the health awareness and healthy lifestyles. Based on the inspection results, which are divided into 5 grades from 1 to 5, different management measures are takes, from regular tracking, plant health and safety education, plant physicians' consultations or outpatient and emergency re-examinations, so as to assist colleagues in raising health awareness and implementing healthy lifestyles. We tracked and completed follow-ups with all 9 employees classified as Level 5 or above. Up to 56 people consulted visiting physicians as wellAnalysis of the annual health exam data identified the following top 10 anomalies/ratio among Alpha Networks employees. Many were related to metabolic syndrome. (*relevant item)

Top 10 Anomalies (All/Men and Women)

1. Abnormal BMI*	56.1%	6. Epithelial cells in urine	20.4%
2. Low-density lipoprotein cholesterol *	51.5%	7. Uric acid*	20.2%
3. Urine culture	49.7%	8. Triglycerides*	18.2%
4. Total cholesterol*	47.2%	9. Blood sugar before meals*	16.7%
5. Abnormal waist size*	37.3%	10. Leukocyte esterase in urine*	13.9%

♥ Employees with metabolic syndrome anomalies picked up during screening are registered for tracking and management. A total of 22 people were interviewed and tracked. Measures such as physician interviews, lifestyle management, follow-up monitoring, and related seminars reduced the rate of such anomalies to 15.4%.

We offer seminars on metabolic syndrome and colorectal cancer based on employee ID numbers during on-site service sessions at the factory. In 2024, there were 3 sessions attended by 158 people.

c. To address the importance of coping with workplace stress among colleagues, we promoted a counseling hotline and provided self-help articles to help colleagues understand themselves better and how to seek support and assistance with problems.

- **Health promotion and care**

In 2024, 7 health promotion seminars were held with 280 participants.
To help employees identify potential health problems, we offered cancer screening services (such as abdominal ultrasound, gynecological ultrasound, mammogram, and pap smears) to enable "early detection and early treatment" and reduce the severity and impact of the disease on people's lives. The services were used 255 times.

In addition to caring for the physical health of staff, we also offer health education, care and notifications for staff suffering from occupational or private injuries and illnesses, including injury/illness tracking, advice on reasonable days of rest and recuperation, return to (different) work assessment, and assistance with reintegration in the workplace.

The various health promoting measures adopted by Alpha Networks were recognized at the "Corporate Health Responsibility (CHR) Awards" (Large Enterprises - Manufacturing) hosted by the CommonHealth magazine with recognition as a "99 Healthy Enterprises."

- **Maternal healthcare and protection**

a. The Company provides exclusive parking spaces for female staff over 6 months pregnant.

b. We have a "Maternal Health and Protection Regulation", and offer maternal health protection and care to female workers from pregnancy until one year after giving birth or while breastfeeding. In 2024, 6 employees received relevant care and assistance.

c. We offer private rooms for breastfeeding or milk expression with facilities (refrigerator/sterilizer// electric heater, etc.), to offer peace of mind to working mothers.

d. In 2024, the Company redrew the company parking lot and added 6 maternity parking spaces. The spaces were also located near the elevator for the convenience of pregnant employees.

♥ The Company's upgrades to the environment and facilities of the lactation room led to the "Friendly Lactation Room - Outstanding Performance Award" from the Public Health Bureau of Hsinchu City in August 2024.

- **Infectious disease prevention and care**

Self-funded influenza vaccination activities were held in 2024 and used by 118 people.

- **Emergency first-aid mechanism**

There're 3 AED devices in Hsinchu Factory, the use of which is included in the evacuation drills to train, audit and replenish the supplies of the emergency cabinets and medicine cabinets in the staircases. We signed a contract for an ambulance service with the staff clinic to ensure prompt ambulance service in case of emergency.

- **Community care**

2 blood donation events were held, with a total of 144 participants donating 200 bags of blood.

- **Supporting the "4 major plans for labor health protection" required by Ministry of Labor - overwork, human-factor hazard, maternal protection, and unlawful infringement.**

a. Overwork - Health management measures provided to prevent cerebral or cardiovascular-related diseases due to abnormal workloads and protect the physical and mental well-being of employees. Physician consultations are arranged for those with excessive workloads.

b. Human-factor hazards - Special health exams are provided for special workers every year. Other measures include work bench adjustments, reminders to change posture while working, proper rest after work, and introduction of visually impaired masseurs to reduce fatigue.

c. Maternal protection - The "Maternal Health Protection" measures mentioned previously.

d. Unlawful Infringement: To prevent employees being subjected to unlawful infringement, verbal or physical abuse of their body and mind, anti-bullying and anti-sexual harassment policies have been implemented by Alpha Networks. Please refer to 3.1 Human Rights.

3.6 Social Engagement

Playing a symphony of life through fusion of philanthropy and corporate mission

The core philosophy of the Alpha Networks Foundation is "giving back to society." This year, we sponsored a performance at Alpha Networks by the "Gu Dong Yue Xing" Bongo drum percussion band. Gu Dong Yue Xing is a percussion band made up of intellectually disabled children from the Hsinchu Association for Welfare of Persons with Intellectual Disabilities. Thanks to regular training under the direction of professional teachers, the children are now filled with self-confidence and show off their skills in a fun and humorous way. More than 80 Alpha Networks volunteers took part in this event. 10 intellectually disabled children also took part in the performance. We hope that the "Gu Dong Yue Xing" Bongo drum band's performance will share a message of love and hope in life, encourage everyone to embraced people with disabilities, recognize that "we are all born for a purpose", and watch them find shine in their own way in life.

Christmas this year was very special too as Alpha Networks brought warmth to the cold of winter through direct action. Our "Delivering Love to the Countryside to Fulfill Christmas Wishes" charity project reached many rural elementary schools including Yufeng, Jianshi, Meihu, Shilei, Jiaxing Elementary School - Yixi Branch, Xiouluan Elementary School - Tianpu Branch, Xinle, and Wufeng. During this event filled with love and caring, Alpha Networks employees transformed into "Santa Claus" to make the wishes of rural students come true. Through their efforts, winter didn't seem so cold any more, and the children's dreams were no longer beyond reach. Alpha Networks employees enthusiastically donated 494 gifts each valued at NT$500. 9 employees even adopted more than 10 gifts. These gifts contained not only the children's dream gifts but also the sincere well-wishes and love from Alpha Networks.

Each school had its own heart-warming story. The charity of Alpha Networks volunteers not only helped the children realize their dreams but also lit up the future for these rural children.

Looking ahead, Alpha Networks Foundation shall remain committed to fulfilling its corporate social responsibility by collaborating with more organizations and leveraging internal resources to contribute to society through practical actions.

Searching for Sustainable Environment

Cherish our planet earth where all life lives together

Annual Accomplishments

[Viewpoint] Carbon Reduction Action

4.1 Green Products

4.2 Environment and Energy

4.3 Carbon Emission

4.4 Environmental Protection Measures

4.5 Environmental Regulations Compliance

In our business operations, the Company places strong emphasis on environmental sustainability and adheres to the requirements of international trends. Carbon reduction strategies and actions for “Green Energy”, “Green Supply Chain”, “International Initiative”, “Organizational Carbon Inventory” and “Product Carbon Footprint” have been planned and launched based on the 30/40/50 targets to realize the goal of sustainable corporate development.

Annual Accomplishments

Power Saving

- 2024 group power consumption reduced by **0.7%** (compared to 2023).

reduced by ↓0.7%

Hsinchu Factory

reduced by ↓10.8%

Changshu Factory

reduced by ↓20.9%

* Dongguan Factory was closed at the end of 2023 and its production capacity transferred to the Vietnam Factory.

Water Resource Management

- 2024 water usage (compared to 2023).

Hsinchu Factory

reduced by

↓8.9%

Changshu Factory

reduced by

↓2.4%

Waste Management

- 2024 waste recycling rate increased by **2.5%** (compared to 2023).

increased by ↑2.5%

85.25% → 87.75%

Hsinchu Factory + Changshu Factory+ Vietnam Factory

Hazardous Substance Management

- **100%** implementation of Packaging and Packaging Waste Directive 94/62/EC and Battery Regulation 2023/1542.
- **100%** implementation in risk assessment of hazardous substances

【Viewpoint】

Carbon Reduction Action

2024 actions

Green energy	2024 Accomplishment	2025 Target
(Reduce) Power saving	Power consumption reduced by 0.7%	Continue reduction
(Replace) Solar PV	Make plan	HCF by H2 VNF by end of 2025
(Replace) RECs	3,400 MWH	7,329 MWH (estimated)
RE%	**13%**	**27%**

Green supply chain	2024 Accomplishment	2025 Target
Suppliers training	1	2
Suppliers platform	Cloud version launch	Deploy on-premise version
Suppliers upload data	16 suppliers	30 suppliers

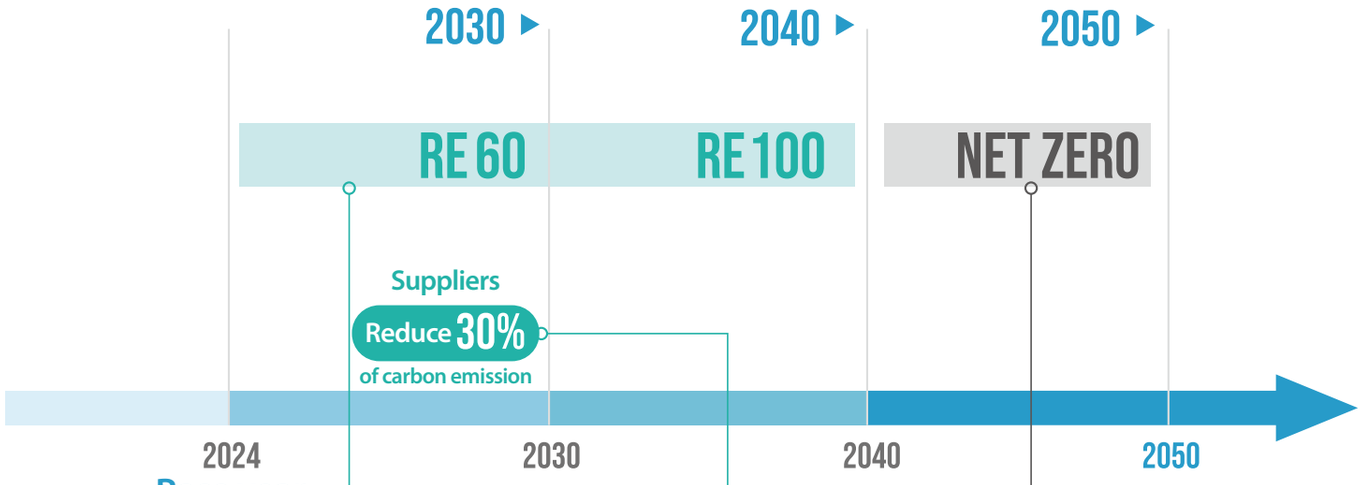
SBTi	2024 Accomplishment	2025 Target
Commitment	Committed	-
Carbon Inventory[Note] / Reduction Plan	On going	Complete
Submit & approval	-	Get approval

Note Follow GHG protocol

Carbon footprint	2024 Accomplishment	2025 Target
Carbon footprint calculation	2 items	Calculate for all products with a mass production run longer than 3 months
ISO 14067 Certification	1 item	Per customer requirements

Carbon inventory	2024 Accomplishment	2025 Target
Carbon Inventory	Vietnam Factory - completed	Other domestic/overseas subsidiaries to comply with the requirements of the FSC Sustainable Development Roadmap
ISO 14064-1 Certification		

Vision for sustainable environment



Carbon reduction strategy and action

Main strategies

Green energy
- (Reduce) Power saving measures.
- (Replace) Domestic/offshore solar PV implementation
  Renewable energy certificates (RECs)

Green supply chain
- Supplier Conference and training
- Tracking of suppliers' carbon emissions data
- Require suppliers to meet carbon reduction targets

Green initiative - SBTi
Joined SBTi to embrace the Net Zero by 2050 target, demonstrating the Company's commitment to the setting and meeting of progressive science-based annual carbon reduction targets.

Supplemen-tary measures

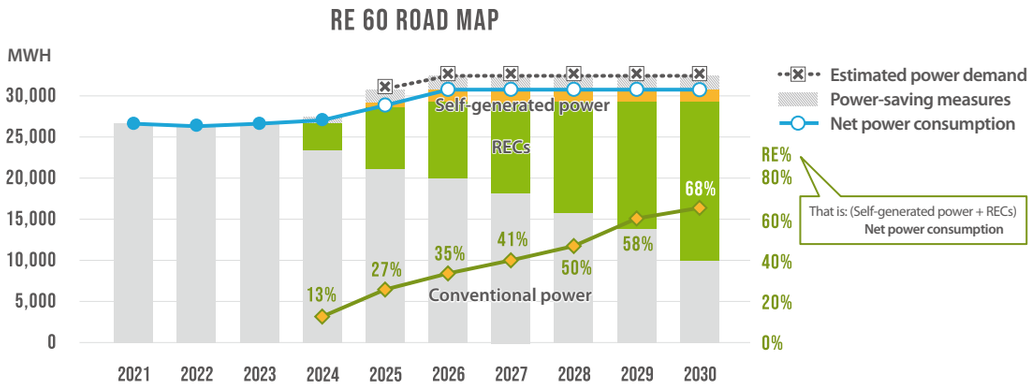
Green operations
- Product carbon footprint calculations **(from Cradle to Gate)**
- ISO 14067 certification

Green digital transition
- Information system
  Supplier sustainability information platform
  (collation of supplier data on carbon emissions)
- Management system
  ISO certification (14064-1 / 14067 etc.)

Alpha Networks has declared RE60 and 30% carbon reduction in the supply chain by 2030 / RE100 by 2040 / Net Zero by 2050 as its vision for sustainable environment. The goals are to reach 60% renewable energy consumption and reduce (Scope 2) carbon emissions by 60% before 2030; suppliers are to reduce carbon emissions (Scope 4) by 30%; reach 100% renewable energy consumption by 2040; and ultimately, realize net zero emissions by 2050. Carbon reduction strategies and actions for "Green Energy", "Green Supply Chain", "International Initiative", "Organizational Carbon Inventory" and "Product Carbon Footprint" have been planned and launched by Alpha Networks based on the 30/40/50 target.

Green energy

This strategy is based on the basic concepts of "Reduce" and "Replace." The Company will start by implementing ongoing power saving measures to reduce power consumption. Conventional power is then progressively replaced by renewable energy. Current planning focuses on self-generated power and purchase of Renewable Energy Certificates (RECs). Alpha Networks has already forecasted our business situation and power demand based on our roadmap for meeting the 2030 RE60 target. Power saving targets have been set accordingly and power saving plan drawn up. Solar energy system is to be constructed for self-generation. The quantity of RECs that will need to be purchased has been estimated as well.



Alpha Networks is planning to install solar panels at the Hsinchu and Vietnam factories. Each factory will generate approximately 800 MHW per year with construction to be completed in 2025. The amount of renewable energy required (self-generation + RECs) is calculated based on the RE% target for each year. The number of RECs that must be purchased each year on top of self-generated power is shown in the table below. The relevant estimates will be updated on a rolling basis and the relevant planning adjusted.

- Statistics on REC purchases in 2024 and sample (please scan QR code and enter verification code to query REC contents).

Region	Energy Source	Technology	Quantity	Units	Note
China	Hydroelectric	Run of river	1,935	MWH	I-Rec China
	Solar	PV Ground mounted	300	MWH	I-Rec China
	Hydroelectric	Run of river	65	MWH	I-Rec China
Vietnam	Hydroelectric	Dam	900	MWH	I-Rec Vietnam
	Solar	PV Roof Mounted	200	MWH	I-Rec Vietnam
Total			3,400	MWH	

QR Code Verification
Verify the status of this Redemption Statement by scanning the QR code on the left and entering in the Verification Key below
Verification Key
1 5 0 4 8 3 9 9
https://api-internal.evident.app/public/certificates/en/H8L9B7EC56CpU5R8VjqZB%2BU7gcjDJav%2Fb9jZMRID%2FqtXduZrOycCY5WYN7ayO5Cz

In 2024, Alpha Networks reduced its power consumption by 0.7% compared to 2023 (please refer to 4.2.1 Energy Management), and procured a total of 3,400 MWh in renewable energy certificates, achieving the annual RE10+ target (with renewable energy accounting for 13%). Moving forward, the company will continue to work towards the RE60 target by 2030.

Reduce and Replace Plans	2024	2025	2026	2027	2028	2029	2030
Energy-saving solution	Please refer to 4.2.1 Energy Management (3) Power saving and carbon reduction actions	• Torsion field optimization • Power saving for elevators • Improvement of basement lighting • Upgrade to energy-saving LED lighting fixtures • Replacement of old compressor • Energy adjustment for air conditioning	• Improvement of air-conditioning at high-voltage substation • Upgrade to energy-saving LED lighting fixtures • Replacement of old dryer • Energy conservation for air-conditioning cabinet • Energy adjustment for air conditioning	• Upgrade to energy-saving LED lighting fixtures • Energy conservation for air-conditioning cabinet • Energy adjustment for air conditioning	• Upgrade to energy-saving LED lighting fixtures • Energy conservation for air-conditioning cabinet • Energy adjustment for air conditioning	• Upgrade to energy-saving LED lighting fixtures • Energy conservation for air-conditioning cabinet • Energy adjustment for air conditioning	• Upgrade to energy-saving LED lighting fixtures • Energy conservation for air-conditioning cabinet • Energy adjustment for air conditioning
Self-generation/Solar PV	Planning and assessment	• Hsinchu Factory • Vietnam Factory					
Estimated REC demand	**3,400 MWH**	**7,329 MWH**	**9,348 MWH**	**11,195 MWH**	**13,866 MWH**	**16,546 MWH**	**19,671 MWH**

Green supply chain

As a developer, manufacturer, and service provider for professional network communication equipment, Alpha Networks harnesses its visionary and highly advanced technologies to design and develop high-performance, high added-value network communication products for its customers. We select top-quality raw materials with optimal costs and suppliers with the best delivery times and technologies. Rigorous quality controls are implemented in the manufacturing process. The ultimate goal is to provide customers with highly satisfying products and build high-quality network environments paired with premium services.

"Supply chain management" in particular is a very important task for OEM. Alpha Networks appreciates the leadership role it plays for suppliers in supply chain management. To guide/encourage carbon reduction by suppliers and realize the goal of a 30% carbon reduction in the supply chain, the following roles and responsibilities apply to Alpha Networks and suppliers:

Alpha Networks' role

- Professional guidance and technical support
- Establish a supplier sustainability information platform
- Training of supplier cadre personnel
- Track implementation outcomes
- Continue to jointly manage the carbon emissions system

Suppliers' responsibility

- Provide data on plant activities
- Participate in discussion and communications
- Support the training of cadre personnel
- Fill out the factory's internal carbon inventory registry
- Provide feedback on system usage

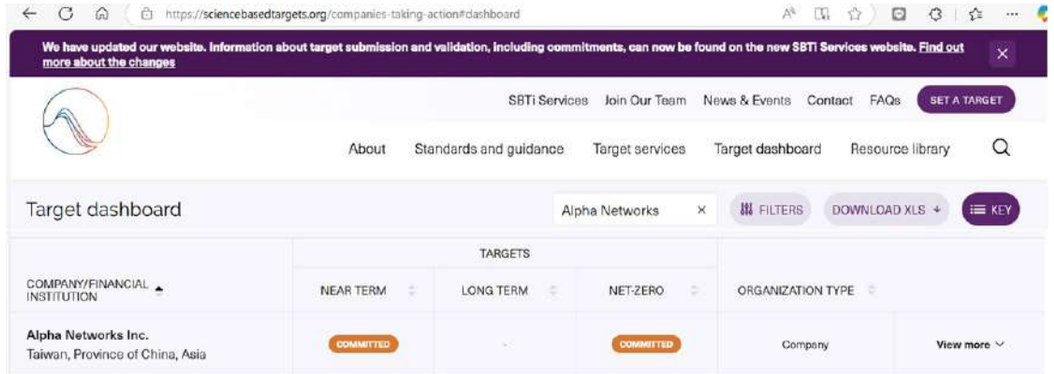
At the "Supplier Energy Conservation and Carbon Reduction Conference" held on November 17, 2023, at the Hsinchu HQ, Alpha Networks announced that it will partner with suppliers on sustainability initiatives and shared its major carbon reduction strategies including "Green Energy," "Supply Chain Carbon Reduction," "and "International Initiatives." Industrial Development Bureau and Institute for Information Industry experts were also invited to share their carbon reduction experiences and global trends. By making contribution to environmental sustainability through collaborative efforts with suppliers, we hope to create a sustainable low-carbon supply chain and work together towards carbon reduction goals. We are continuing to share carbon reduction practices with suppliers as well as the provision of mentoring and carbon reduction courses. On April 8, 2024, Alpha Networks invited 30 suppliers to participate in the supplier carbon inventory cadre training course held at our Hsinchu HQ. A supplier sustainability information platform (cloud edition) was also set up. Carbon emissions data was uploaded by 16 suppliers in 2024. In the future, we will continue to push for suppliers to carry out carbon inventories, register for the platform and upload their carbon emissions data. Concrete actions will be taken to encourage and help suppliers on carbon reduction. We will work together to formulate future carbon reduction pathways and actions as well.

Training course for supplier's carbon inventory cadre personnel ▲

Green initiative - SBTi

Alpha Networks submitted our Commitment Letter to SBTi in August 2024. We are committed to the goal of Net Zero by 2050, will set progressive science-based annual reduction targets, and take action on carbon reduction. Follow-up development was also carried out in accordance with SBTi procedures including carbon inventory using the GHG protocol and preparation of the carbon reduction plan. Preparations should be completed in the first half of 2025 and submitted to SBTi review and is expected to get SBTi approval by the end of that 2025.

