



ALPHA Networks

Corporate Social Responsibility Report

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About this Report

Alpha Networks Inc. (hereinafter referred to as "Alpha") has published the annual corporate social responsibility (CSR) report since 2018. The CSR report will present to all stakeholders the investments and accomplishments made by Alpha in terms of business operations, corporate governance, environmental protection, employee rights and community involvement. This CSR report is available in both Chinese and English. Stakeholders can download the contents of this publicly available report from <https://www.alphanetworks.com>.

Publication

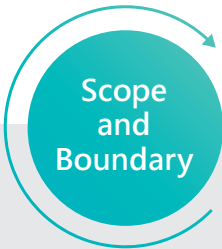
The report was published in June 2020. Alpha published the inaugural CSR Report in 2018 and the company's sustainable development-related performance is disclosed in the report in June every year.

Contact Information

Please do not hesitate to contact us with any questions or suggestions:
Alpha Networks Inc.

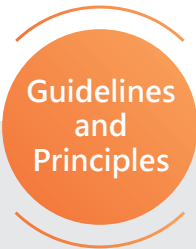
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This Report discloses the measures implemented by Alpha Networks in the CSR domain and their outcomes. In addition to Alpha Networks (Hsinchu), parts of the Report also encompass the following factories located in China but not its sites in Chengdu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

- Alpha Networks Inc.: Corporate Headquarters. Known as Alpha Networks (Hsinchu) for short
- Alpha Networks (Dongguan) Co., Ltd. (hereinafter referred to as "Alpha Dongguan")
- Alpha Networks (Changshu) Ltd. (hereinafter referred to as "Alpha Changshu")



This report has been prepared in accordance with the GRI Standards: Core option as the basic framework for the disclosure of 2019 sustainability issues and information at Alpha. The GRI Standards reference table is also provided in full as an index to the contents of each section.



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.



Forging the Internet to connect people and things

Ethics, customer values, agility, and concerted performance are the unchanging core values of Alpha Networks in pursuing a balance between technology and culture. During the constantly changing process of network communication technology development, we firmly believe that the company's growth and profitability must be built on employee happiness, environmental friendliness, energy conservation, and community care. Engendering a circle of kindness and public welfare by consolidating the company's tangible and intangible resources is the unwavering philosophy and action of the company since its inception.

The name of Alpha Networks is derived from **Alpha, the first letter of the Greek alphabet, symbolizing the company's ambition to become the industry leader** in terms of product technology by pooling together the innovation and momentum of our employees and clients to generate the greatest collective strength. In 2019, the company vigorously invested in the R&D of 5G end-to-end vertical market application solutions and also invested in Hitron Technologies Inc. to enter cable market, taking advantage of the complementary product lines, and specifically implementing the corporate vision of "Forging the Internet to connect people and things." Through internal savings and control, the company has implemented smart planning in the factories and adjusted A/C and lighting in the offices. Furthermore, the employee restaurant no longer provided tableware; we started with these little details and expanded to the overall working environment, focusing on energy conservation, carbon reduction, and environmental protection.

The aim is to let the company make contributions toward the environment and society in a bit to materialize the vision of sustainable management.

Alpha Networks has established 2 foundations dedicated to public welfare, applying the company's expertise and resources in network communication for the purposes of giving back to social welfare groups in Hsinchu County/City as well as the advancement of education