- Screenshot of SBTi website (that Alpha Networks has committed to achieve Net Zero by 2050 targets)



- SBTi procedure and Alpha Networks progress

Product carbon footprint

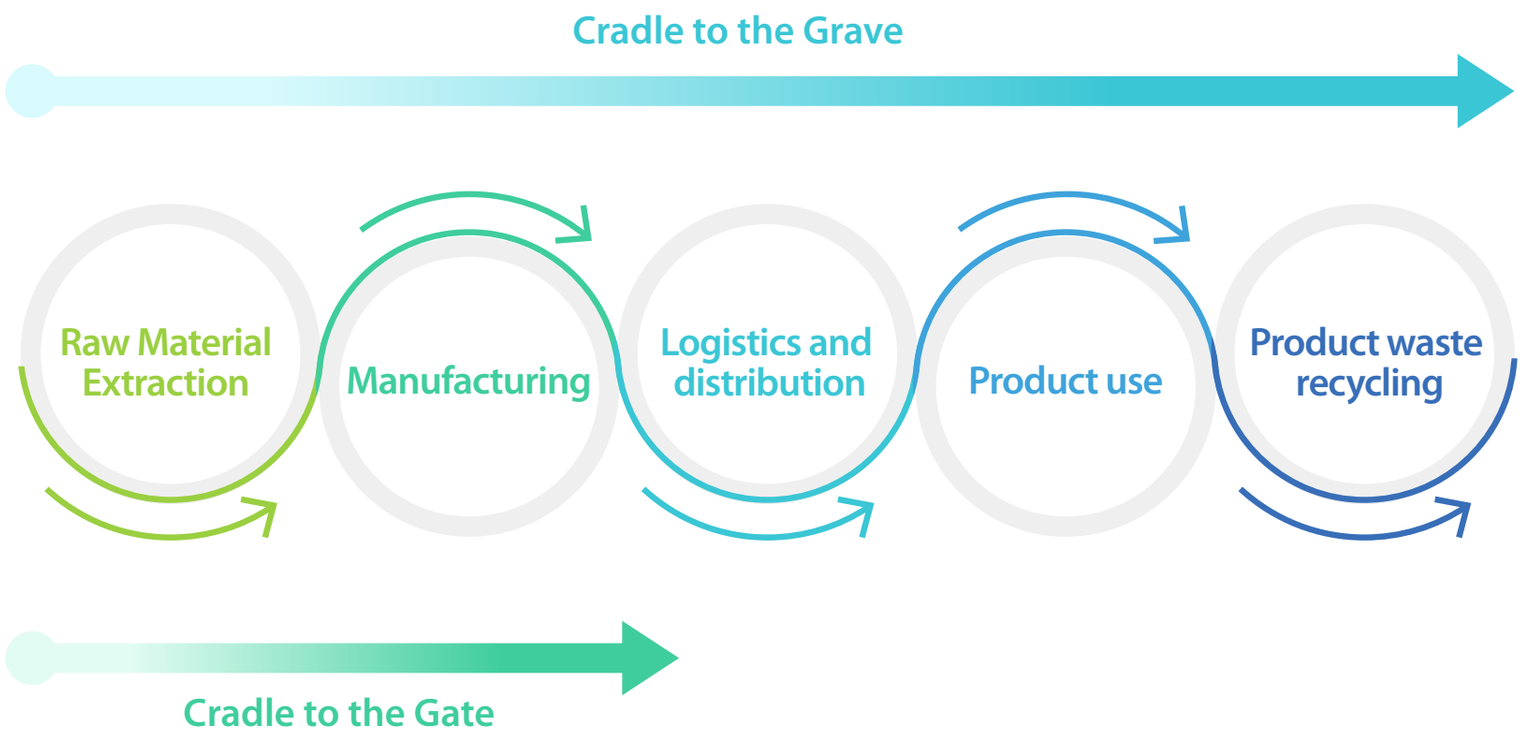
Alpha Networks calculated the product carbon footprint of 2 products in 2024. Third-party verification was conducted for 1 product at the customer's request. Internal training was also carried out to cultivate understanding of carbon footprint practices and procedures. We are also planning to introduce a carbon footprint management platform that will enable the rapid calculation of carbon footprints for different products. This will not only improve customer satisfaction, but also facilitate the development of low-carbon products and improve product competitiveness.

From 2025 onwards, Alpha Networks will calculate the carbon footprint of all products with a mass production run longer than 3 months.

* For more information on product carbon footprints please refer to 4.3.4 Product Carbon Footprint

Organizational carbon inventory

For organizational carbon inventories, Alpha Networks completed the carbon inventory and third-party verification of all production bases in 2024 (see 4.3.3 Greenhouse Gas Inventory). We will adhere to the Sustainable Development Roadmap issued by the FSC to progressively carry out organizational carbon inventories and third-party verification (please see 4.3.5 Greenhouse Gas Inventory Timeline) at all domestic and overseas sites other than production bases (business locations, RMA & R&D centers. Please refer to Global Presence). Obtaining a full picture of carbon emission sources and hot spots at all sites will help Alpha Networks to plan and implement carbon reduction plans essential to achieving the Net Zero by 2050 targets.



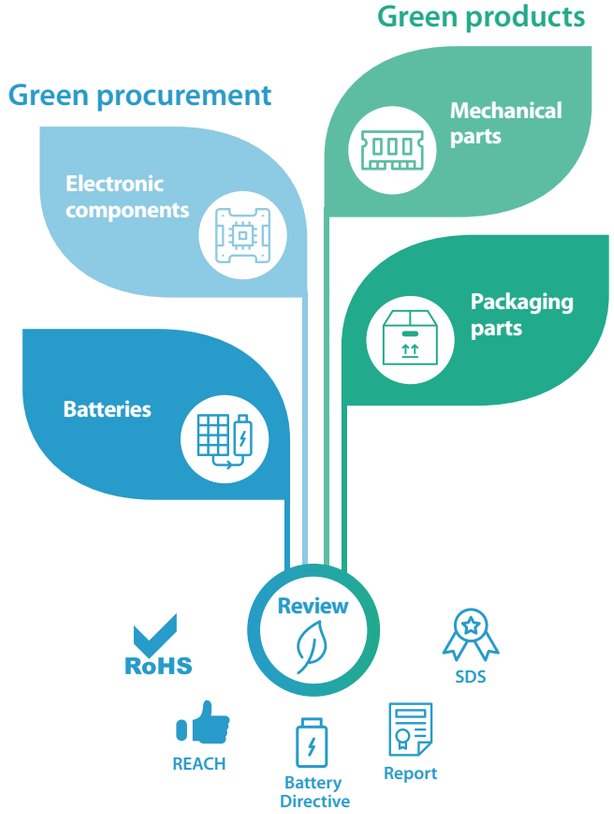
4.1 Green Products

To ensure compliance of raw materials and products, Alpha Networks has implemented procedures and systemic management from procurement, hazardous substance management, product R&D to design. Establishment of systems including ISO 9001, TL 9000, IATF16949, ISO 14001, QC 080000, ISO14064-1 and AEO, to manage each stage of the product life cycle. Meanwhile, operational continuity management was introduced to avoid disruptions due to natural and manmade disasters and to ensure stable supply of raw materials. Finally, customer satisfaction surveys are conducted to understand customers' assessment in green products compliance and to facilitate continuous improvement.

4.1.1 Green Procurement

To fulfill our environmental responsibility as a global citizen, Alpha Networks has reduced the use of natural resources and toxic substances, practiced green procurement, requiring suppliers to sign the "Non-Use Guarantee" specifications, to achieve sustainable operation of green products and implement green production and green consumption.

Material conformity review for part approvals



4.1.2 Hazardous Substance Management

In accordance with the management system required by the International Electrotechnical Commission (IEC) issued in October 2005 for hazardous substances of electric machinery and electronic components and products, Alpha Networks obtained the new IECQ QC 080000: 2017 certificates for all factories. Guided by the hazardous substance free policy, we set system targets every year, continue to monitor the latest regulatory requirements and enforce proper management.

Hazardous substance management objective

Hazardous substance free policy	No.	Objective	2024 target	Responsible unit
Conformity and compliance with environmental laws and Restriction of Hazardous Substances Directive	1	Full adoption of RoHS Directive, 2011/65 EU, EU2015/863, Packaging and Packaging Waste Directive 94/62/EC, EU Battery Directive 2013/1542 EU, and proper maintenance and management of GPM system cards	Achievement rate: 100%	Green Engineering Section
	2	REACH, SVHC, REACH XVII, TPHC, TCSA, Mineral Oil, and PFAS integrated reports must display the correct colors.	Achievement rate: 100%	Green Engineering Section
	3	Early preparedness one year before expiration of exemption clauses	Expiration of exemption clauses ≤1year	Green Engineering Section
	4	GPM system and MCD data accuracy review	Times per quarter	Green Engineering Section
	5	Regulation data collection	Times per quarter	Green Engineering Section
Green product R&D to achieve the HSF status	6	No. of items on the GPM system not in conformity to green materials requirements=0	Number of items per year = 0	Green Engineering Section
	7	Informing colleagues of regulatory requirements via the platform	Achievement rate: 100%	Green Engineering Section
	8	Hazardous substance risk assessment	Achievement rate: 100%	Green Engineering Section
	9	Integration reporting and production	Achievement rate: 98%	Green Engineering Section

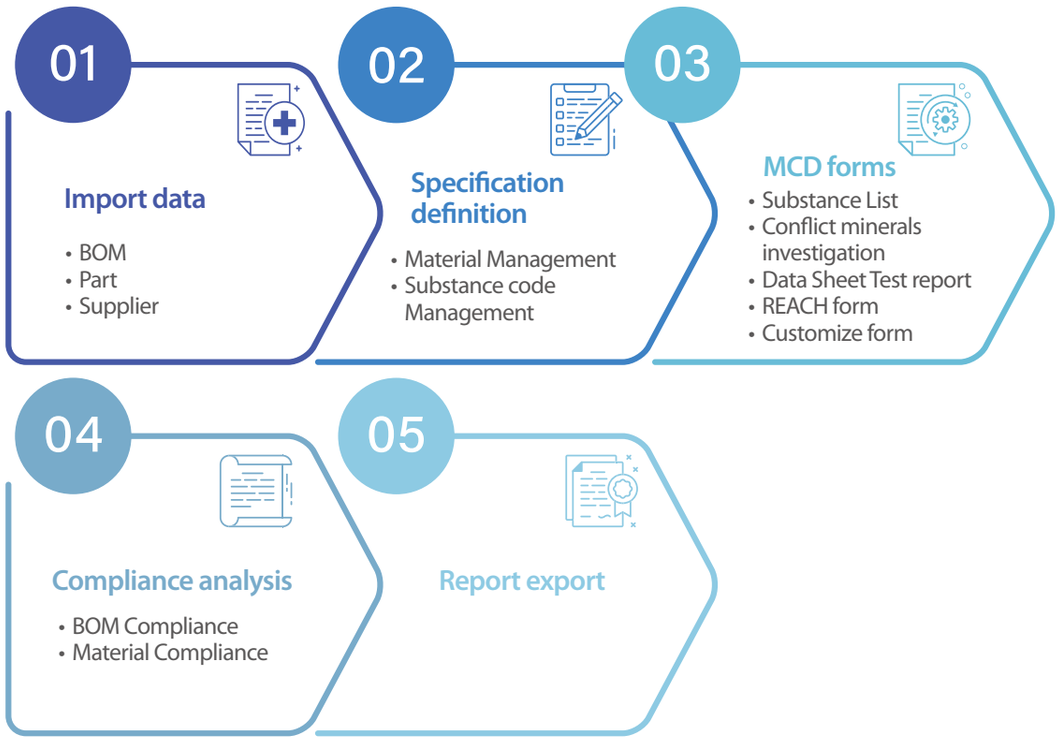
Remark:
- RoHS: Restriction of Hazardous Substances
- REACH:Registration, Evaluation and Authorization of Chemicals
- SVHC: Substances of Very High Concern
- TSCA: Toxic Substances Control Act
- HSF: Hazardous substances free
- GPM: Green Product Management

4.1.3 Green product System

Alpha Networks has established a green product management (GPM) system in response to environmental laws of various countries and clients' requirements. We also require our suppliers to sign guarantees and submit third-party test reports to ensure that our products comply with the rules on restricted substances and avoid negative impacts from harmful substances. These ensure product compliance with environmental regulations from development to production.

Alpha Networks GPM platform: https://www.ezgpm.net/

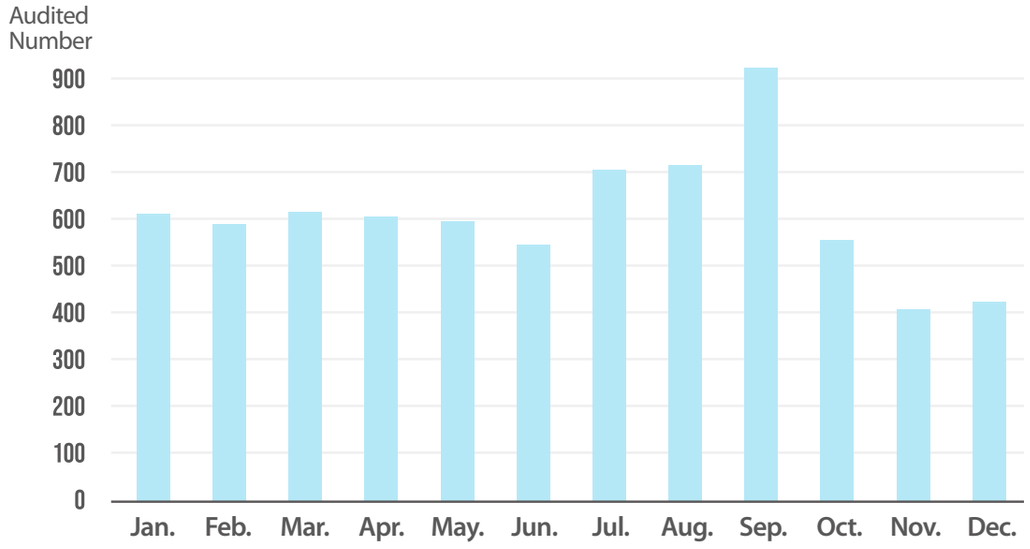
Hazardous substance management process



The number of MCDs audited each month was shown in the table below. A total of 7,299 cases were completed during the year. Confirmation that the raw materials from the supplier meet the standards for controlled substances.

MCD approve table

Number/ Month	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Audited Numbers	618	591	620	605	594	533	707	711	927	549	412	432	7,299



Remark:
• MCD: Material Composition Declaration

4.1.4 Product Innovation and Production

Alpha Networks is actively investing in green product R&D and manufacturing processes. We are also raising the environmental awareness of our entire workforce. During the product manufacturing process, ISO 9001, TL 9000, IATF16949, ISO 14001, QC 080000, ISO14064 and AEO management system-based measures are implemented to various production activities to unleash the maximum potential of the green movement and generate the greatest benefits. Different system policies are shown in the schema below.

System policy chart

ISO 9001, TL 9000 and IATF 16949 Quality Policy

- Do the right things at the first time.
- Continuous improvement for better quality.
- 100% customer satisfaction.

Environmental Policy / HSF Policy

- Obey and meet environmental regulations and restricted instructions for harmful substance.
- Research and develop green products to pursue the goal of perfection in HSF product.
- Advance levels of resource recycling and promote decrement of waste amount.
- Continually improve production processes and mitigate negative environmental impacts.
- Promote knowledge of environmental protection to all employees to ensure us fulfill our mission.
- Save energy and enhance the rates of resource utilization efficiency.

Note: QC 080000 (Hazardous Substance Management System)
HSF (Hazardous Substance Free)

AEO Authorized Economic Operator Safety Policy

- Declaration for Implementation of Safety and Quality Corporate System:
  To ensure the assets security of the Company and its business partners, all employees and suppliers must comply with the policy.
- Practice risk management Policy statement:
  Identification of threats to security, risk assessment, and risk management enable the implementation of necessary risk reduction and controls measures that strengthen supply chain security management.
- Supply chain security performance Policy statement:
  Improve employee abilities and understanding through education and training. Enforce management reviews and continuous improvement to ensure the applicability and validity of the supply chain security system.

Greenhouse Gas Inventory and Policy Statement

As global warming continues to worsen, everyone at Alpha Networks recognizes that we must fulfill our corporate environmental and social responsibility as a leading provider of OEM services for network communication products. For this reason, we hereby declare that we will:

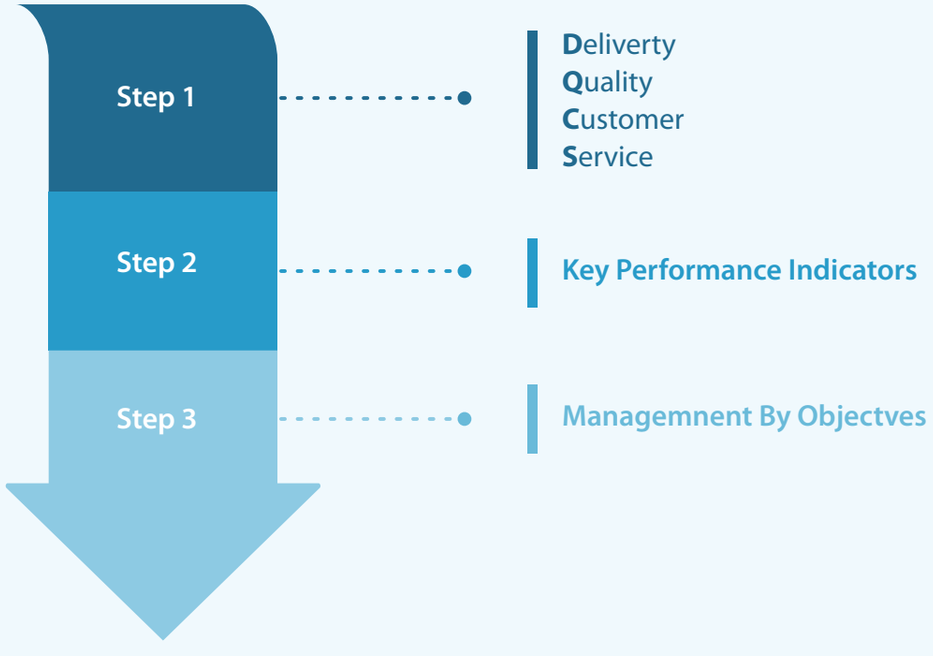
- Committed to make Carbon Disclosure, in order to facilitate the corporate really grasp the situation.
- Facilitate the tracking of internal carbon emissions by committing to the disclosure of enterprise carbon emissions.
- Work with our business partners to expand the scope of reduction initiatives.
- Provide our consumers and users with more low-carbon options. Increase transparency and reduce product carbon footprints.

Note: Greenhouse Gases (GHG) ISO14064-1: Guidelines for the quantification and reporting of GHG emissions and reductions at the organizational level.

To meet our Delivery, Quality, Customer satisfaction and Service goals, a top-down approach is used by Alpha Networks to develop the corporate vision, unit organizational goals (KPI, MBO) and employees' individual performance goals every year. Different quality techniques, tools and systems are introduced around our corporate values of “Integrity”, “Customer Value”, “Agility” and “Collaboration” to ensure compliance with the quality management standards of green production from product development through to production and manufacturing.

Operational procedures for targets of quality management

Top-down quality targets



The same set of manufacturing systems and quality management standards are used at all Alpha Networks' production sites, including the Manufacturing Execution System (MES), SAP, PLM, e-JIT (Just-in-Time) and Supplier Management System (SMS). Each production site collaborates with the Quality Center on the promotion of continuous improvement projects and the introduction of performance management such as Total Production Management (TPM), Total Customer Satisfaction (TCS), 6 Sigma, Quality Control Cycle Circle (QCC), Quality Improvement Team (QIT) and the improvement proposal mechanisms. Everyone participates in the analysis and discussion to prevent the same problems from happening again. The registration and tracking of the Key Performance Indicators (KPI) and Management by Objective (MBO) set by each unit each year is also used to predict potential risks so that preventive mechanisms can be planned in advance. Continuous improvement through the PDCA cycle is used to do our part in corporate responsibility. To ensure proper ESD protection and mechanisms for all parts and products during the manufacturing process, all Alpha Networks manufacturing operations adhere to the ANSI/ESD S20.20 standard on protection against electrostatic discharges. The access control system is also integrated into the ESD protection regime. Only authorized personnel that pass the ESD measurement are allowed on-site.

Relevance of quality management activities

Standardized deployment of systems

- Green production
- Preventive Mechanism
- Lean production
- Continuous improvement

Business continuity management

ESD protection combined with access control

Remark:
- MES: Manufacturing Execution System
- PLM: Product Lifecycle Management

The Hsinchu Factory and Quality Center began collaborating on continuous quality improvement activities in 2024 to enhance employees' quality awareness and make quality consciousness a part of everyone's DNA. The planned roll-out the Hsinchu Factory QCC circle is shown below:

Hsinchu Factory QCC circle

NO	Group	Name of circle
1	Manufacturing 1st Department_1	Holy Hand Circle
2	Manufacturing 1st Department_2	Pushing Hand Circle
3	Manufacturing 1st Department + 2nd Department Night Shift	Onion Ring
4	Manufacturing 2nd Department_1	Triple Circle
5	Manufacturing 2nd Department_2	Grass Circle
6	Manufacturing 2nd Department_3	Key Ring
7	Manufacturing 2nd Department_4	Hula Loop
8	Manufacturing QA Department	Happy Ring
9	Warehousing Department_1	Victory Circle
10	Engineering_1	Lifebuoy
11	Engineering_2	Doughnut
12	Engineering_3	Drawing Circle
13	Engineering_4	Network Circle

Implementation of the latest QCC activity started from January 2024 and was successfully completed on June 2024. The teams carried out 6 months of data collection, analysis, discussion. They also implemented countermeasures and verified the outcomes. At the end, 10 teams took part in the presentation of results. The main purposes of QCC are enhancing quality awareness and continuous improvements. This event was therefore not ranked. The research results from each team will be rolled out to the relevant processes as well in the spirit of the event.

4.1.5 Product Design

Alpha Networks considers the product disassembly and recovery design at the design stage. Product assembly design does not use complex tools and linking processes for production. Plastic components weight 25g or more should also marked. The use of more than two types of materials should also be avoided. Disassembly and recovery (Recycle, Reuse, Reduce - 3R) and the EU Waste from Electrical and Electronic Equipment directive (WEEE) all form the basis of green product design. Recyclable materials are therefore chosen by Alpha Networks during system design to better comply with EU environmental requirements.

4.1.6 Green Design

Alpha Networks strives for strategic actions in ESG and sustainable development. Hazardous substance management, environmental and GHG emission policies have been formulated and actions taken for environmental sustainability. Life Cycle Thinking (LCT) is introduced to the product R&D stage to facilitate the management of hazardous substances. Green design concepts are incorporated and timely adjustments are made accordingly to updated international environmental regulations (Figure 1). Alpha Networks exercises strict control over all products, in adherence to the EU RoHS Directive and the EU REACH Regulations. To achieve environmental sustainability, continue to improve product performance to meet the EU ErP (Energy-Related Products) Directive and the customs regulations set by the U.S. DoE (Department of Energy) and CEC (Commission for Environmental Cooperation) and by the Natural Resources Canada and other countries. Moreover, the product development process focuses on (1) easy disassembly and recyclability (2) energy efficiency (3) pollution control and (4) low toxicity. Emissions, wastewater, waste, noise, and fire management operations are all conducted during the running of the factory to help the environment. To manage GHG emissions, organizational GHG inventories are conducted at factories every year to keep track of carbon emissions and promote carbon reduction activities. Alpha Networks' sustainability management and operation are disclosed in accordance with "GRI 300: Environmental Disclosures" in subsequent chapters for reference of stakeholders.

Features of product development process

Recyclable and easy disassembly

In accordance with the EU WEEE product design principles, components are made from materials that can be recovered and reused where possible. Design that hampers disassembly such as paint coatings, welding and adhesives are avoided where possible. Technical documents such as product is assembly manuals and WEEE 3R report are also produced. The goal of achieving a high product recycling rate has now been achieved.

Energy efficiency

Product energy efficiency is based mainly on the guidance of EU ErP. Implementation references (EC) No. 1275/2008 regulations on standby and off mode electrical consumption of home and office equipment, as well as (EU) 2019/1782 regulations on external power supplies.

Pollution prevention

Life Cycle Thinking (LCT) is introduced at the product development phase to identify a product's key environmental considerations and minimize its environmental impact during resource extraction, manufacturing, distribution and sale, use, disposal and recovery.

Low toxicity

Strict internal control via green materials management platform. Introduction of lead-free manufacturing processes, with all components in compliance with the EU RoHS and REACH requirements.

4.1.7 Energy Efficiency Design

Alpha Networks considers the enhancement of energy efficiency and the reduction of energy consumption during the product design stage. These include:

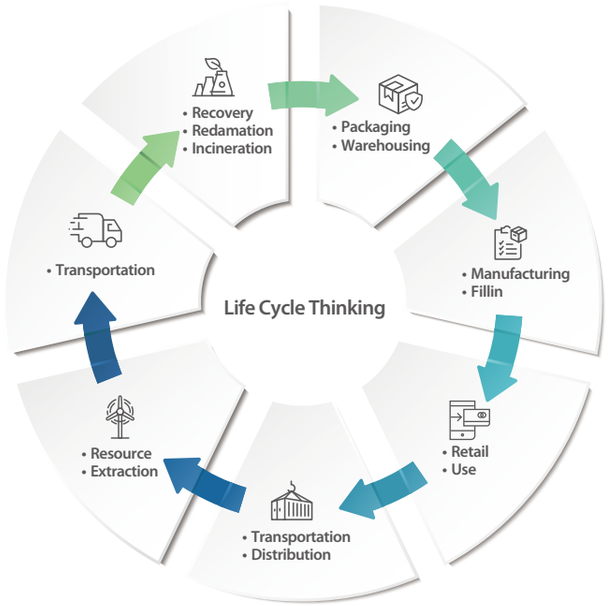
1. EU (Energy-Related Products) directive (ErP): adherence to (EC) No 1275/2008 and (EU) No. 801/2013 requirements in energy consumption for networking and communications equipment in standby and off modes
2. U.S. Department of Energy (DOE): DOE certification can be issued in accordance with US laws on energy efficiency. Main purpose of certification is to reduce energy demand and the Greenhouse Effect through energy conservation, emissions reduction, and helping users save energy.
3. California Energy Commission (CEC): the CEC's Appliance Efficiency Regulations promulgated in 1976 are applicable to all products in California. As the only compulsory energy performance legislation in the U.S. that have influence consumer behavior, these regulations play a pivotal role in energy consumption reduction.
4. Natural Resources Canada (NRCan): the regulatory body in Canada on energy efficiency standards of industrial products and consumer goods. It has established the energy consumption standards on more than 50 product categories manufactured and marketed in Canada or imported to Canada.

According to the 2024 statistics on product energy efficiency tests, the application was submitted for 2 products of the same type. The results conformed to the energy consumption standards in the European Union, the U.S. and Canada.

Product type	Test item	BU	Test results
Passive Fiber Network	ErP×2 PCS	Wireless Broadband Business Unit	Compliance

Remark:
- ErP: Energy-related Product
- DOE: Department of Energy
- CEC: California Energy Commission's
- NRCan: Natural Resources Canada

Process of deliberation and development for product lifecycle



4.2 Environment and Energy

To ensure an effective environmental energy management and response to environmental issues on all fronts, Alpha Networks formulates policies and initiates campaigns and targets each year, to contribute to environmental management.

Environmental policy/HSF policy

01 Obey and meet environmental regulations and restricted instructions for harmful substance.

02 Research and develop green products to pursue the goal of perfection in HSF product.

03 Advance levels of resource recycling and promote decrement of waste amount.

04 Continually improve production processes and mitigate negative environmental impacts.

05 Promote knowledge of environmental protection to all employees to ensure us fulfill our mission.

06 Save energy and enhance the rates of resource utilization efficiency.

Environmental objective

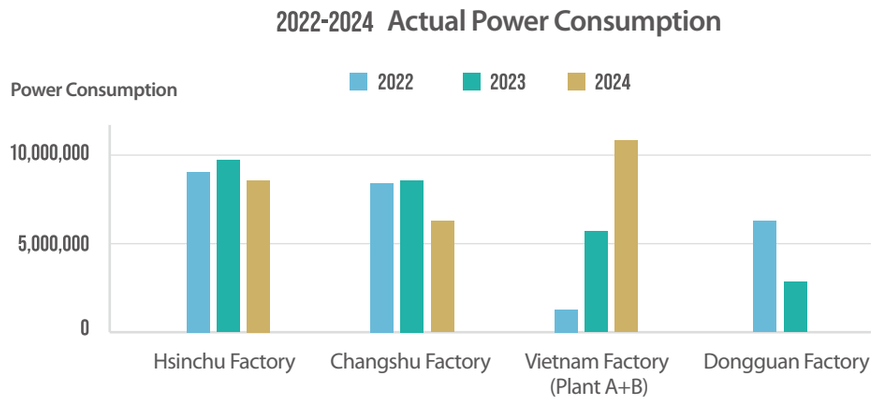
Environmental Policy/ HSF Policy	No.	Objective	2024 target	Responsible unit
1. Improve employees' awareness of environmental protection, and join in environmental protection work.	1.1	Alpha Networks Green website update	Per year ≥ 1 time	Green Engineering Section PR Room
	1.2	Green News Update	Per year ≥ 1 time	Green Engineering Section Art Design Department
	1.3	Biodiversity practice activities (such as: beach cleaning, mountain cleaning, tree planting, environmentally friendly farmland maintenance...)	Per year ≥ 1 time	Green Engineering Section Alpha Networks Foundation
2. Conserve energy and improve energy efficiency.	2.1	Collection of green-related regulations	Per year ≥ 4 time	Green Engineering Section
	2.2	CDP carbon disclosure score improved to B- or higher	Per year ≥ 1 time	Green Engineering Section Relevant BU & Departments

4.2.1 Energy Management

Alpha Networks is committed to promoting energy conservation and carbon reduction, making improvements to energy-intensive equipment, as well as upgrading environmental safety and health facilities of the company. This will not only improve the software and hardware for energy conservation and carbon reduction at Alpha Networks (Hsinchu Factory) but also achieve the goals of energy conservation, GHG reduction, and safety & health management. Statistics of actual power consumption and results of carbon reduction projects are detailed as follows.

(1) Power consumption statistics at each factory (2022 ~ 2024)

To respond to the global pursuit of net zero by 2050, the government is driving net zero in the country and the society with legislations. It is hoped that companies and the public work together, to mitigate climate change and achieve carbon neutrality. The previous year witnessed global challenges one after another: climate change, energy shortages and ocean crisis. We in Taiwan should also be concerned and make changes in life. There is an increasing awareness for mitigation of climate change and a growing emphasis on carbon footprint. People who care about environmental protection are now paying more attention to the impact of their actions on the planet. They also advocate for actions to protect the earth and reduce the impact on and destruction of the earth. To reduce the energy burden Taiwan and conserve the Earth's finite resources, Alpha Networks is complying with regulatory requirements by tracking the actual power consumption trends at the Hsinchu, Changshu and Vietnam factories.



Kwh	Hsinchu Factory	Changshu Factory	Vietnam Factory (Plant A+B)	Dongguan Factory	Total
2022	8,907,200	8,277,675	1,391,467	7,313,918	25,890,260
2023	9,787,600	8,400,824	5,681,228	2,856,300	26,725,952
2024	8,725,200	6,640,515	11,166,615	Closed	26,532,330

Note:
1. Convenience store and coffee station were included in the power consumption data of the Hsinchu Factory.
2. In 2024, the Group's annual power consumption was reduced by 0.7% compared to 2023. Hsinchu Factory achieved a 10.8% reduction while the Changshu Factory achieved a 20.9% reduction.
3. Dongguan Factory was closed at the end of 2023 and its production capacity transferred to the Vietnam Factory.
4. The power consumption at the Vietnam Factory was the combined total of Plant A + Plant B. Plant A was commissioned in May 2022, and Plant B was commissioned in May 2023.

(2) Purchase of Renewable Energy Certificates (REC): The quantity of RECs purchased by each factory in 2024 is show in the table below.

Region	Factory	REC target	REC Type	Quantity for 2024	Units
China	Changshu Factory	RE 30	Small hydro	**1,935**	MWh
China	Changshu Factory	RE 30	Solar energy	**300**	MWh
China	Chengdu RD center	RE 10	Small hydro	**65**	MWh
Vietnam	Vietnam Factory	RE 10	Small hydro	**900**	MWh
Vietnam	Vietnam Factory	RE 10	Solar energy	**200**	MWh
Total		**RE 13**		**3,400**	MWh

Note:
1. In China, small hydro is defined as those with an installed capacity of 25,000 kW or less.
2. In Vietnam, small hydro is defined as those with an installed capacity of 5,000 kW or less.

(3) Power saving and carbon reduction actions:

Alpha Networks adheres to national policies. As a member of the organization, we work together to create a more pleasant and sustainable homes for ourselves and future generations. We care and we take actions by striving to reduce energy consumption and carbon. Energy-saving equipment such as variable frequency cooling tower fans were installed at the Hsinchu Factory. The combined efforts of our employees have yielded the following achievements in 2024: The estimated annual power savings from the variable frequency energy-saving effect of the cooling tower at Alpha Networks will come to roughly 180 MWh.

The Changshu Factory was initially fitted with conventional lighting fixtures when it was first built. Due to the high cost of a complete replacement, 70 sets of LED light tubes were replaced on the SMT-A line on 3F of the workshop. Estimated savings in electrical consumption for the year was 25,000 kWh, or RMB $20,000/year.

① Changshu Factory power saving and carbon reduction - LED light replacement

Energy efficiency initiative	Special projects and action plans	Estimated profit or loss				Expenses saved each year
		Operating expense before the revamp		Operating expense after the revamp		
		Electricity costs for equipment	Maintenance expense	Electricity costs for equipment	Maintenance expense	
Replaced 70 sets of LED lights at the SMT-A line on 3F of the workshop.	1.The factory and the dormitories initially used T5 fluorescent tubes with ballast (36W each). The actual energy consumption was approximately 40 watts each. 2.Due to the high cost of total and inadequate lighting, lighting fixtures were refitted with energy-saving LED lights (20W each).	RMB 37,000/year (electricity bills for 5KW lighting)	RMB 9,000/year (maintenance and light bulb changes)	RMB 19,000/ year (electricity bills for 2.5KW lighting)	RMB 6,500/year (maintenance and light bulb changes)	RMB 20,500/year.

Before refit

After refit

② Installation of variable frequency energy-saving cooling tower fans at Hsinchu Factory

Purpose:
By utilizing the temperature difference between the cooling water inlet and return water, coupled with automatic control of fan speed based on outdoor dry and wet bulb temperatures, energy consumption of the equipment is reduced, thus achieving energy-saving goals.

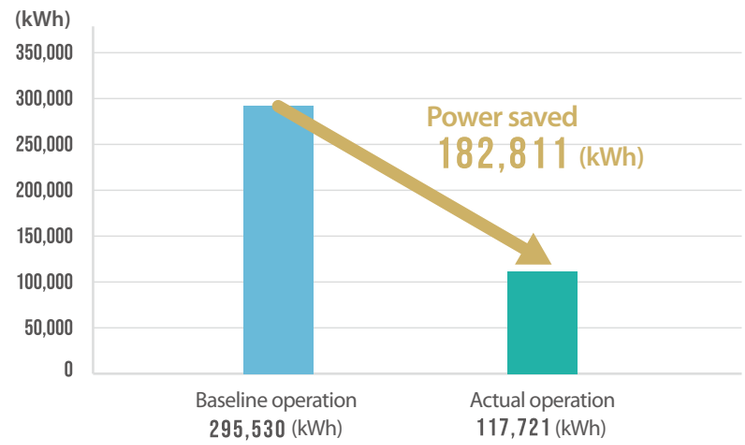
Approach:
(1) Installation of baffles in the cooling tower to mitigate turbulence and short-circuiting, thereby reducing energy consumption.

(2) Variable frequency drives were installed on a total of 6 cooling tower fans (CT1~CT6), achieving energy savings through varying the rotation frequency.

Summary: the improvements are expected to reduce power consumption by 182,811 kWh and electricity costs by NT$ 731,244 a year.
Benefit: between 2024/11/1 ~ 2024/12/31 the power-saving rate was calculated to be 61.9%.

Installation of variable frequency power-saving cooling tower fans at the top floor of Hsinchu Factory

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Baseline operation power consumption (kWh)	1,338	2,855	7,813	26,024	32,587	31,536	32,587	32,587	31,536	32,543	31,536	32,587	**295,530**
Actual power consumption (kWh)	248	515	1,385	6,410	4,298	9,356	17,815	24,069	23,644	15,841	6,745	2,396	**112,721**
Power savings	1,090	2,340	6,428	19,614	28,290	22,180	14,773	8,519	7,892	16,702	24,791	30,192	**182,811**
Power saving rate	81%	82%	82%	75%	87%	70%	45%	26%	25%	51%	79%	93%	**61.9%**



Conclusion

Maintaining power saving and carbon reduction targets as well as continuous improvements are all part Alpha Networks' mission. RECs are purchased to reduce carbon emissions. Hsinchu Factory had already implemented the ISO 50001:2018 energy management system and passed TÜV Rheinland certification in 2024. Energy intensive equipment was identified and improvements carried out to the power consumption of the water coolant system. Variable frequency fan motor, replacement of the cooling tower's heat dissipation materials, and fitting of partitions to reduce eddies all led to significant improvements in overall performance. An example of this is the variable frequency upgrade to the rooftop cooling tower at the Hsinchu Factory.

Further carbon reductions are planned for next year as part of continuous improvement. Planning includes:

- The Hsinchu Factory will upgrade the underground car park lighting, improve the energy-efficiency of the passenger elevator control system, and rent out the rooftop for construction of solar energy system. Power generation will start in 2026 with annual output of around 800 MWh. In 2025 H2, we plan to purchase 400 MWh of green energy and introduce the Energy Management System (EMS) for energy monitoring, identifying opportunities for improvement, and reduce the use of conventional gray electricity (conventional electricity).
- In 2025, the Changshu Factory will replace the old compressor equipment purchased in 2010. Switching to variable frequency should reduce power consumption by 10%. The 8 air-conditioning boxes and 4 cooling water circulation systems in the factory will also be changed from mains frequency to smart variable frequency. This should reduce power consumption by 20% for estimated total savings of 450 MW for the year.
- The Vietnam Factory began implementing power saving measures for plant equipment in 2025. For example: Fitting blowers in the office with timer switches, turning off half of the streetlights at night to save energy, installing timed shutdown programs for the burn-in room, timer for water cooler to reduce power consumption, increased the temperature of chilled water by 0.5 degrees, and setting the office temperature 25 degrees. These measures are expected to reduce power consumption by 160Mwh for the year. The rooftop will be rented out in the same year the installation of a solar panel. Power production is expected to formally commence in Q4. Estimated output is 200 MWh and total output for 2026 is expected to be 800 MWh.

4.2.2 Environmental Awareness

On top of the statutory environmental protection activities, Alpha Networks regards environmental protection as its own responsibility, and actively responds to international trends and customer needs. We actively participate in environmental protection training courses, and promote and encourage staff to practice environmental protection through internal gatherings, so that they understand the relationship between people and the environment, and take practical action to fulfil their environmental protection responsibilities. 2024 training classes related to green and environmental protection please refer to the table below.

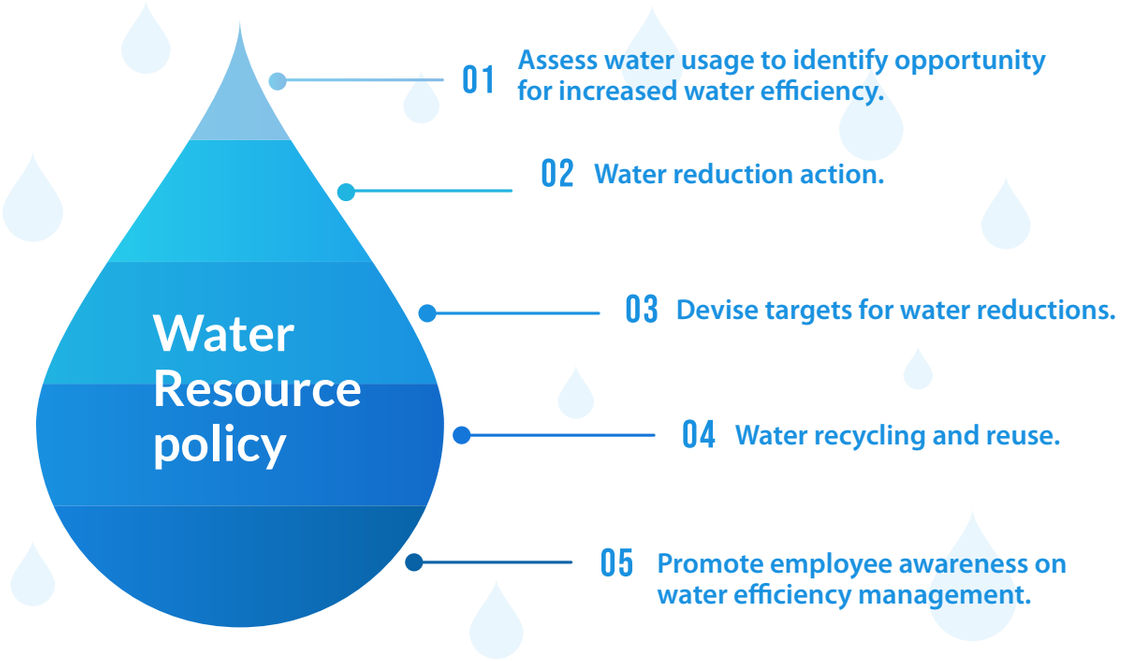
Environmental protection training courses

Course title	Organizer	Date
Introduction to the latest regulatory developments in REACH and RoHS (online seminar)	TÜV Rheinland Taiwan Ltd.	2024.12.4
TSCA Restricted Substance Testing and PFAS Use Report (Zoom online seminar)	TÜV Rheinland Taiwan Ltd.	2024.09.12
(Expert) seminar on regulations on electrical and electronic products (online seminar)	SGS Taiwan Ltd.	2024.08.28
Introduction to the national regulations (online seminar)	TÜV Rheinland Taiwan Ltd.	2024.7.25

4.2.3 Water Resource Management

The global impact of extreme climate has led to growing stakeholder concern on water resource issues. Alpha Networks is managing environment-related issues in a systemic manner through the ISO 14001 environmental management system. In terms of water consumption, Alpha Networks does not have water-intensive processes and there is no high consumption of water. Analysis of water usage found most of the water was for domestic purposes or used in the cooling towers for cooling factory equipment. Water-saving taps were fitted throughout the factory to reduce water consumption. Each factory tracks their water intensity and analyzes their water consumption every year. Water conservation targets are set, monitored and reviewed to identify opportunities for water conservation and to continue improving water efficiency. Discharged wastewater are periodically sampled and monitored to prevent environmental pollution, and to ensure that the discharge satisfies the discharge standard requirement of the local environmental protection authorities.

Water resource policy



Water risk assessment

Water-saving KPIs are set with periodic performance management to reduce water consumption. The targets for next year are also adjusted at the end of the year based on water usage and related risks. Alpha Networks also manages water usage on-site, simulates water restrictions, and evaluates regional support for water usage to improve their ability to respond or react to water shortages/ restrictions.

Item Degree of risk	Effect on company operations/Description	
Water withdrawal	Alpha Networks does not have water-intensive processes but safe, clean potable water must be supplied to employees. The Company takes water shortages very seriously. If we receive government notification or media reports that the water supply will be suspended or restricted due turbidity after a typhoon or drying out of the water source, water tankers are mobilized to replenish the shortfall and avoid operational disruptions.	
Low risk	**Countermeasure / Management Mechanism**	1. Continue to reduce water consumption 2. Devise response mechanism for water shortage
Drinking water quality	All sites only use tap water. We do not pump ground water for business use. Water filtration equipment is used and regularly inspected in accordance with the law to ensure the water is safe.	
Low risk	**Countermeasure / Management Mechanism**	NA
Water pollution Prevention	Wastewater discharged by the Taiwan Factory is connected directly to the sewer system built by the Wastewater Treatment Plant. Wastewater discharged by the Changshu Factory and Terminal Factory are discharged into the underground sewer system of the industrial park. This will not lead to water pollution that impacts directly on the water body and land. All discharge quality are regularly monitored and tested in accordance with the law. The test results all exceeded regulatory standards. There were no incidents of water pollutions at each factory.	
Low risk	**Countermeasure / Management Mechanism**	NA
Flood	The Taiwan, Changshu, and Vietnam factories are not located in a region with high-flooding risk. In addition, the Company has devised preventive and emergency response control processes for outside companies. Before a typhoon, janitors are required to clean out the drains. This prevents flooding due to poor drainage. Other emergency response equipment such as sand bags are also prepared in an advance.	
Low risk	**Countermeasure / Management Mechanism**	NA
Regulatory Compliance	Compliance with water-related laws are examined year. IF the law has been regulated then a response must be taken at once. There were no incidents of illegal behavior relating to water at each factory.	
Low risk	**Countermeasure / Management Mechanism**	NA
Water fee	In Changshu (China), Vietnam and Taiwan the water rates are very low. Taiwan has not imposed water consumption levies either. The impact on future cost is very low because the Factory doesn't use much water.	
Low risk	**Countermeasure / Management Mechanism**	Water-saving measures

In 2024, Alpha Networks' total water withdrawal (including the Hsinchu, Changshu, and Vietnam factories) was 145,956 tons, wastewater discharge was 114,736 tons, and water consumption was 31,220 tons.

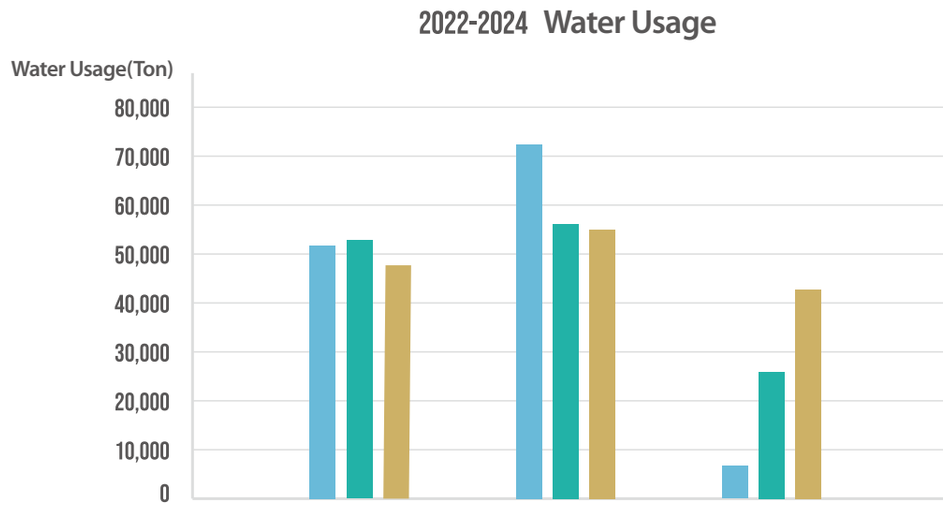
Water withdrawal (unit : ton)			All regions
Water withdrawal by source	Surface water	Fresh water (≤1,000 mg/L total dissolved solids)	0
		Other water (>1,000 mg/L total dissolved solids)	0
	Ground water	Fresh water (≤1,000 mg/L total dissolved solids)	0
		Other water (>1,000 mg/L total dissolved solids)	0
	Seawater	Fresh water (≤1,000 mg/L total dissolved solids)	0
		Other water (>1,000 mg/L total dissolved solids)	0
	Produced water	Fresh water (≤1,000 mg/L total dissolved solids)	0
		Other water (>1,000 mg/L total dissolved solids)	0
	Third-party water	Fresh water (≤1,000 mg/L total dissolved solids)	145,956
		Other water (>1,000 mg/L total dissolved solids)	0
	Third-party withdrawal by source	Surface water, ground water, seawater, produced water	0
Total Water withdrawal	Surface water + Ground water + Seawater+ Third-party water		145,956

Discharge (unit : ton)		All regions
Water discharge by destination	Surface water	0
	Ground water	0
	Seawater	0
Total discharge	Third-party water	114,736
	Surface water + Ground water + Seawater+ Third-party water	114,736
Water discharge by fresh water and other water	Fresh water	0
	Other water	0

Water consumption (unit : ton)	All regions
Total water consumption	31,220

Water usage

Actual water usage statistics for each factory between 2022 ~ 2024 are shown below:
The Vietnam Factory is currently Alpha Networks' main production base. Production capacity has been greatly increased so manpower requirements and water consumption have both increased as well.



	Hsinchu Factory	Changshu Factory	Vietnam Factory (Plant A+B)
2022	51,413	73,014	7,079
2023	52,736	56,649	25,578
2024	48,008	55,264	42,684

Remark:
1. Convenience store and coffee station were included in the water consumption data of the Hsinchu Factory.
2. In 2024, Hsinchu Factory achieved a 8.9% reduction in water consumption while the Changshu Factory achieved a 2.4% reduction.
3. The water consumption at the Vietnam Factory was the combined total of Plant A + Plant B. Plant A was commissioned in May 2022, and Plant B was commissioned in May 2023.

Drinking water quality testing

Alpha Networks takes measures to ensure that the quality of drinking water is up to standard to protect the safety and hygiene of all employees' water supply. Water dispenser equipment is maintained in-house or by contractors every month. An environmental testing organization accredited by the EPA is retained to test the quality of the treated water for level of E.coli and total bacteria count every 3 months. Maintenance tasks and water quality test results are recorded in the "Water Dispenser Water Quality Testing and Equipment Maintenance Record Form" and posted prominently near the water dispensers. The test results for Hsinchu Factory, Changshu Factory, and Plant A of Vietnam Factory are shown below:

HsinChu Factory: According to the Enforcement Rules of the Act Governing Drinking Water Management:

- e.coli count ≤ 6 CFU/100mL
- Total bacteria count ≤ *CFU/mL

Changshu Factory: compliant with GB/T 57TT50 (Standards for drinking water quality)

Vietnam Factory (Plant A and B):
based on QCVN 6-1: 2010/BYT National Standards for Natural Mineral Water and Bottled Water, and QCVN 01-1:2018/BYT National Standards for Drinking Water Quality.

2024 Drinking water quality test results (based on the data from the 4th Quarter)

Factory / Test item	E.coli count (Unit: CFU/100mL)	Total bacteria count (Unit: CFU/mL)
Hsinchu Factory	<1	-
Changshu Factory	Not detected	Not detected

Factory / Test item	E.coli count (Unit: CFU/100mL)	Total bacteria count (Unit: CFU/mL)
Vietnam Factory (Plant A)	KPH (Note)	KPH (Note)
Vietnam Factory (Plant B)	KPH (Note)	KPH (Note)

Source: Alpha Networks drinking water quality test report
Note: KPH: Non-detectable (not detected, below the detection threshold).

Discharge water testing

Environmental testing organizations accredited by the Environmental Protection Administration of the Executive Yuan are commissioned every year to carry out testing and keep a record of the test results. The discharge system at Hsinchu Factory has separate rainwater and wastewater (effluent) pipes. Rainwater is collected by the rainwater drains around the plant buildings before being discharged into the park's storm-water mains. Domestic wastewater (effluent) is piped to the park's sewage mains and from there to the sewage treatment plant for processing before discharge. The discharges from the rainwater and sewage lines are not mixed. All wastewater discharges comply with the rules of the Regulation for the Use and Management of Wastewater Treatment and Sewage System in the Science Park, where the sampling well is cleaned and the flow meter is calibrated annually.

Factory wastewater discharge, 2022~2024 (Tons)

Factory / Test item	2022	2023	2024
Hsinchu Factory	29,110	28,445	25,325
Changshu Factory	73,014	56,649	55,264
Vietnam Factory (Plant A)	5,042	9,886	11,105
Vietnam Factory (Plant B)	297	10,424	23,042

Note 1: Source - Hsinchu Factory – Meter readings reported to the Science Park Administration's sewage treatment factory each month.
Note 2: Source - Changshu Factory – Data is based on tap water consumption statistics (local regulations do not require the tracking of sewage volume so the sewage discharge figures are based on tap water consumption)
Note 3: Source - Vietnam Factory – Calculated based on 80% of tap water consumption, according to QCVN 40:2011 / BTNMT (National Industrial Wastewater Regulation), and classified as Category B for testing purposes.

2024 discharge water quality test results

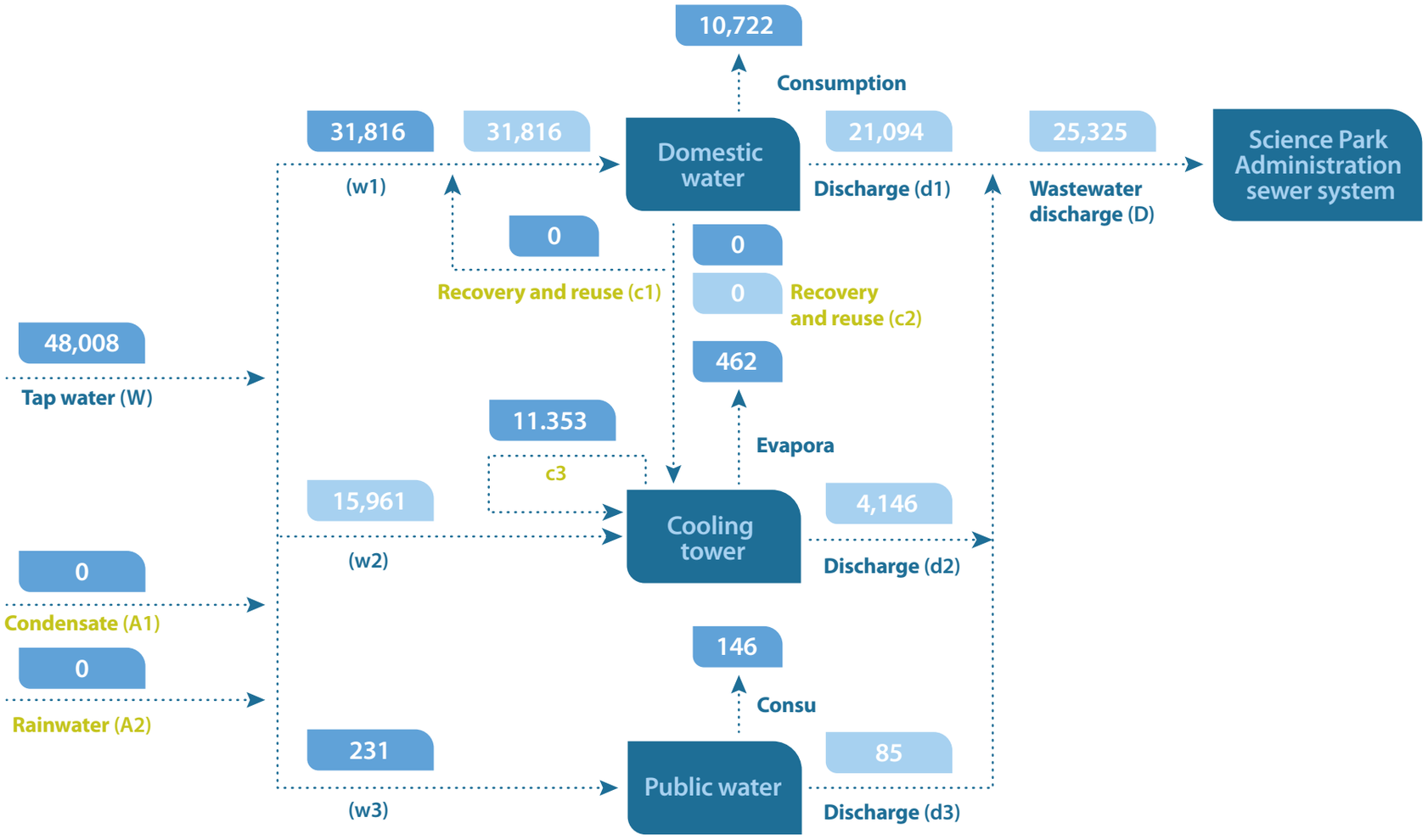
Factory / Test item	pH	COD	BOD	SS	Oil	MBAS	Ammonia-Nitrogen	Phosphate
Hsinchu Factory Actual value	6.9	240mg/l	77.7mg/l	59mg/l	20.6mg/l	1.6mg/l	6.42 mg/l	-
Hsinchu Factory Controlled value	5.0~9.0	500mg/l	300mg/l	300mg/l	15mg/l	10mg/l	50mg/l	-
Changshu Factory Actual value	7.6	188 mg/l	-	23 mg/l	0.79mg/l	0.509 mg/l	42.4 mg/l	0.64 mg/l
Changshu Factory Controlled value	6~9	500mg/l	-	400mg/l	100mg/l	20mg/l	45mg/l	8mg/l
Vietnam Factory (Plant A) Measured NT1	7.44	66.4 mg/l	31.7 mg/l	46 mg/l	3.6 mg/l	-	0.12 mg/l	4.54 mg/l
Vietnam Factory (Plant B) Measured NT2	7.48	48.3 mg/l	23.2 mg/l	30 mg/l	2.2 mg/l	-	3.69 mg/l	4.22 mg/l
Vietnam Factory Controlled value	5.5~9	150 mg/l	50 mg/l	TSS 100 mg/l	10 mg/l	-	10 mg/l	6 mg/l

Source: Discharge water test report
Note: sewage from each factory is collected by sewer pipes and channeled to the sewage treatment plant for processing. The sewage is only discharged to the environment after making sure that it complies with the regulations stipulated by various authorities.

Water balance

2024 Water balance sheet for Alpha Networks Hsinchu Factory

Alpha Networks Hsinchu Factory submits a water balance sheet to the sewage treatment plant for management every month in accordance with the Regulation for the Use and Management of Wastewater Treatment and Sewage System in the Hsinchu Science Park. Communication between the two parties and periodic wastewater water quality testing ensures that that the discharge quality conforms to the requirements of the Hsinchu Science Park sewer system.



Recovery rate = $\frac{(A1+A2)+(c1+c2+c3)}{(W+A1+A2)+(c1+c2+c3)} \times 100\% = 19.1\%$

Wastewater discharge rate = $\frac{D}{(W+A1+A2)} \times 100\% = 52.8\%$

Note:
1: Present water data using the original chart where possible.
2. Calculation formula has been defined. Simply enter the data into t he water balance sheet and the % will be calculated automatically.
3. Water balance sheet can be adjusted/calculated separately if necessary.

Linked data Calculated by computer equation

Description:

A1: Condensate recovery
A2: Rainwater recovery

W: Tap water
w1: Domestic water consumption
w2: Cooling tower water consumption
w3: Public water consumption

D: Total wastewater discharge
d1: Domestic wastewater
d2: Cooling tower discharge
d3: Public water discharge

V: Evaporation from cooling tower

c1: Recovery and reuse
c2: Recovery and reuse
c3: Reclamation of cooling t ower discharge

Consumption: Drinking water, irrigation

4.2.4 Biodiversity

Alpha Networks' volunteers visited a rustic mountain village in Hengshan, Hsinchu, during the summer in July to experience the arduous life of tea farmers. Many plants and animals make their home in the tea plantations. There are flowers and butterflies everywhere, and some of the volunteers even saw a pangolin in the woods. These sights embody the symbiotic existence of man and nature.

1 | Tea-picking ecological activity

Alpha Networks' volunteers braved the sun to gather at "Cihu Temple" in the foot hills of Yuanli and get ready for a day of bulrush harvest. The cut bulrush is laid out neatly on the ground, filling the air with the fragrance of freshly cut grass. Despite being soaked in sweat, the volunteers still enjoyed themselves. Hands smeared with dirt and grass juices symbolize their connection with the land before their feet.

2 | Bulrush harvest ecological activity

03 Chrysanthemum picking ecological activity

The transition from fall to winter coincides with the Chrysanthemum season. Alpha Networks' volunteers traveled to Tongluo, Miaoli, for the annual Chrysanthemum harvest. There they experienced the flower farmers' hard-working attitude for themselves, and immersed themselves in the bounty of the farming village. Young farmers and volunteers shared how they incorporated the ideals of environmental friendliness into everyday life. "Better to get your hands dirty than ruin the soil" summarizes their respect and love for the land.

04 Mesona harvest ecological activity

Mesona is richest in jelly after the Bailu solar term in fall. This is therefore the best time for the mesona harvest. Alpha Networks' volunteers and their families ventured deep into Xinli District, Guanxi, Hsinchu, to help harvest mesona in the fields during the Bailu solar term. Guanxi's mesona is heir to generations of people's memories. The farmers protect the land with their hands and watch over the agricultural community.

4.3 Carbon Emission

4.3.1 Greenhouse Gas Inventory and Policy Statement

Climate anomalies caused by global warming is now threatening our living environment. As a leading network communications equipment maker, we fulfill our social responsibility by creating a toxin-free, healthy and sustainable living environment for future generations.

To this end, we promise the following:

- Facilitate the tracking of internal carbon emissions by committing to the disclosure of enterprise carbon emissions.
- Work with our business partners to expand the scope of reduction initiatives.
- Provide our consumers and users with more low-carbon options.
- Increase transparency and reduce product carbon footprints.

The impact of global climate is imminent. In early 2022, Taiwan experienced a sweeping drought due to insufficient precipitation. To address the resulting water shortage, local regions reduced water pressure and supply, water rationing, farming and business suspension at different levels. In July during the same year, the floods in Western European countries such as Germany, Belgium, the Netherlands, Switzerland and Luxembourg caused power outage in some regions, prompted forced evacuation and destroyed infrastructure and agricultural facilities in certain areas. In particular, Germany suffered serious damages to its infrastructures. Experts believe that extreme weathers have started to wreak havoc at all corners of the earth. To reduce carbon emissions, countries around the world have announced that they will achieve the goal of "Net Zero by 2050". Environmental, social and corporate governance (ESG) is very important to Alpha Networks. International trends and the Task Force on Climate-related Financial Disclosures (TCFD) were used as a reference for applying more specific and quantitative methods to monitor and understand the risks and opportunities from our own operations and activities, and realize the goals of sustainable corporate development.

Due to the increasingly serious global warming, the international community promotes energy conservation and Greenhouse Gas (GHG) reduction. In response to global climate change, Alpha Networks has joined the Carbon Disclosure Project (CDP), committing ourselves to carbon emission disclosure (ISO 14064--1) as an enterprise and product carbon footprint (PCF; ISO 14067) to monitor, understand, control and reduce our GHG emissions in a timely manner.

* For more information, please visit the Alpha Networks' website > ESG > Environmental Protection

4.3.2 Carbon Disclosure

Alpha Networks signed up Carbon Disclosure Project (CDP) in 2013. GHG inventory data is registered with the CDP website (https://www.cdp.net/en) for disclosure. CDP then announces the results for the year to provide customers and the relevant stakeholders with a reference. The 2023 projects included disclosure of climate change, water and supplier participation. Alpha Networks will keep an eye on the global issues in relation to climate change. Annual reports disclose the achievements to stakeholders every year.

CDP results for 2022~ 2024

Result/Year	2022	2023	2024
Climate Change	B-	C	C
Water Security	B-	C	C
Supplier Engagement Rating	A-	Note	Note

Source: CDP official website
Note: no disclosure on the CDP website

4.3.3 Greenhouse Gas Inventory

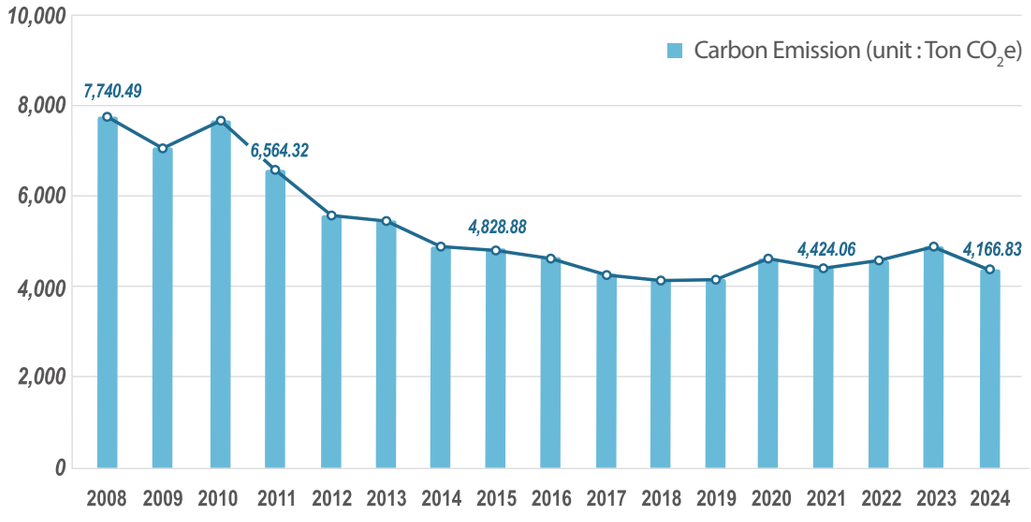
As a global citizen, Alpha Networks is very much willing to contribute to the protection of the global environment and to the reduction of greenhouse gas emissions. The ISO 14064-1:2006 greenhouse gas inventory standard was adopted in 2018, and the greenhouse gas emissions of that year were set as the base year. We remain committed to conducting GHG inventories, slowing down global warming, controlling and managing greenhouse gas emissions, and fulfilling our corporate responsibility for the global green new deal and the green economy. In response to the updated requirements of ISO14064-1:2018, Alpha Networks Hsinchu Factory has completed training on ISO14064-1:2018 and updated the baseline year to 2021 on December 8, 2021. The Hsinchu Factory shall follow the statistical guidelines of the Intergovernmental Panel on Climate Change (IPCC) and the regulations of the Environmental Protection Administration's Greenhouse Gas Reduction and Management Act, and conduct greenhouse gas identification for even types of GHGs in accordance with the Kyoto Protocol, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). The operational boundaries of Alpha Networks Hsinchu Factory include direct greenhouse gas emissions sources (Category 1) and indirect greenhouse gas emissions sources (Category 2, Category 3, Category 4, Category 5, Category 6). The greenhouse gas types identified by the Company include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbons (HFCs). However, we have not identified emission sources for greenhouse gases such as perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), nitrogen trifluoride (NF_3), and biogenic carbon, which are subject to regulation under the Kyoto Protocol.

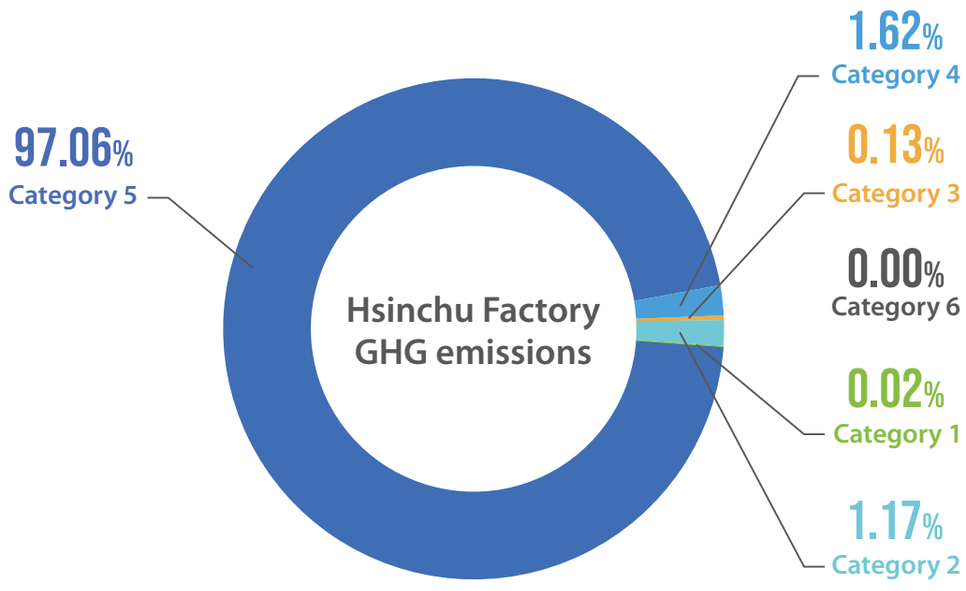
The Hsinchu Factory and Changshu Factory both completed their ISO 14064-1:2018 inventory and third-party verification in 2024. The relevant results are explained below; the Vietnam Factory completed its 2024 inventory (please see the timetable under 4.3.5 Greenhouse Gas Inventory Timeline) but the report did not complete its third-party verification in time. Once verification is completed the data will be published on the Company's Website > ESG.

2024 GHG emission by category (Hsinchu Factory)

Category	Category 1	Category 2	Category 3	Category 4	Category 5	Category 6	Total
Carbon Emissions (Ton CO_2e)	71.3032	4,095.5292	448.2720	5,686.1309	339,881.4595	0.0000	350,182.695
Percentage (%)	0.02%	1.17%	0.13%	1.62%	97.06%	0.00%	100.00%

Change in GHG emissions (Scope 1 + 2) at Hsinchu Factory from 2008 to 2024

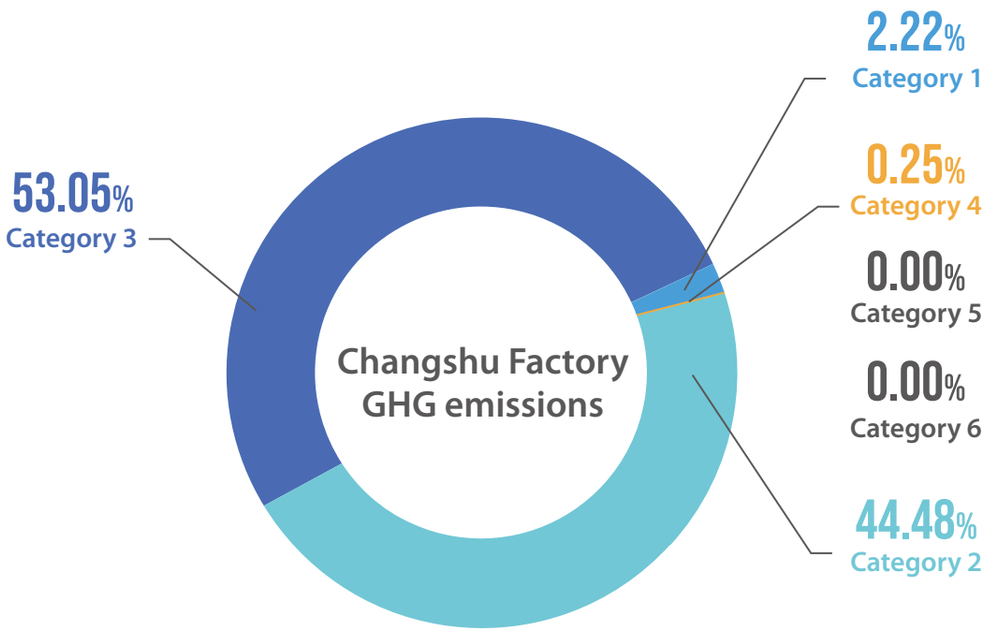




Global warming triggered by excessive GHG emissions has become an important environmental issue for the whole world. Based on the principles of sustainable development and the obligation to fulfill corporate social responsibility, Alpha Networks (Changshu Factory) is actively committed to greenhouse gas emission inventory and control to mitigate global warming. Through our management efforts, we aim to conserve energy resources and uphold the sustainable development of the global ecological environment. With the baseline year for greenhouse gas inventory conducted according to ISO 14064-1:2018 standard set between January 1 to December 31, 2024, our operational boundary includes direct greenhouse gas emissions (Category 1) and indirect greenhouse gas emissions (Categories 2, 3, 4, 5, 6). The greenhouse gases inventoried by Alpha Networks include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). Total GHG emissions by Alpha Networks (Changshu Factory) in 2024 amounted to 18,267.26 tons of CO_2 equivalent. The emissions for each category and their respective percentages are as follows:

2024 GHG emission by category (Changshu Factory)

Category	Category 1	Category 2	Category 3	Category 4	Category 5	Category 6	Total
Carbon Emissions (Ton CO_2e)	197.79	3969.70	4735.20	22.55	0.00	0.00	8,925.24
Percentage (%)	2.22%	44.48%	53.05%	0.25%	0.00%	0.00%	100.00%



Additional information of Alpha Networks 2024 GHG emissions

The above inventory does not contain REC data due to procedural factors. Once the REC's equivalent emissions (tons CO2e) are reduced, the market baseline is then as shown below:

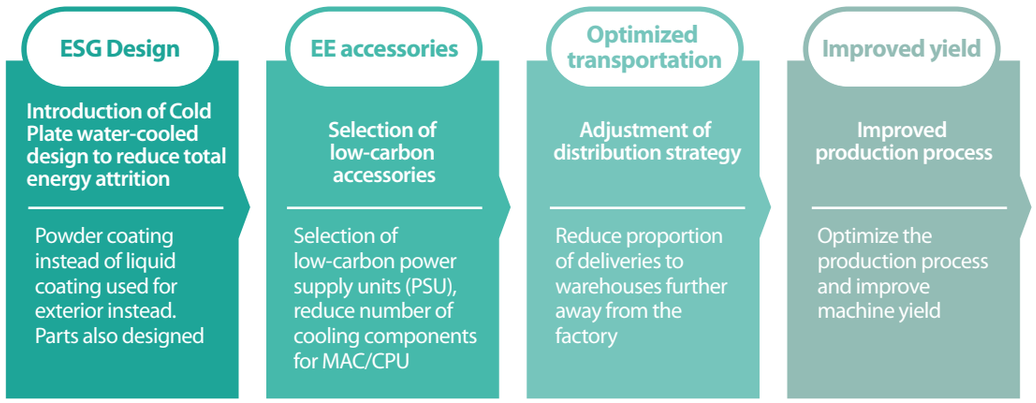
Ton CO_2e

Site	Scope 1	Scope 2		(A) REC (MWh)	(B) Electricity carbon coefficient
Hsinchu Factory	71.30	Regional baseline	4,095.53	0	0.4890
		-) Equivalent tons of REC(=A x B)	0.00		
		=) Market baseline	4,095.53		
Changshu Factory	197.79	Regional baseline	3,969.70	2,235	0.5978
		-) Equivalent tons of REC(=A x B)	1,336.19		
		=) Market baseline	2,633.51		
V i etnam Factory	37.98	Regional baseline	7,361.03	1,100	0.6592
		-) Equivalent tons of REC(=A x B)	729.73		
		=) Market baseline	6,631.30		
Regional baseline	307.07		15.426.26		
Market baseline			13,360.34		

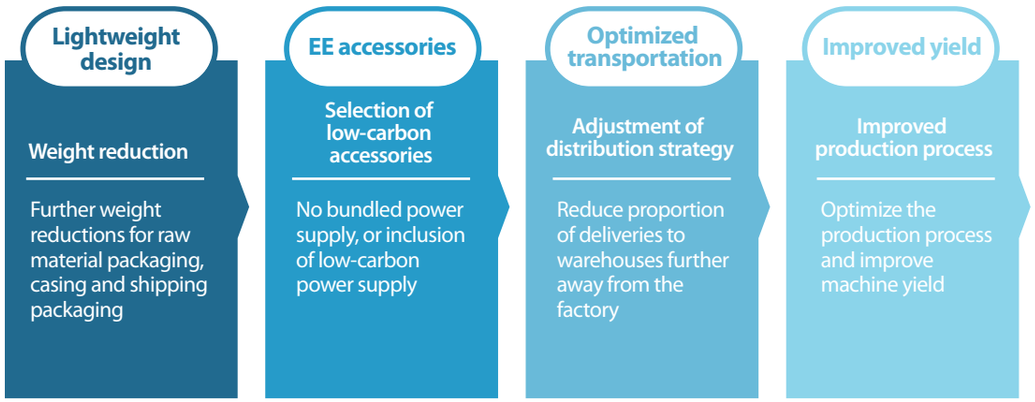
4.3.4 Product Carbon Footprint

Global requirements on environmentally sustainable development are becoming increasingly stricter. Businesses must actively implement carbon reduction strategies during product design and production to satisfy international carbon reduction trends and market requirements. Alpha Networks strives fulfill our corporate social responsibility by reducing the carbon footprint of our products throughout their life cycle. Scientific methods are also used to ensure the transparency and measurability of carbon reduction actions. To ensure the proper implementation of our corporate sustainability strategy, Alpha Networks cooperated with an external consulting firm in 2024 to successfully mentor the carbon footprint inventory of 2 models. TÜV Rheinland Taiwan Ltd. certification was also obtained to ensure that the products' carbon emissions data conformed to international standards. Alpha Networks will expand the scope of product carbon footprints to all new products from 2025 onwards. This will strengthen our competitive edge in the green supply chain and build a solid foundation for the realization of sustainable development goals. Our strategies and targets for carbon footprint inventories and the certification process are systematically managed and continuously refined to ensure that we are making an active contribution on carbon reduction and environmental protection, and that we are working with industry chain partners to realize a low-carbon future together

• Product carbon reduction - Switch



• Product carbon reduction - XGS-PON



• ISO 14067certificate

Certificate

Inventory Standard ISO 14067:2018
Certificate Registr. No. CO 25866826 2501
Report No. 48253661 001

2025-02-05

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Annex to certificate

Inventory Standard ISO 14067:2018
Certificate Registr. No. CO 25866826 2501
Report No. 48253661 001

Page 1 of 1

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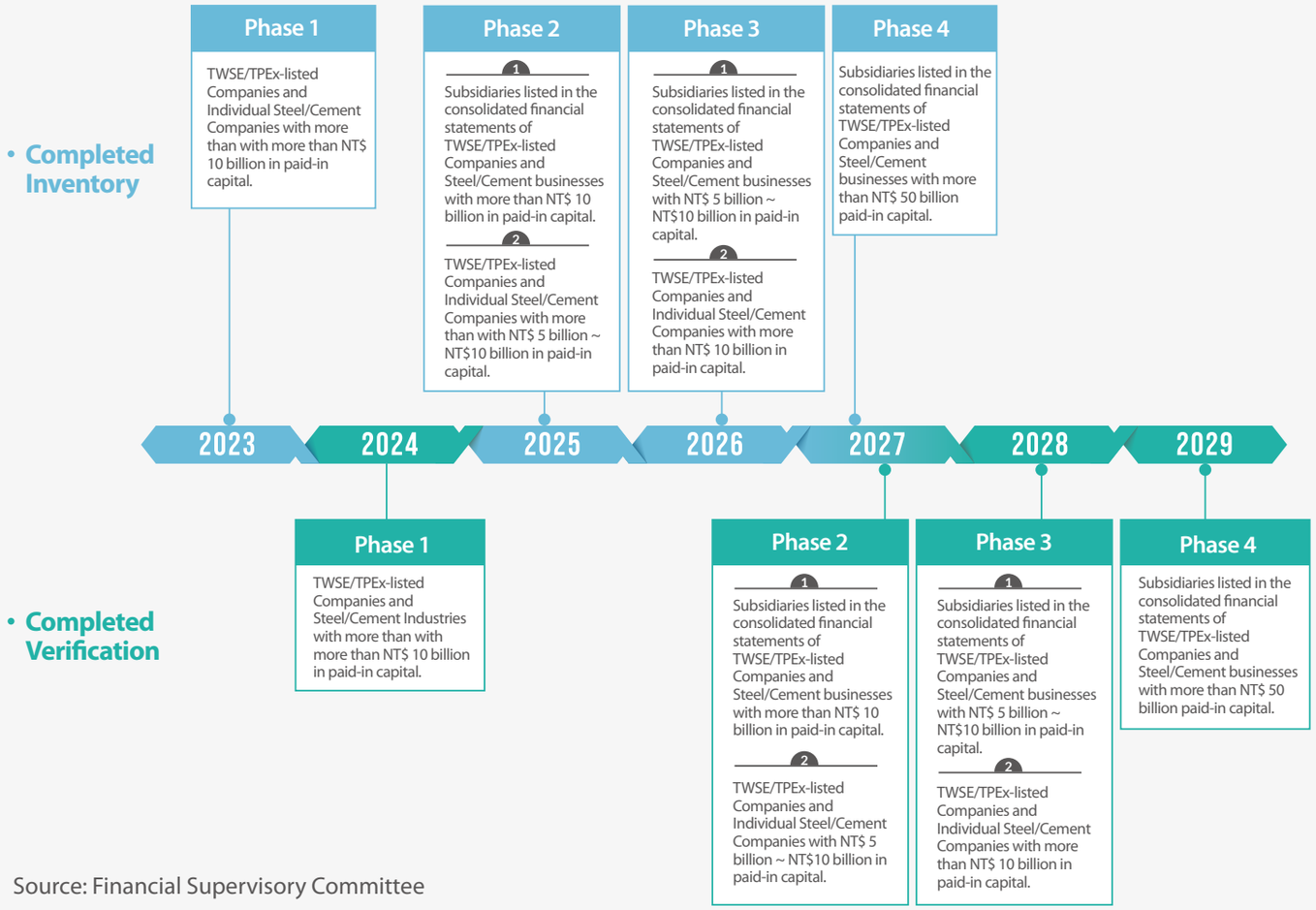
4.3.5 Greenhouse Gas Inventory Timeline

Pursuant to the Financial Supervisory Commission's (FSC) Sustainable Development Roadmap, Alpha Networks is implementing the plan outlined by the FSC for listed companies to complete greenhouse gas inventories by 2027 and verification by 2029. The parent company and subsidiaries in the Alpha Networks consolidated financial statements have a total of 25 locations. Phase 1 inventory was launched in 2023 ahead of schedule to complement Group planning. This initiative tracked and reported the energy consumption and greenhouse gas emissions at each location, providing a baseline for subsequent carbon reduction plans. This not only helps mitigate the impacts of climate change but also enhances the company's competitiveness in the global market.

Financial Supervisory Committee's timetable for "Sustainable Development Roadmap for TWSE/TPEx-listed Companies."



Source: Financial Supervisory Committee

ALPHA Networks GHG inventory schedule (end of 2024)

	Parent Company	Subsidiary name	Location Domestic/ Overseas	Set up dedicated / non-dedicated unit	GHG inventory training	Complete GHG inventory	Complete verification
1	Qisda	Alpha Networks	Domestic	2009/12	2010/2	2021/12	2022/3
2	Alpha Networks	Hitron Technologies Inc.	Domestic	2011/6	2011/8	2022/2	2022/5
3	Alpha Networks	Alpha Networks (Hong Kong) Ltd.	Overseas	2025/3	2025/5	2025/12	2027/12
4	Alpha Networks	Alpha Solutions Co., Ltd.	Overseas	2025/3	2025/5	2025/12	2027/12
5	Alpha Networks	Alpha Networks, Inc.(USA)	Overseas	2025/3	2025/5	2025/12	2027/12
6	Alpha Networks	Alpha Technical Services Inc.	Overseas	2025/3	2025/5	2025/12	2027/12
7	Alpha Networks	Enrich Investment Corporation	Domestic	2025/3	2025/5	2025/12	2027/12
8	Alpha Networks	Alpha Networks Vietnam Company Limited	Overseas	2023/12	2024/3	2024/6	2025/6
9	Alpha Networks	Alpha Networks Vietnam Company Limited	Domestic	2025/3	2025/5	2025/12	2027/12
10	Alpha Networks	Aespula Technology Inc.	Domestic	2025/3	2025/5	2025/12	2027/12
11	Alpha Networks	Transnet Corporation	Overseas	2025/3	2025/5	2025/12	2027/12
12	Alpha Networks	Alpha Networks (Chengdu) Ltd.	Overseas	2023/5	2023/8	2023/9	2023/10
13	Alpha Networks	Innoauto Technologies Inc.	Overseas	2025/3	2025/5	2025/12	2027/12
14	Alpha Networks	Hitron Technologies (SIP) Inc.	Overseas	2025/3	2025/5	2025/12	2027/12
15	Alpha Networks	Hitron Technologies Europe Holding B.V.	Overseas	2025/3	2025/5	2025/12	2027/12
16	Alpha Networks	Hitron Technologies Americas Inc.	Overseas	2025/3	2025/5	2025/12	2027/12
17	Alpha Networks	Hitron Technologies (Vietnam) Inc.	Overseas	2022/3	2022/5	2022/9	2022/12
18	Alpha Networks	Hitron Technologies (Suzho Industrial Area) Ltd.	Overseas	2025/3	2025/5	2025/12	2027/12
19	Alpha Networks	Hitron Technologies (Suzho) Lied.	Overseas	2025/3	2025/5	2025/12	2027/12
20	Alpha Networks	Interactive Digital Technologies	Domestic	2022/9	2022/12	2023/2	2023/5
21	Alpha Networks	Huaci Communications Equipment (Shanghai)	Overseas	2025/3	2025/5	2025/12	2027/12
22	Alpha Networks	Alpha Networks (Changshu) Ltd.	Overseas	2023/5	2023/8	2023/9	2023/10
23	Alpha Networks	Alpha Networks (Dongguan) Co., Ltd.	Overseas	2022/3	2022/5	2022/9	2022/12
24	Alpha Networks	Indialpha Technet Private Limited	Overseas	2025/3	2025/5	2025/12	2027/12
25	Alpha Networks	Fiber Logic Communications, Inc.	Domestic	2025/3	2025/5	2025/12	2027/12

4.4 Environmental Protection Measures

Alpha Networks is dedicated to waste management to effectively ensure compliance and achieve waste reduction. Further management measures have been adopted for noise control, emission (waste gas) control, fire safety inspection and reporting and public safety inspection and reporting. The enhancement of the managed scope is explained below.

4.4.1 Waste Management

A waste management procedure has been formulated by Alpha Networks to establish an effective internal waste management system to prevent the polluting of the environment through improper waste management. Waste is divided into general waste, hazardous industrial waste and general industrial waste. Hsinchu Factory is equipped with a compliant waste storage area, and a waste disposal company approved by the government and with no fines over the past year is hired to dispose of Alpha Networks' waste. To reduce waste, each factory strengthened waste sorting, labeling and education in 2017. According to statistics, the total volume of waste in 2024 increased by 285.42 tons compared to 2023. The main reason for this increase was a 334% increase in production capacity at the Vietnam Factory in 2024 compared to 2023, resulting in a corresponding increase in waste as well. In 2024, the waste recycling rate increase by 2023 increase by 2.5% compared to 2040 (85.25% -> 87.75%). The Company shall continue to strengthen waste classification and labeling efforts to achieve waste reduction goals.

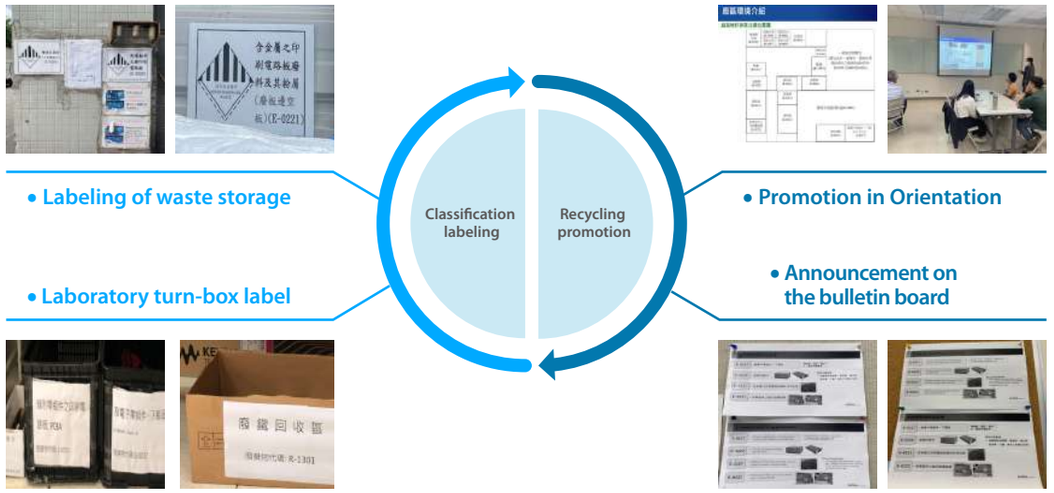
Waste output between 2022 ~ 2024

(Unit: Kg)

Category		Treatment method	2022	2023	2024
General industrial waste	Recyclable	Incineration (energy recycled)	41,170	38,730	32,520
		Recycled for reuse	562,565	608,524	865,200
		Others	0	0	0
		Subtotal	603,735	647,254	897,720
	Non-recyclable	Incineration (no energy recycled)	48,760	82,260	120,642
		Landfill	0	0	0
		Others	0	0	0
		Subtotal	48,760	82,260	120,642
	Total for general industrial waste		652,495	729,514	1,018,362
Hazardous industrial waste	Recyclable	Incineration (energy recycled)	0	0	13,176
		Recycled for reuse	45,431	41,113	48,102
		Others	0	0	0
		Subtotal	45,431	41,113	48,102
	Non-recyclable	Incineration (no energy recycled)	15,336	36,847	13,254
		Landfill	0	0	0
		Others	0	0	0
		Subtotal	15,336	36,847	13,254
	Total for hazardous industrial waste		60,767	77,960	74,531
Recovery rate			713,262	807,475	1,092,893

Remark: The scope of waste management includes Hsinchu Factory, Dongguan Factory, Changshu Factory, and Vietnam Factory. Dongguan Factory not included in 2024.

Alpha Networks embarked on the following incentives to improve waste recycling:



Changshu Factory completed the UI environmental certification and received the UL 2700 platinum certificate.

UL Solutions is pleased to present this letter to:
Amazon.com Services LLC

Congratulations to the company for having achieved:
Environmental Claim Validation
for:
ALPHA NETWORKS (CHANGSHU) LTD.
No. 6, Yintong Road, New & Hi-tech Industrial Development Zone, Changshu, Jiangsu Province 215500, P. R. China.

This facility has achieved Zero Waste to Landfill Platinum Operations, 100% diversion, with 5% Thermal Processing with Energy Recovery as per Environmental Claim Validation Procedure (ECVP) for Zero Waste Classifications, UL 2799A First Edition per UL project 4790711606.

This achievement letter is not a product certificate, and it does not indicate the current status of a product or facility's certification/Validation. Please confirm the current status of a certification/Validation by searching the UL SPOT® Product Database at UL.com/spot or by emailing LST.ULE.ProgramAdministration@ul.com.

07/24/2024 – 07/24/2025
Validation period

Josh Warren
VP&GM, Retail & Consumer Products

UL Solutions

Electronic waste recovery and recovery progress

E-0217

Waste electronic components

Waste wiring, resistors, capacitors, IC, power supply unit

E-0220

Waste communication equipment

Recovery precautions:
Any plastics or paper need to be disassembled, separated, then placed in the corresponding sealed bag.

E (electronic) waste such as removed parts/mechanisms, waste communications equipment, abolishment of PCB and waste PCB panels. The Company arranged for EPA-licensed vendors to deal with the situation.

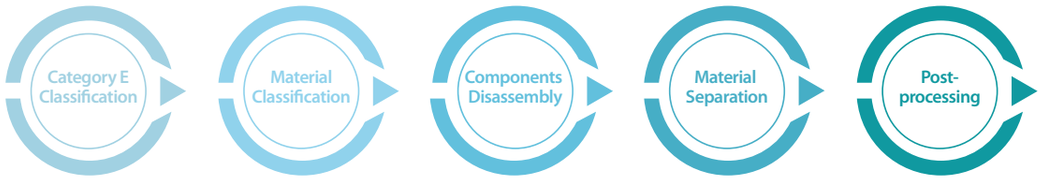
E-0221

PCB scrap containing metal and powder

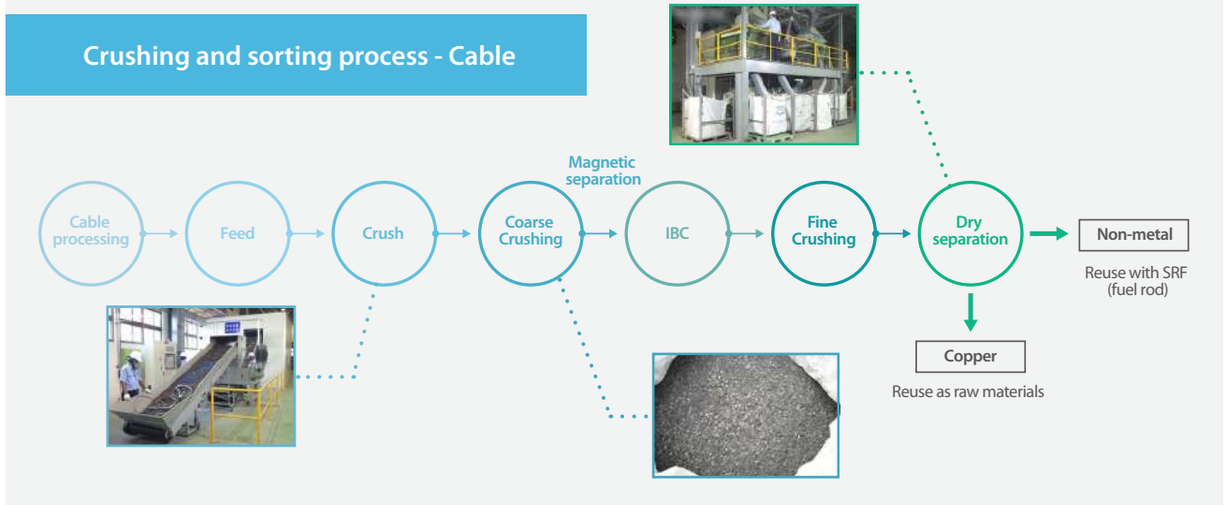
E-0222

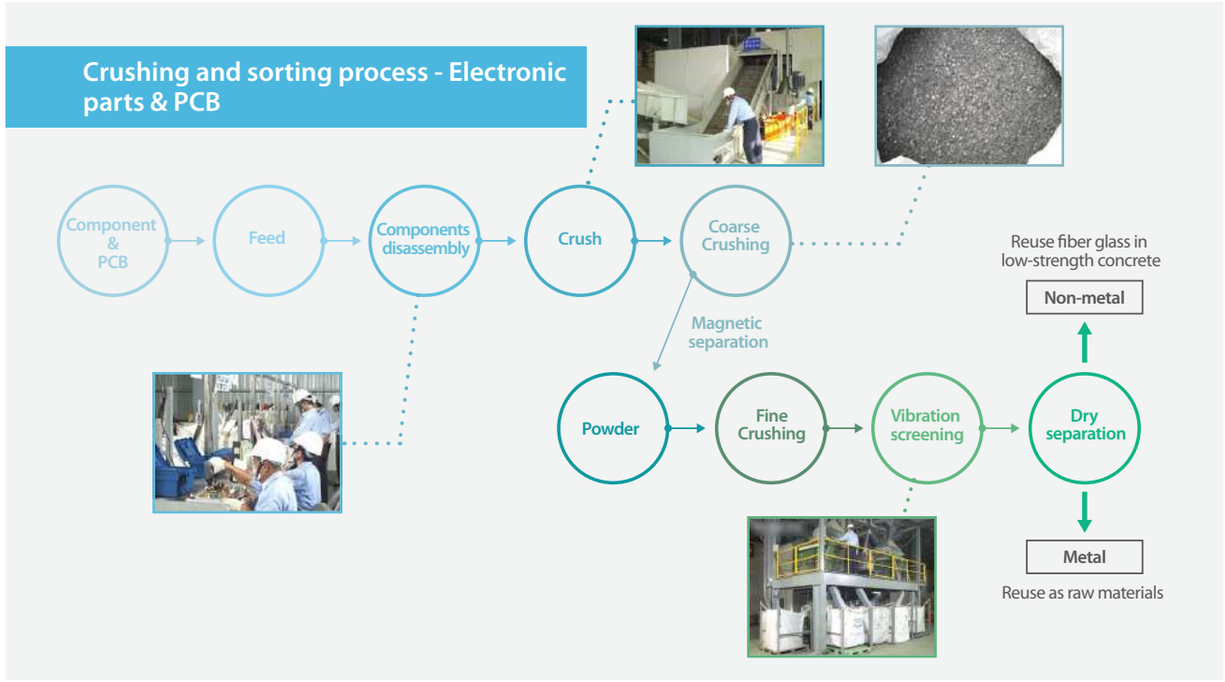
PCB scrap with components

The disassembly and sorting procedure as follows:



Crushing and sorting operation after disassembly:





4.4.2 Noise Control

Noise control at Alpha Networks (Hsinchu Factory) is divided into a work area and surrounding environment in accordance with Occupational Safety & Health Act and Noise Control Act regulations. For noise control in the surrounding environment, the Noise Control Zone Designation Guidelines require class 3 controls at the Alpha Networks (Hsinchu Factory) site as it is located within a science-based industrial park. If a significant noise source is installed or moved around the site then the noise level must be measured by an outside contractor to ensure compliance with control standards. There were no significant noise sources in the Hsinchu Factory's surrounding area. No protests were received from neighboring factories or residents either.

Local residents complained to the Changshu Factory at the end of 2023 that the process blower on the top floor was too loud and impacting on their quality of life. For the sake of community relations and to foster a friendly environment, a noise reduction project was launched. A third-party inspection body was also engaged to measure the daytime and nighttime noise levels. Both now conform to the noise standards after improvements were made.

▲ Before improvement (blower vibrations)

▲ After improvement (blower repair, fitting of shock-absorbing hoses and noise suppression piping)

Test report

CTI 华测检测

检 测 结 果

报告编号 A2230660471101C 第 9 页 共 11 页

表 8:

样品信息:			
样品类型	厂界噪声	检测日期	2023-12-22 2024-01-03
气象条件	昼间:多云、风速 1.3m/s; 夜间:多云、风速 1.3m/s;		

检测结果:

序号	检测点位置	检测时段	样品编号		结果（dB(A)）	主要声源
1	Z1	昼间：2023-12-22 12:36~2023-12-22 13:11 夜间：2024-01-03 22:04~2024-01-03 22:29	昼间 Leq	SUPC1421062	52.6	工业噪声
			夜间 Leq	SUPC1421061	50.9	工业噪声
			夜间 Lmax	SUPC1421061	58.8	工业噪声
2	Z2		昼间 Leq	SUPC1421066	55.5	工业噪声
			夜间 Leq	SUPC1421063	52.4	工业噪声
			夜间 Lmax	SUPC1421063	57.3	工业噪声
3	Z3		昼间 Leq	SUPC1421067	52.5	工业噪声
			夜间 Leq	SUPC1421064	46.8	工业噪声
			夜间 Lmax	SUPC1421064	55.8	工业噪声
4	Z4		昼间 Leq	SUPC1421068	49.2	工业噪声
			夜间 Leq	SUPC1421065	51.4	工业噪声
			夜间 Lmax	SUPC1421065	54.2	工业噪声

备注：厂界噪声为现场检测。

本页完

Q/CTI LD-SUCEDD-0701-F06 版本/版次：2.1

Hotline:400 6788 333 www.cti cert.com E mail:info@cti cert.com Complaint call:0755 33681700 Complaint E mail:complaint@cti cert.com

Source: Test report (Day time noise limit is 60 dB, night time is 50 dB)

4.4.3 Emission Control

Industrial emissions can be divided into particulate emissions and gaseous emissions. To ensure the effective control and reduction of emissions from the production process, Alpha Networks (Hsinchu Factory) retained an EPA-accredited environmental testing organization to measure the composition of emissions from the production process and reduce their environmental impact. All emissions must conform to the statutory emission standards.

2024 flue exhaust inspection result

Hsinchu Factory

Flue No. P002	Lead		Particulate pollutant		Total Hydrocarbons	
	Actual value	<0.02(mg/Nm^3)	Actual value	<1(mg/Nm^3)	Actual value	13 ppm
	Emission standard	10(mg/Nm^3)	Emission standard	100(mg/Nm^3)	Emission standard	*
Flue No. P003	Lead		Particulate pollutant		Total Hydrocarbons	
	Actual value	<0.02 (mg/Nm^3)	Actual value	<1 (mg/Nm^3)	Actual value	2 ppm
	Emission standard	10(mg/Nm^3)	Emission standard	100(mg/Nm^3)	Emission standard	*
Flue No. P004	Lead		Particulate pollutant		Total Hydrocarbons	
	Actual value	0.02 (mg/Nm^3)	Actual value	<1(mg/Nm^3)	Actual value	5 ppm
	Emission standard	10(mg/Nm^3)	Emission standard	100(mg/Nm^3)	Emission standard	*

Source: Alpha Networks (Hsinchu Factory) flue exhaust test report

Changshu Factory

Flue No.1	Item	Tin and its compounds	Non-methane hydrocarbon (counted as carbon)
	Emission concentration (mg/ m^3)	ND(mg/ m^3)	1.6(mg/ m^3)
	Limit value (mg/ m^3)	5	60
Flue No.2	Item	Tin and its compounds	Non-methane hydrocarbon (counted as carbon)
	Emission concentration (mg/ m^3)	ND(mg/ m^3)	1.3(mg/ m^3)
	Limit value (mg/ m^3)	5	60

Note: ND: None detectable
Source: Alpha Networks (Changshu Factory) Emissions test report

Vietnam Factory

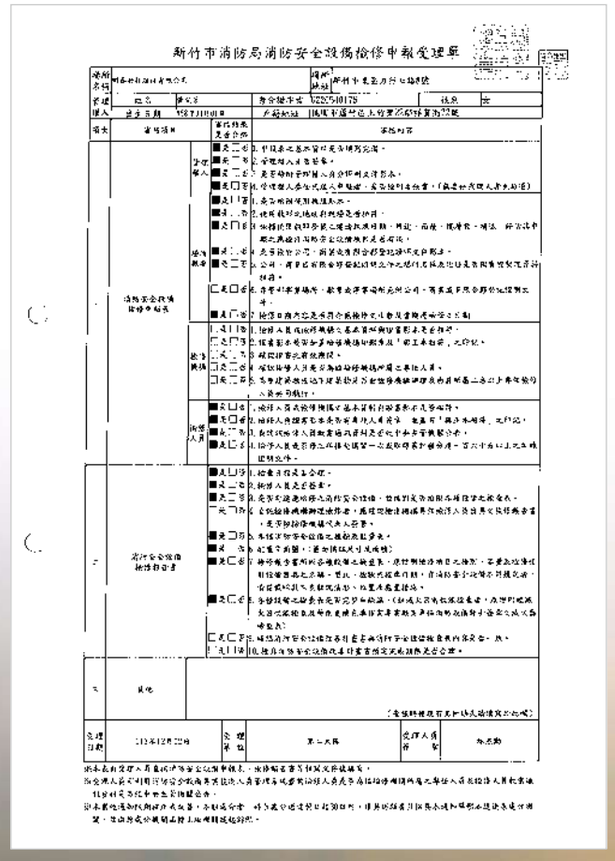
	Dust	Isopropanol	Xylene	Toluene
Flue No. KT1 (Plant A)	28	KPH	KPH	KPH
Flue No. KT2 (Plant A)	33	-	-	-
Flue No. KT3 (Plant B)	31	KPH	KPH	3.39
Flue No. KT4 (Plant B)	34	-	-	-
Emission standard	200 mg/Nm^3	980 mg/Nm^3	870 mg/Nm^3	750 mg/Nm^3

Note: KPH: below the detection threshold.
Source: applicable standards for Environmental Testing Report of Alpha Networks (Vietnam Factory)
Applicable standards:
QCVN 19:2009/BTNMT - National standards for industrial dust and inorganic emissions.
QCVN 20:2009/BTNMT - National standards for industrial emissions of certain organic substances.

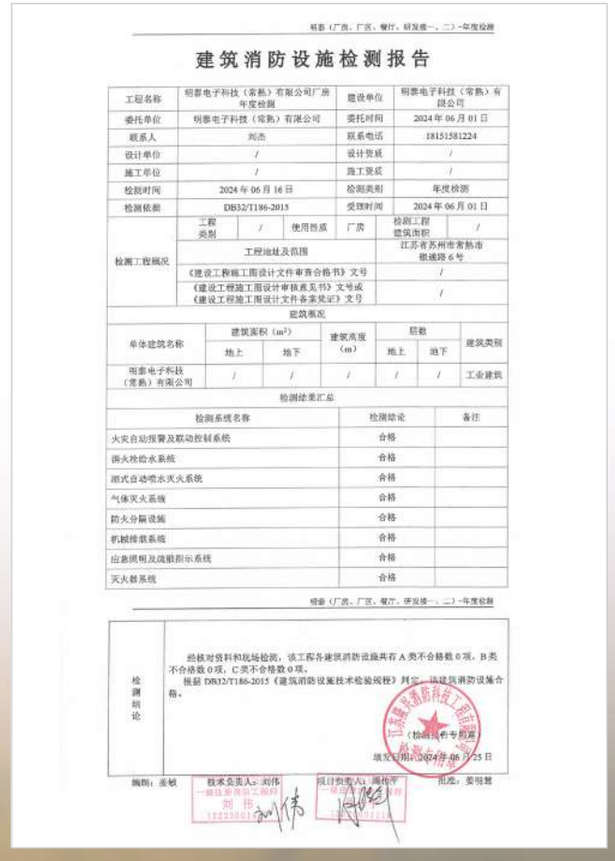
4.4.4 Fire Safety Inspection

The three types of maintenance cycle for fire safety equipment at Alpha Networks (Hsinchu Factory) are monthly maintenance, quarterly maintenance, and annual inspection/declaration. For monthly and quarterly inspections, the condition of the equipment is recorded by the inspection personnel in the inspection form. Annual inspections of fire safety equipment are contracted to fire safety companies and registered in accordance with the Operational Criteria for the Inspection and Registration of Fire Safety Equipment in All Premises.

Alpha Networks (Changshu Factory) services fire safety facilities every month and at least one full inspection of building firefighting facilities at least once a year in accordance wit Article 16 of the Fire Control Law of the People's Republic of China (PRC). It ensures that the records are valid and the test results are complete before archival.

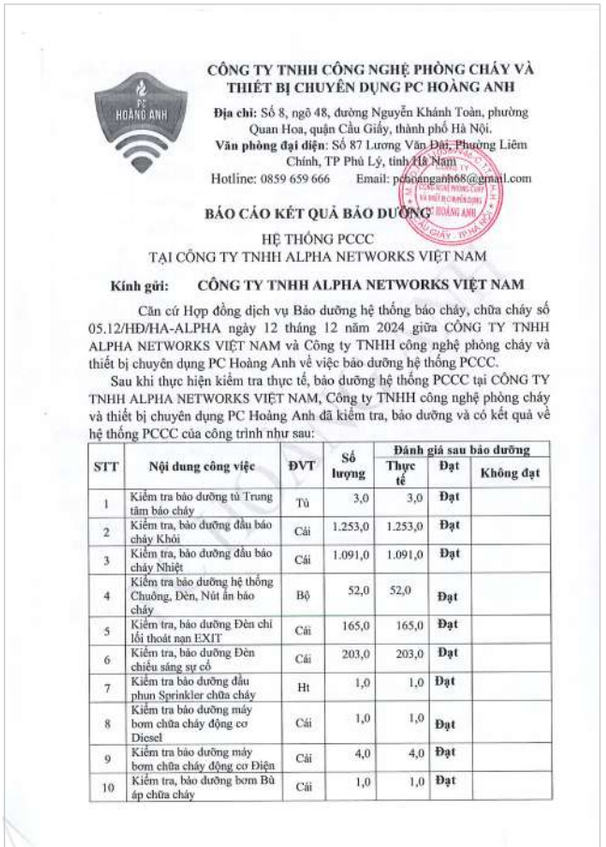

新竹市消防局消防安全設備檢修申報受理單

Source: Alpha Network (Hsinchu Factory) Fire Safety Equipment Inspection and Declaration Form


建筑消防设施检测报告

Source: Alpha Networks (Changshu Factory) 2024 Annual fire safety test report

Alpha Networks (Vietnam Factory) conducts monthly internal inspections in accordance with Vietnam's fire safety laws. Contractors are engaged to conduct a thorough inspection every year as well, covering the following items:



CÔNG TY TNHH CÔNG NGHỆ PHÒNG CHÁY VÀ THIẾT BỊ CHUYÊN DỤNG PC HOÀNG ANH

Địa chỉ: Số 8, ngõ 48, đường Nguyễn Khánh Toàn, phường Quan Hoa, quận Cầu Giấy, thành phố Hà Nội.
Văn phòng đại diện: Số 87 Lương Văn Đáo, Phường Liêm Chính, TP Phủ Lý, tỉnh Hà Nam
Hotline: 0859 659 666 Email: pchoanganh68@gmail.com

BÁO CÁO KẾT QUẢ BẢO DƯỠNG

HỆ THỐNG PCCC
TẠI CÔNG TY TNHH ALPHA NETWORKS VIỆT NAM

Kính gửi: CÔNG TY TNHH ALPHA NETWORKS VIỆT NAM

Căn cứ Hợp đồng dịch vụ Bảo dưỡng hệ thống báo cháy, chữa cháy số 05.12/HĐ/HA-ALPHA ngày 12 tháng 12 năm 2024 giữa CÔNG TY TNHH ALPHA NETWORKS VIỆT NAM và Công ty TNHH công nghệ phòng cháy và thiết bị chuyên dụng PC Hoàng Anh về việc bảo dưỡng hệ thống PCCC.

Sau khi thực hiện kiểm tra thực tế, bảo dưỡng hệ thống PCCC tại CÔNG TY TNHH ALPHA NETWORKS VIỆT NAM, Công ty TNHH công nghệ phòng cháy và thiết bị chuyên dụng PC Hoàng Anh đã kiểm tra, bảo dưỡng và có kết quả về hệ thống PCCC của công trình như sau:

STT	Nội dung công việc	ĐVT	Số lượng	Đánh giá sau bảo dưỡng		
				Thực tế	Đạt	Không đạt
1	Kiểm tra bảo dưỡng tủ Trung tâm báo cháy	Tủ	3,0	3,0	Đạt	
2	Kiểm tra, bảo dưỡng đầu báo cháy Khói	Cái	1.253,0	1.253,0	Đạt	
3	Kiểm tra, bảo dưỡng đầu báo cháy Nhiệt	Cái	1.091,0	1.091,0	Đạt	
4	Kiểm tra bảo dưỡng hệ thống Chuông, Đèn, Nút ấn báo cháy	Bộ	52,0	52,0	Đạt	
5	Kiểm tra, bảo dưỡng Đèn chỉ lối thoát nạn EXIT	Cái	165,0	165,0	Đạt	
6	Kiểm tra, bảo dưỡng Đèn chiếu sáng sự cố	Cái	203,0	203,0	Đạt	
7	Kiểm tra bảo dưỡng đầu phun Sprinkler chữa cháy	Ht	1,0	1,0	Đạt	
8	Kiểm tra bảo dưỡng máy bơm chữa cháy động cơ Diesel	Cái	1,0	1,0	Đạt	
9	Kiểm tra bảo dưỡng máy bơm chữa cháy động cơ Điện	Cái	4,0	4,0	Đạt	
10	Kiểm tra, bảo dưỡng bơm Bù áp chữa cháy	Cái	1,0	1,0	Đạt	
11	Kiểm tra, bảo dưỡng Bình tích áp	Bình	1,0	1,0	Đạt	
12	Kiểm tra, bảo dưỡng tủ điều khiển máy bơm	Cái	2,0	2,0	Đạt	
13	Kiểm tra bảo dưỡng Tủ chữa cháy vách tường ngoài nhà	Cái	57,0	57,0	Đạt	
14	Kiểm tra, bảo dưỡng tủ điều khiển quạt hút khói	Tủ	4,0	4,0	Đạt	
15	Kiểm tra, bảo dưỡng Quạt thông gió hút khói	Ht	11,0	11,0	Đạt	
16	Kiểm tra bảo dưỡng, Bình chữa cháy các loại	Bình	315,0	315,0	Đạt	
17	Chi phí giàn giáo thang, xe nâng. Vật tư phụ phục vụ thi công	Gói	1,0	1,0	Đạt	
18	Nạp bình chữa cháy MFZ4	Bình	41,0	41,0	Đạt	
19	Nạp bình chữa cháy MT3	Bình	22,0	22,0	Đạt	

Kiến nghị:
- Hệ thống bơm chữa cháy định kỳ mỗi tháng nên vận hành 1 đến 2 lần

Trên đây là kết quả kiểm tra bảo dưỡng hệ thống PCCC tại công ty.

Với báo cáo này hy vọng Công ty sẽ đưa ra được các biện pháp, phương pháp phù hợp để đảm bảo an toàn cho công tác PCCC tại công ty.

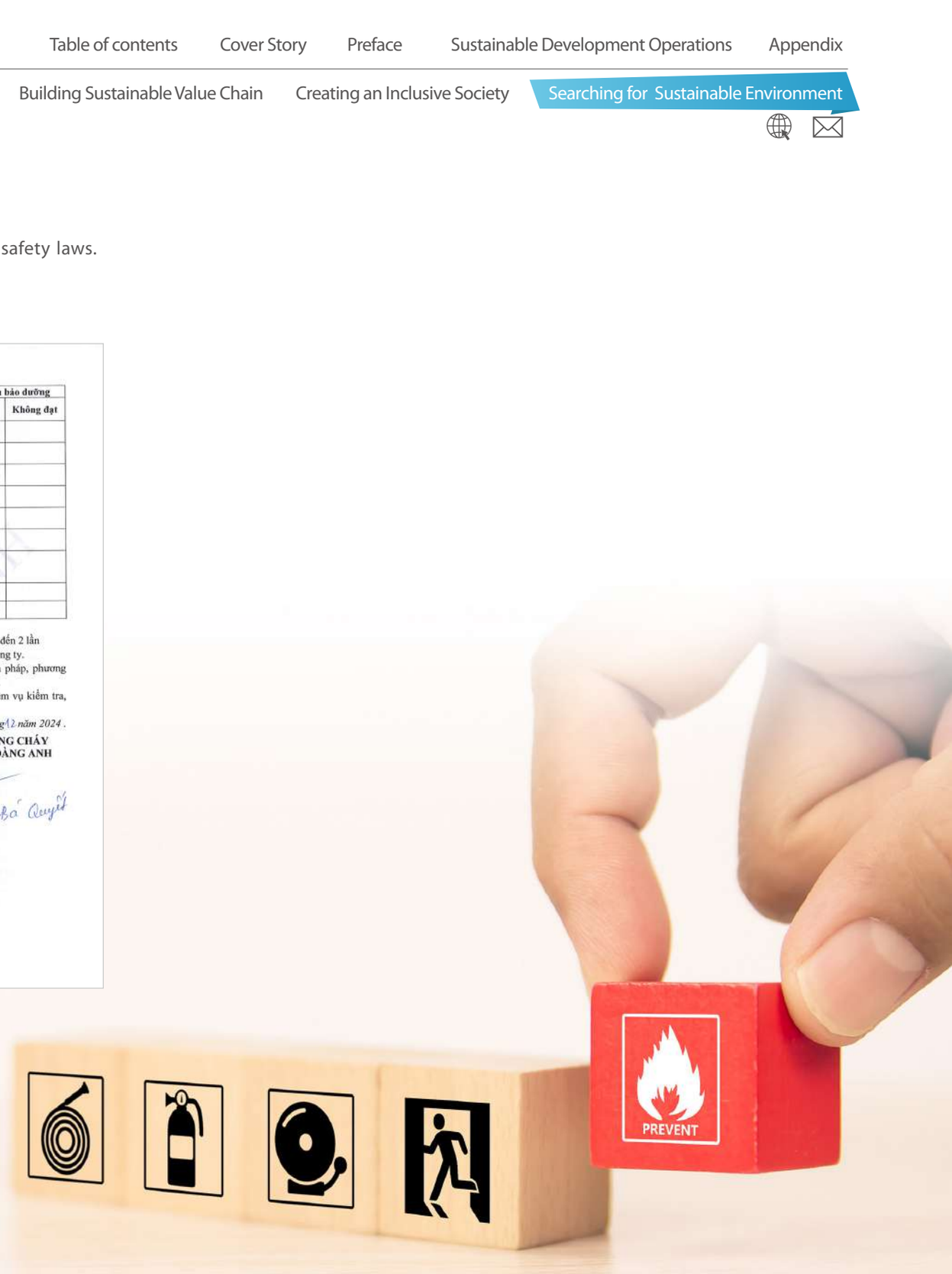
Chúng tôi xin chân thành cảm ơn Quý Công ty đã giao nhiệm vụ kiểm tra, bảo dưỡng hệ thống PCCC của công ty cho chúng tôi.

Hà Nội, ngày 20 tháng 12 năm 2024.

CÔNG TY TNHH CÔNG NGHỆ PHÒNG CHÁY VÀ THIẾT BỊ CHUYÊN DỤNG PC HOÀNG ANH

Phan Bá Quyết

Source: Alpha Networks (Vietnam Factory) 2024 Annual fire safety test report



4.4.5 Public Safety Inspection

Alpha Networks (Hsinchu Factory) not only complies with the relevant laws and regulations but also attach great importance to the working and living environment of employees. Every effort is made to create a workplace where employees can feel safe. Building public safety inspection, certification and declaration is also organized every two years. The latest declaration was made in 2023 and no problems were found.

正本

國家科學及技術委員會新竹科學園區管理局
建築物防火避難設施與設備安全檢查申報結果通知書

F1－5

112年度檢查申報案	接號日期	113年01月09日
	發文日期	113年01月11日
	發文字號	113-K5000007-01

檢查登記碼：B11121107027

受文者：黃文芳

副本受文者：全國建築物公共安全檢查股份有限公司

主旨：所報附表建築物依建築法第77條第3項及建築物公共安全檢查簽證及申報辦法規定辦理防火避難設施與設備安全檢查申報，業依規定查核完竣，復請查照。

通知事項：

一、本次附附申報書件，查核結果如下：
查核合格，予以備查。

二、下次（年度）應申報期間為114年07月01日至114年09月30日，屆時請依規定辦理申報。

三、本申報建築物如為供 A-1、B、D-1、D-5、F-1、F-2、F-3、H-1等類組別使用之營業場所（詳申報資料表「規況周遊類組」），申報人應將本通知書張掛（貼）於營業場所明顯處。

四、如有不服，依訴願法第14條規定應自行政處分達到之次日起30日內，向原處分機關或受理訴願機關提起訴願。

新竹科學園區管理局

（附表一）申報資料表

一、申報人	■使用人 □所有權人 □公寓大廈管理委員會之主任委員、管理負責人	姓名	黃文芳	國民身分證字號（或統一編號）	D000000076
		通訊住址	新竹市**********路8號	通訊電話	03******66
申報建築物概要	申報建築物或營業場所名稱	明泰科技股份有限公司		現況周遊類組	C2【一般會專類場所】C2 一般工廠、C2【一般會專類場所】C2 附設建築室兼停車場，C2【一般會專類場所】C2 停車場，從戴室
	建築物地址	新竹市東區科學工業園區力行七路8號		使用執照	(88)科工(竹)用字第291號
	整幢建築物現況	地上 5 層 地下 3 層		申報樓層別	地下層1層、地上層2層、地上層3層、地上層4層、地上層5層，突出物1層，地下層2層，地上層1層，地下層3層
	本次申報範圍之樓地板面積	49374.19 平方公尺			
專業機構、專業所負人資料	專業機構或事務所	機構(事務所)名稱	全國建築物公共安全檢查股份有限公司	認可證字號	40C5C00013
		機構(事務所)負責人姓名	郭財發	通訊電話	03******87
	專業檢查人	防火避難設施類	姓名 王智謀	認可證字號	40C3F02156
		設備安全類	姓名 陳晨仕	認可證字號	40C2F02155

此頁尚為驗證資料是否正確，因應新式個人資料保護法，將部分隱私資料另外處理

Source: Alpha Networks (Hsinchu Factory) building public safety inspection, certification and registration form

Alpha Networks (Changshu Factory) services fire safety facilities every month and at least one full inspection of building firefighting facilities at least once a year in accordance wit Article 16 of the Fire Control Law of the People's Republic of China (PRC). It ensures that the records are valid and the test results are complete before archival.

Alpha Networks (Vietnam Factory) conducts monthly internal inspections in accordance with Vietnam's fire safety laws. Contractors are engaged to conduct a thorough inspection every year as well, covering the following items:
(1) Fire alarm system
(2) Fire fighting system
(3) Emergency exit signs
(4) Fire extinguishers
(5) Lightning protection system

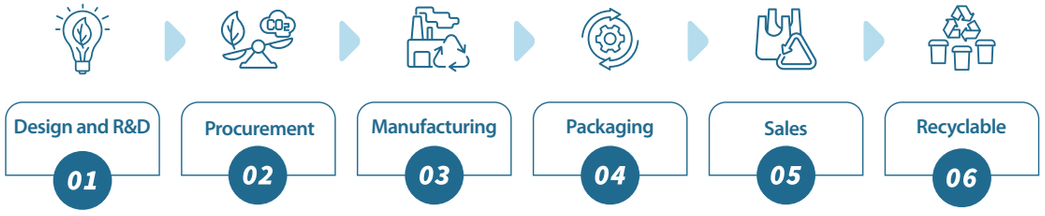
Test result: Testing found that all systems were working normally with no problems.

4.5 Environmental Regulations Compliance

4.5.1 Hazardous Substance Regulations

Rules banning the use of hazardous substances and on waste recovery have been imposed by international regulations such as the "Waste Electrical and Electronic Equipment" (WEEE) directive and the "Restriction of the use of certain hazardous substances in electrical and electronic equipment" (RoHS). The use of 6 kinds of hazardous substances was specifically banned from July, 2006 and add 4 new hazardous substances under control form July 22, 2019, for a total of 10 banned hazardous substances. And the importation of noncompliant electronic, information and communication products was prohibited as well. With the Eco-design principles were therefore incorporated into the design and manufacture of products during manufacturing, recycling and export.

Product Life Cycle



Implemented in every process

To keep track of current laws and regulations, 16 green and environment related legislations were updated in 2024, covering the European Union, the U.S., Australia, and Taiwan.

Green regulations in force

Regulation	Content	Effective date
EU REACH	EU REACH (SVHC) candidate list updated to 242 substances	2024/11/7
EU REACH	EU REACH (SVHC) candidate list updated to 241 substances	2024/6/27
EU REACH	EU REACH (SVHC) candidate list updated to 240 substances	2024/1/27
(EU) 2024/573	EU issues Regulation (EU) 2024/573 to update the law on Fluorinated greenhouse gases.	2024/3/11
(EU) 2024/590	EU issues new law on ozone-depleting substances.	2024/2/20
(EU) 2024/1416	RoHS Directive Annex III - Exemption of Cadmium used in the light sources of displays	2024/5/21
EPA	EPA announces draft control legislation on NMP (N-Methylpyrrolidinone, CAS: 872-50-4).	2024/6/14
GB/T 26572-2011	Requirements of concentration limits for certain restricted substances in electrical and electronic products	2024/6/29
EPA	US announces ban on use of chrysotile asbestos	2024/3/18
EPA	US designates 10 High-Priority Substances under the TSCA	2024/8/8
RMI	Responsible Minerals Initiative (RMI) releases its Additional Minerals Reporting Template (AMRT) V1.2 and AMRT Completion Guide.	2024/10/4
(EU) 2024/2570	EU amends Regulation on Persistent Organic Pollutants (POP) to include limits on unintentional traces of Methoxychlor and HBCDD.	2024/9/27
(EU) 2023/1542	Batteries must have declaration of conformity and CE mark to be sold in the EU market	2024/8/18
CP 65	California passes amendment to CP65 on warning labels	2024/11/26
CSCL	Japan announced that it is including 137 PFOA-related compounds in its Chemical Substances Control Law (CSCL)	2024/11/15
GB/T 45091-2024	Plastics - Limits for restricted substances of recycled plastics	2024/11/28

All Alpha Networks' products semi-assemblies, raw materials, packaging and auxiliary materials conform to current EU RoHS directive and REACH international regulations. All chemical substances used in products, parts and components as well as during the production process are strictly managed in accordance with the usage, restricted use or banned use requirements for hazardous substances through the GPM system. Product integration reports are generated in accordance with the management mechanism. The statistics for product integration reports in 2024 were compiled and provided to customers as product declarations and to customs for inspection.

GPM system survey & management graph

Custom form process (GPM)

- Inspection form designed by central factory
- Online communication and interaction with suppliers
- Upload of specification documents by suppliers
- Verify compliance with requirements

Green investigation process

- Compile materials database
- Version control for specifications and regulation
- Investigation of restricted substances
- Review verification and audit
- Tracing of green materials and BOM

GPM: Green Product Management

2024 Product integration report compilation statistics

Number/ Month	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Monthly target %	98	98	98	98	98	98	98	98	98	98	98	98	98
Achievement rate%	100	100	100	100	100	100	100	100	100	100	100	100	100
Number of cases to be completed	235	102	165	167	222	244	245	195	104	142	211	269	2,301
Actual number of cases completed	235	102	165	167	222	244	245	195	104	142	211	269	2,301

Product declaration (2024)

Type	Number
China RoHS	42
REACH	490
RoHS	227
EU Sanction on Restricted Iron	3
Other(e.g. CP65, French EDC, etc.)	14
Substances List	22
BSMI	24
PFAS	28
POPs	44
TSCA	87

4.5.2 Regulatory Database

Alpha Networks clearly defines hazardous substance usage standards for products able to and environment-related control requirements by regularly updating the green product control guidelines. Alpha Networks is therefore fulfilling its commitment to social responsibility by ensuring product compliance with all the relevant requirements. Apart from complying with existing standards on restricted, banned and controlled substances, Alpha Networks monitors international regulations and requirements on environmental substances including regional or national laws and regulations restricting or banning the use hazardous substances. In keeping with Alpha Networks' commitment to environmental protection, suppliers are asked to conform to and adhere to the relevant laws and regulations as well as their reporting obligations. To strengthen the enforcement of relevant regulations, a fast and detailed regulatory management database has been set up to improve Company personnel's understanding of enforcement efforts and progress.

For substances whose use may be restricted or banned in the future, we will continue to evaluate our options where the technology does not impact product quality, safety reliability, human health and increase environmental impact. We will consider revising the timetable for restricted/banned substances, and look at alternatives or improvements that will reduce the level of environmental impact and effect in order to comply with customer requirements as well as international, regional, and national green regulations. An “Alpha Networks Regulatory Database” has been set up for storage and queries to facilitate effective communication.

In 2024, Alpha Networks was not subjected to lawsuits or major fines for violating laws and regulations related to green products.

Regulatory Management Architecture

Appendix

GRI Standard Index

SASB Metrics

TWSE Sustainability Disclosure Indicators - Communications and Internet Industry

TCFD Index

Climate Related Information Disclosure

Principles of the United Nations Global Compact

SDGs Ibdex

Assurance Statement

GRI Standard

Statement of Use	The 2024 Alpha Networks Sustainability Report complies with the requirements of new GRI Standards (2021). The scope of data and information disclosed is January 1 to December 31, 2024
GRI 1Used	GRI 1 : Foundation 2021
Applicable GRI Sector Standard(s)	No applicable GRI Sector Standard(s)

GRI 2: General Disclosures 2021

Disclosure Item		Chapter	Page	Remark
The organization and its reporting practice				
2-1	Organizational details	About Alpha Networks	6~16	
2-2	Entities included in the organization's sustainability reporting	About this Report	4	
2-3	Reporting period, frequency and contact point	About this Report	4	
2-4	Restatements of information		N/A	There is no restatements of information to previous reports
2-5	External assurance	About this Report Appendix-Assurance Statement	4 149	
Activities and workers				
2-6	Activities, value chain and other business relationships	1.5 Operating Performance -2024 Reveune by Product Categories or Region 2.1 Sustainable Products 2.2 Resilient Supply Chain 2.3 Customer Satisfaction About Alpha Networks - Memberships	57 61~70 71~73 74 16	
2-7	Employees	3.2.1 Manpower Allocation	81~82	
2-8	Workers who are not employees	3.5.3 Occupational incident - Contractor's Safety and Hygiene Management	93	

Disclosure Item		Chapter	Page	Remark
Governance				
2-9	Governance structure and composition	1.1.1 Governance Structure	36	
2-10	Nomination and selection of the highest governance body	1.1.1 Governance Structure	36	
2-11	Chair of the highest governance body	1.1.1 Governance Structure	36	
2-12	Role of the highest governance body in overseeing the management of impacts	1.4.1 Risk Management Policy and Operations	46	
2-13	Delegation of responsibility for managing impacts	1.4.1 Risk Management Policy and Operations	46	
2-14	Role of the highest governance body in sustainability reporting	Sustainable Development Operational Framework	18~19	
2-15	Conflicts of interest	1.1.2 Operation of the Board of Directors	37~38	
2-16	Communication of critical concerns	1.4.1 Risk Management Policy and Operations	46	
2-17	Collective knowledge of the highest governance body	1.1.1 Governance Structure 1.1.2 Operation of the Board of Directors	36 37~38	
2-18	Evaluation of the performance of the highest governance body	1.1.1 Governance Structure 1.1.2 Operation of the Board of Directors	36 37~38	
2-19	Remuneration policies	1.1.4 Operation of the Remuneration Committee	39	
2-20	Process to determine remuneration	1.1.4 Operation of the Remuneration Committee	39	
Strategy, policies and practices				
2-22	Statement on sustainable development strategy	From the Chairman Alpha Policies - Sustainable Development Policy Sustainable Development Operational Framework	5 10 18~19	
2-23	Policy commitments	From the Chairman Viewpoint - Carbon Reduction Action	5 100	
2-25	Processes to remediate negative impacts	1.4 Risk Management	46~56	
2-27	Compliance with laws and regulations	1.2.3 Regulation Compliance	43	
2-28	Membership associations	About Alpha Networks - Memberships	16	
Stakeholder engagement				
2-29	Approach to stakeholder engagement	Stakeholder Communication and Identification of Issues of concern	20~29	
2-30	Collective bargaining agreements		N/A	No union organization at present.

GRI 3 Material Topics 2021

Disclosure Item		Chapter	Page	Remark
3-1	Process to determine material topics	Stakeholder Communication and Identification of Issues of concern	20~29	
3-2	List of material topics	Material Issues conclusion	27~29	
3-3	Management of material topics	Material Issues conclusion 1.4.2 Risk management operations process and results 1.4.3 Risks and opportunities of climate change	27~29 48~50 51~55	

Material Topics

Topic	Disclosure Item		Chapter	Page	Remark
Operating performance					
GRI 201 Economic Performance	201-1	Direct economic value generated and distributed	1.5 Operating Performance	57~58	
	201-2	Financial implications and other risks and opportunities due to climate change	1.4.3 Risks and Opportunities of Climate Change	51~55	
	201-3	Defined benefit plan obligations and other retirement plans	3.3.2 Welfare Measures and Employee Insurance	87	
	201-4	Financial assistance received from government	1.5 Operating Performance- Project Grants	58	
Supply chain management					
GRI 308 Supplier Environmental Assessment	308-1	New suppliers that were screened using environmental criteria	2.2.1 Supplier Management	71~72	
	308-2	Negative environmental impacts in the supply chain and actions taken	2.2.4 Supplier Audit and Due Diligence	73	
GRI 414 Supplier Social Assessment	414-1	New suppliers that were screened using social criteria	2.2.4 Supplier Audit and Due Diligence	73	
	414-2	Negative social impacts in the supply chain and actions taken	2.2.4 Supplier Audit and Due Diligence	73	
Risk Management					
GRI 201 Economic Performance	201-2	Financial implications and other risks and opportunities due to climate change	1.4.3 Risks and Opportunities of Climate Change	51~55	
Carbon Emissions					
GRI 305 Emissions	305-1	Direct (Scope 1) GHG emissions	4.3.3 Greenhouse Gas Inventory	121~122	
	305-2	Energy indirect (Scope 2) GHG emissions	4.3.3 Greenhouse Gas Inventory	121~122	
	305-3	Other indirect (Scope 3) GHG emissions	4.3.3 Greenhouse Gas Inventory	121~122	
	305-4	GHG emissions intensity	4.3.3 Greenhouse Gas Inventory	121~122	
	305-5	Reduction of GHG emissions	4.3.3 Greenhouse Gas Inventory	121~122	
	305-6	Emissions of ozone-depleting substances (ODS)	4.3.3 Greenhouse Gas Inventory	121~122	
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	4.3.3 Greenhouse Gas Inventory	121~122	

Topic	Disclosure Item		Chapter	Page	Remark
Waste management					
GRI 306 Waste	306-1	Waste generation and significant waste-related impacts	4.4.1 Waste Management	125~126	
	306-2	Management of significant waste-related impacts	4.4.1 Waste Management	125~126	
	306-3	Waste generated	4.4.1 Waste Management	125~126	
	306-4	Waste diverted from disposal	4.4.1 Waste Management	125~126	
	306-5	Waste directed to disposal	4.4.1 Waste Management	125~126	
Regulation Compliance					
GRI 307 Environmental Compliance	307-1	Non-compliance with environmental laws and regulations	4.1.2 Hazardous Substance Management System	104	No violation of environmental regulations has occurred.
			4.5 Environmental Regulations Compliance	132~134	
Occupational Health and Safety					
GRI 403 Occupational Health and Safety	403-1	Occupational health and safety management system	3.5.1 Safety and Health Policy	91	
	403-2	Hazard identification, risk assessment, and incident investigation	3.5.1 Safety and Health Policy 3.5.3 Occupational Incident	91 93	
	403-3	Occupational health services	3.5.5 Health Promotion	95~96	
	403-4	Worker participation, consultation, and communication on occupational health and safety	3.5.1 Safety and Health Policy 3.5.5 Health Promotion	91 95~96	
	403-5	Worker training on occupational health and safety	3.5.2 Safety and Hygiene Training	92	
	403-6	Promotion of worker health	3.5.5 Health Promotion	95~96	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	3.5.5 Health Promotion	95~96	
	403-8	Workers covered by an occupational health and safety management system	3.5.1 Safety and Health Policy 3.5.2 Safety and Hygiene Training	91 92	
	403-9	Work-related injuries	3.5.3 Occupational Incident	93	
	403-10	Work-related ill health	3.5.3 Occupational Incident	93	No occupational accident in 2024

Other Topics

Topic	Disclosure Item		Chapter	Page	Remark
GRI 202 Market Presence	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	3.3.1 Salary Level	86	
	202-2	Proportion of senior management hired from the local community	3.2.1 Manpower Allocation	81~82	
GRI 203 Indirect Economic Impacts	203-1	Infrastructure investments and services supported	1.4.2 Risk Management Operations Process and Results	48~50	
	203-2	Significant indirect economic impacts	1.4.2 Risk Management Operations Process and Results	48~50	
GRI 205 Anti-corruption	205-2	Communication and training about anti-corruption policies and procedures	1.2 Ethical Management and Legal Compliance	41~43	
	205-3	Confirmed incidents of corruption and actions taken	1.2 Ethical Management and Legal Compliance	41~43	No incidents of corruption
GRI 206 Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	1.2.4 Obey Market Mechanisms	43	No anti-competitive behavior
GRI 301 Materials	301-2	Recycled input materials used	4.1.6 Green Design		
	301-3	Reclaimed products and their packaging materials	4.1.6 Green Design 4.4.1 Waste Management	109 125~126	
GRI 302 Energy	302-1	Energy consumption within the organization	4.2.1 Energy Management	111~113	
	302-2	Energy consumption outside of the organization		N/A	Information unavailable / incomplete
	302-3	Energy intensity	4.2.1 Energy Management	111~113	
	302-4	Reduction of energy consumption	4.2.1 Energy Management	111~113	
	302-5	Reductions in energy requirements of products and services	4.2.1 Energy Management	111~113	
GRI 303 Water and Effluents	303-4	Water withdrawal	4.2.3 Water Resource Management	114~117	
GRI 304 Biodiversity	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		N/A	Not adjacent to, protected areas and areas of high biodiversity value outside protected areas
	304-2	Significant impacts of activities, products and services on biodiversity	4.2.4 Biodiversity	118~119	
	304-3	Habitats protected or restored		N/A	Not adjacent tHabitats protected or restored
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations		N/A	No habitats in areas affected by Alpha's operation
GRI 401 Employment	401-1	New employee hires and employee turnover	3.2.2 Talent Recruitment and Retention	81~82	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	3.3 Salary and Benefits	86~87	
	401-3	Parental leavec	3.3.3 Leave System	87	
GRI 404 Training and Education	404-1	Average hours of training per year per employee	3.4.1 Training and Development	88~89	
	404-2	Programs for upgrading employee skills and transition assistance programs	3.4.1 Training and Development	88~89	

Topic	Disclosure Item		Chapter	Page	Remark
GRI 405 Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	1.1.1 Governance Structure 1.1.2 Operation of the Board of Directors	36 37~38	
	405-2	Diversity of governance bodies and employees	3.3.1 Salary Level	86	
GRI 406 Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	3.1 Human Rights	78~80	No incidents of discrimination
GRI 408 Child Labor	408-1	Operations and suppliers at significant risk for incidents of child labor	3.1 Human Rights	78~80	No incident of child labor
GRI 409 Forced or Compulsory Labor	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	3.1 Human Rights 2.2.4 Supplier Audit and Due Diligence	78~80 73	No incident of forced or compulsory labor
GRI 410 Security Practices	410-1	Security personnel trained in human rights policies or procedures	3.4.1 Training and Development	88~89	
GRI 411 Rights of Indigenous Peoples	411-1	Security personnel trained in human rights policies or procedures		N/A	No incident of violation involving rights of indigenous peoples
GRI 412 Human Rights Assessment	412-2	Employee training on human rights policies or procedures	3.1 Human Rights 3.4.1 Training and Developmen	78~80 88~89	
GRI 415 Public Policy	415-1	Political contributions	1.2.4 Obey Market Mechanisms	43	No political contribution
GRI 416 Customer Health and Safety	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services		N/A	No incident of non-compliance concerning the health and safety impacts of products and services
GRI 417 Marketing and Labeling	417-2	Incidents of non-compliance concerning product and service information and labeling	2.1.4 Marketing and Promotion	70	No incident of non-compliance concerning product and service information and labeling
	417-3	Incidents of non-compliance concerning marketing communications	2.1.4 Marketing and Promotion	70	No incident of non-compliance concerning marketing communications
GRI 418 Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	1.3.1 Intellectual Property Rights	44	No substantiated complaints concerning breach of client privacy and losses of client data
GRI 419 Socioeconomic Compliance	419-1	Non-compliance with laws and regulations in the social and economic area	1.2 Ethical Management and Legal Compliance	41~43	No non-compliance with laws and regulations in the social and economic area

SASB Index

Topic	Code	Measures	Chapter	Page	Remark
Water Management	TC-ES-140a.1	(1) Total water withdrawn, (2) total water consumed	4.2.3 Water Resource Management	114~117	
Waste Management	TC-ES-150a.1	Amount of hazardous waste from manufacturing, percentage recycled	4.4.1 Waste Management	125	
Product Security	TC-HW-230a.1	Description of approach to identifying and addressing data security risks in products.	1.3 Intellectual Property Rights 1.4.1 Risk Management Policy and Operations	44~45 46~47	
Labor Practices	TC-ES-310a.1	(1) Number of work stoppages and (2) total days idle	1.4.2 Risk Management Operations Process and Results 3.5.3 Occupational Incident	48~50 93	(1) Number of work stoppages and (2) total days idle are both 0
Labor Conditions	TC-ES-320a.1	(1) Total recordable incident rate (TRIR) (2) Near miss frequency rate (NMFR) for (a) direct employees and (b) contract employees	3.5.3 Occupational Incident	93	(1) TRIR and (2) NMFR are both 0
Employee Diversity & Inclusion	TC-HW-330a.1	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees.	3.2.1 Manpower Allocation	81~82	
Supply Chain Management	TC-ES-320a.2 TC-HW-430a.1	Percentage of Tier 1 supplier facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by (a) all facilities and (b) high-risk facilities.	2.2.1 Supplier Management 2.2.4 Supplier Audit and Due Diligence	71~72 73	
	TC-ES-320a.3 TC-HW-430a.2	Tier 1 suppliers' (1) non-conformance rate with the RBA Validated Audit Process (VAP) or equivalent, and (2) associated corrective action rate for (a) priority non-conformances and (b) other non-conformances.	2.2.1 Supplier Management 2.2.4 Supplier Audit and Due Diligence	71~72 73	
Materials Sourcing	TC-HW-440a.1	Description of the management of risks associated with the use of critical materials.	1.4.2 Risk Management Operations Process and Results	48~50	

TWSE Sustainability Disclosure Indicators-Communications and Internet Industry

	Indicator	Type	Chpater	Page	Unit	Remark
1	Total energy consumption, percentage of purchased electricity, utilization rate(renewable energy)	Quantitative	4.2.1 Energy Management	111~113	Gigajoules (GJ), percentage (%)	
2	Total water withdrawn, total water consumption	Quantitative	4.2.3 Water Resource Management	114~117	Thousand cubic meters(m^3)	
3	Total hazardous waste generated and percentage recycled	Quantitative	4.4.1 Waste Management	125~126	Metric tons (t), percentage(%)	
4	Types of, number of employees in and rate of occupational accidents	Quantitative	3.5.3 Occupational Incident	93	Percentage(%), quantity	
5	Product Lifecycle Management Disclosure: including weights of scraps and electronic waste and percentage recycled (Note 1)	Quantitative	4.1.6 Green Design 4.4.1 Waste Management	109 125~126	Metric tons (t), percentage(%)	
6	Description of the management of risks associated with the use of critical materials	Qualitative description	1.4.2 Risk management Operations Process and Results	48~50	Not applicable	
7	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations	Quantitative	1.2.3 Requlation Compliance 1.2.4 Respect for Market Mechanisms	43	Reporting currency	No violation of anti-competition regulations has occurred
8	Production by product category	Quantitative	1.5 Operating Performance - 2024 Reveune by Product Categories	57	Varies by product category	

TCFD Index

Core element	Description	Management	Chpater	Page
Governance	Disclosure the governance mechanisms for Corporate climate risks and opportunities.	• Describe the mechanisms that board of director oversight the climate-related risks and opportunities. • Describe the role of management in assessing and managing climate-related risks and opportunities.	1.1.2 Operation of the Board of Directors - Governance of climate issues 1.4.3 Risks and Opportunities of Climate Change	38 51~55
Strategy	Disclosure the actual and potential impacts that climate risks and opportunitiescause. And influence on company operations, strategies, and financial planning.	• Describe the organization's awareness of short-term, medium-term, and long-term climate- related risks and opportunities. • Describe the potential impacts of climate-related risks and opportunities on an organization's operations, strategies, and financial planning. • Describe the flexible strategies for organizations to adapt to different climate scenarios.	1.4.3 Risks and Opportunities of Climate Change	51~55
Risk management	Describe the process of assessing, evaluating, and managing climate-related risks within an organization.	• Describe the process of identifying and assessing climate-related risks within an organization. • Describe the process of managing climate-related risks within an organization. • Describe how organization integrates the mechanisms for reviewing, assessing, and managing climate-related risks into the overall risk management system.	1.4.1 Risk Management Policy and Operations 1.4.3 Risks and Opportunities of Climate Change	46~47 51~55
Metrics and Targets	Disclosure key indicators and objectives for assessing and managing climate-related risks and opportunities within an organization.	• Describe the indicators used by organizations to assess climate-related risks and opportunities in their strategic and risk management processes • Disclosurethe GHG emission and related risks. • Describe the goals and achievement levels set by organizations for managing climate-related risks and opportunities.	Annual Accomplishments-Environment 4.2.1 Energy Management 4.3.3 Greenhouse Gas Inventory	99 111~113 121~122

Climate Related Information Disclosure

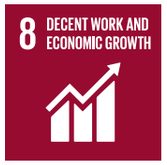
Items	Chapter	Page	Remark
1. The supervision and governance of climate related risks and opportunities by the board of directors and management.	1.1.2 Operation of the Board of Directors - Governance of climate issues 1.4.3 Risks and Opportunities of Climate Change	38 51~55	
2. Identified climate risks and opportunities affect the business, strategy, and finances of the enterprise (short term, medium term, long term).	1.4.3 Risks and Opportunities of Climate Change - Risk assessment of climate change	51~54	
3. The impact of extreme weather events and transition actions on finances.	1.4.3 Risks and Opportunities of Climate Change - Risk assessment of climate change	51~54	
4. The process of identifying, assessing, and managing climate risks is integrated into the overall risk management system.	1.4.1 Risk Management Policy and Operations 1.4.3 Risks and Opportunities of Climate Change - Transition Plan for Climate-related Risks 1.4.4 Business Continuity Management	46~47 54~55 56	
5. If scenario analysis is used to assess resilience to climate change risks, details should be provided on the scenarios, parameters, assumptions, analysis factors, and key financial impacts.	1.4.3 Risks and Opportunities of Climate Change - Climate risk pressure testing	51	
6. If there is a transformation plan to address and manage climate-related risks, describe the content of the plan, as well as the indicators and objectives used to identify and manage physical risks and transition risks.	1.4.3 Risks and Opportunities of Climate Change - Transition Plan for Climate-related Risks Viewpoint - Carbon Reduction Action	51 100~103	
7. If using internal carbon pricing as a planning tool, details should be provided on the pricing basis.		NA	No internal carbon pricing mechanism at present.
8. If climate-related goals are set, details should be provided on the activities covered, greenhouse gas emission scopes, planning timeframe, progress achieved annually, etc. If carbon offsets or Renewable Energy Certificates (RECs) are used to achieve these goals, details should be provided on the source and quantity of carbon offsets or the quantity of RECs.	Viewpoint - Carbon Reduction Action	100~103	
9. GHG inventory and certification	4.3.3 Greenhouse Gas Inventory 4.3.5 Greenhouse Gas Inventory timeline	121~122 124	

Principles of the United Nations Global Compact

Principles	Chapter	Page	Remark
Human Rights			
Businesses should support and respect the protection of internationally proclaimed human rights.	3.1 Human Rights	78~80	
Businesses should make sure that they are not complicit in human rights abuses	3.1Human Rights	78~80	
Labor			
Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	3.1 Human Rights - Transparent and smooth policy	78	No union organization at present. Offer diversified communication channel for employees.
Businesses should uphold the elimination of all forms of forced and compulsory labour.	3.1 Human Rights	78~80	
Businesses should uphold the effective abolition of child labour.	3.1 Human Rights	78~80	
Businesses should uphold the elimination of discrimination in respect of employment and occupation.	3.1 Human Rights	78~80	
Environment			
Businesses should support a precautionary approach to environmental challenges.	Viewpoin - Carbon Reduction Action	100~103	
Businesses should undertake initiatives to promote greater environmental responsibility.	Viewpoin - Carbon Reduction Action 4.1 Green Products	100~103 104~109	
Businesses should encourage the development and diffusion of environmentally friendly technologies.	Viewpoin - Carbon Reduction Action 4.1 Green Products	100~103 104~109	
Anti-Corruption			
Businesses should work against corruption in all its forms, including extortion and bribery.	1.2 Ethical Management and Legal Compliance	41~43	

SDGs Index

SDGs	SDG Targets	Actions	Chapter	Page	Remark
SDG 1 No Poverty	Ensure that everyone has equal rights and access to economic resources, basic services, property, natural resources, new technologies, and financial services.	Implement a non-discriminatory recruitng policy and provide a comprehensive training system and learning pathways, offering a platform for employee growth and development. In addition to pursuing sustainable economic growth for the company, we actively strive to enhance the salary levels of our employees.	3.4 Talent Development 3.3.1 Salary Level	88~90 86	
SDG 2 Zero Hunger	Double rural productivity and increase the income of small-scale food producers. Ensure that all people have access to safe, nutritious, and sufficient food.	Combining social engagement and ecology, Alpha Networks organizes ecological activities such as tea picking, bulrush harvest and and chrysanthemum picking to support local small farmers. To provide employees with safe, hygienic, and healthy group meals, ensure food safety through strict control of ingredient sourcing, food processing, utensil safety, and environmental facilities.	4.2.4 Biodiversity 3.5.4 Food Hygiene and Safety	118~119 94	
SDG 3 Good Health And Well-being	Promote healthy lifestyles and well-being at all ages.	Alpha Networks systematically promotes health enhancement measures and activities, offering health check-ups with items exceeding regulatory requirements, and establishing a medical room to collaboratively advance healthcare, health promotion, and special protection.			
SDG 4 Quality Education	Ensure inclusive and equitable quality education, providing lifelong learning opportunities for all.	Alpha Networks provides employees with a comprehensive training system and learning pathways. In collaboration with the Alpha Foundation, Alpha Networks continually promotes science education, enabling students and the elderly to engage in diverse and lifelong learning.	3.5.5 Health Promotion	95~96	
SDG 5 Gender Equality	Achieve gender equality and empower women and girls.	Upholding a fair compensation and benefits policy, employee salaries, rewards, and benefits are not subject to discriminatory treatment based on gender, race, nationality, age, or other factors.	3.4.1Training and Development 3.6 Social Engagement	88~89 97	
SDG 10 Reduced Inequalities	Reduce inequality both domestically and internationally.		3.1 Human Rights 3.3.1 Salary Level	78~80 86	

SDGs	SDG Targets	Actions	Chapter	Page	Remark
 SDG 8 Decent Work and Economic Growth	Promote equitable, inclusive, and sustainable business growth, achieve full employment, and allow everyone to enjoy decent work.	Alpha Networks is committed to promoting full employment and ensuring everyone to enjoy decent work, while maintaining the company's sustainable economic growth and sound financial results.	1.5 Operating Performance	57~58	
SDG 9 Industry, Innovation and Infrastructure	Build resilient infrastructure, foster an inclusive and sustainable enterprise industries, and drive innovation.	Alpha Networks has decades of expertise in network communication products. With innovative thinking, the company continuously invests resources in the research and development of core network communication technologies and global patent applications driven by key technologies.	2.1.3 Development and Innovation	64~69	
SDG 12 Responsible Consumption and Production	Ensure sustainable consumption and production patterns.	Alpha Networks is committed to responsible procurement, requiring all suppliers to comply with relevant laws and regulations, focusing on suppl chain's impact on labor rights, environment, safety, and hygiene. Our commitment to green products and environmentally friendly practices is integrated into our quality and manufacturing processes to ensure responsible production.	4.1 Green Products 2.2 Resilient Supply Chain	104~109 71~73	
SDG 13 Climate Action	Take urgent actions to address climate change and its impacts.	Alpha Networks is committed to implementing environmentally friendly measures such as energy saving, carbon and waste reduction, and water saving to support climate action.	Viewpoint - Carbon Reduction Action 4.2 Envwironment and Energy 4.3 Carbon Emission 4.4 Environmental Protection Measures	100~103 110~119 120~124 125~131	
SDG 15 Life on Land	Conservation and sustainable use of terrestrial ecosystems to ensure biodiversity and prevent land degradation.	Alpha Networks organizes eco-friendly activities such as tea picking, bulrush harvest and and chrysanthemum picking to support sustainable ecosystems, ensuring biodiversity and preventing land degradation.	4.2.4 Biodiversity	118~119	
SDG 17 Partnerships for the Goals	Strengthen sustainable development implementation methods and mobilize global partnerships for sustainable development.	Alpha Networks' mission is "be a globally recognized, professional networking supplier of design, manufacturing and services (DMS). Alpha Networks connects the entire value chain, from design of innovative products, responsible procurement, and manufacture with a focus on both quality and efficiency, thereby ensuring high customer satisfaction.	2.1.3 Development and Innovation 2.2 Resilient Supply Chain 2.3 Customer Satisfaction	64~69 71~73 74	

Assurance Statement

This Report was prepared in accordance with the GRI Standards 2021 issued by the Global Reporting Initiative. Independent verification was conducted by TÜV Rheinland Taiwan Ltd. in accordance with the AA1000 Account Ability Assurance Standard and GRI Standard. The report has been certified to AA1000 Type 1 with a moderate level of assurance.

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Independent Assurance Statement

Alpha Networks Inc. 2024 Sustainability Report

Introduction:

TÜV Rheinland Taiwan Ltd., member of TÜV Rheinland Group, Germany (hereinafter "TÜV Rheinland Taiwan", "We") has been entrusted by the management of Alpha Networks Inc. (hereinafter "Alpha", "the Company") to conduct independent assurance of Alpha Networks Inc. 2024 Sustainability Report (hereinafter "the Report"). All contractual contents for this assurance engagement rest entirely within the responsibility of Alpha. Our task was to give a fair and adequate judgment on the Alpha Networks Inc. 2024 Sustainability Report.

The intended users of this assurance statement are stakeholders having relevance to the Alpha overall Sustainability Performance and impacts of its business activities during 2024 (January 2024 ~ December 2024). TÜV Rheinland Group is a global service provider of CSR & Sustainability Services in over 65 countries, having qualified professionals in the field of Corporate Sustainability Assurance, Environment, Social and Stakeholder Engagement. We have maintained complete impartiality and independence during the assurance engagement and were not involved in the preparation of report contents.

Assurance Standard:

TÜV Rheinland Taiwan undertook the assurance work in accordance with the AA1000 Assurance Standard v3 (AA1000AS v3) Moderate level of assurance.

Scope & Type of Assurance:

Our assurance engagement was carried out in accordance with the AA1000AS v3, Type 1, Moderate level on Alpha's sustainability performance disclosed in the Report and evaluated the information and data. The following assurance criteria were used in performing the assurance work:

- In accordance with GRI Universal Standards 2021 and performance indicators and according to disclosure on management approach (DMAs) from Economic, Environment & Social category, also defined in Reporting boundaries.
- Adherence to the AA1000 AccountAbility Principles (2018) of Inclusivity, Materiality, Responsiveness, and Impact.

Limitation: TÜV Rheinland Taiwan performed the assurance based on the scope of defined engagement agreement, and on a moderate level assurance under the AA1000 Assurance Standard v3 for engagement. The assurance engagement was carried out at Alpha Hsinchu Headquarters at Hsinchu Science Park, Hsinchu City, Taiwan. The consultations with external stakeholder were not carried out. Information and performance data subject to assurance is limited to the contents of the Report. Information and performance data subject to assurance is limited to the contents of the Report. Our assurance work did not cover financial report and its financial data, and other information not related to sustainability.

Assurance Methodology:

TÜV Rheinland Taiwan's assurance activities included:

- Assuring Alpha's ESG-related management practices and processes, to evaluate relevant management systems, including sustainability strategy, management policy, corporate governance, compliance management, risk management, stakeholder engagement, material issue analysis and impact, and key performance.
- Conducting interviews with over 15 Alpha's senior management and managers responsible for gathering and analyzing information on ESG-related performance.
- Reviewing and examining sustainability strategy, management practices, and performance information and data to test the accuracy of such information and data through random sampling principles and applied analytical procedures.
- Collecting documentary evidence and assessing management representations to support the extent to which Alpha adherence to the Accountability Principles.

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- The Verification Executive Team was comprised by our multidisciplinary, experienced professionals in the field of Corporate Sustainability, Environment, Social and Stakeholder Engagement.

Adherence to AA 1000 principles:

Inclusivity:
Alpha has continually sought the engagement of its stakeholders, identify and understand their stakeholder, and use the communication mechanism to identify the material issues and achieve an accountable response.

Materiality:
Alpha has implemented the material issues identification processing. The identification was based on the requirements and focus of attention of the stakeholder, the consideration of the company internal policy, shareholders meeting, questionnaires and the understanding and communication on the sustainable development content. The sustainability information disclosed enables its stakeholders to make informed judgements about Alpha 's management and performance.

Responsiveness:
Alpha has implemented the policy including environment and safety, quality, and corporate sustainability. The 2024 report disclosed the management system of the company and stakeholder engagement, responding to their stakeholders against material issues of the sustainable development.

Impact:
Alpha has identified and fairly represented impacts that were measured and disclosed in effective way. Alpha has established processes to monitor, measure, evaluate and manage impacts that lead to more effective decision-making and results-based management within the organization.

Conclusion:

In conclusion, we can mention that no instances or information came to our attention that would be to the contrary of the statement made below:

- Alpha Networks Inc. 2024 Sustainability Report meets the requirement of Type-1, Moderate Level Assurance according to AA1000AS v3 and Global Reporting Initiative (GRI) Universal Standards 2021.
- The Report includes statements and claims that reflects Alpha achievements and challenges supported by documentary evidence and internal records.
- The performance data we found in the report are collected, stored and analyzed in a systematic and professional manner and were plausible.
- TÜV Rheinland Taiwan shall not bear any liability or responsibility to a third party for perception and decision about Alpha based on this Assurance Statement.

AA1000
Licensed Report
000-734/V3-F6DAG

Vito Lin

Vito C. C. Lin

Technical Manager

TÜV Rheinland Taiwan Ltd.

Taipei, May 28, 2025

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ALPHA Networks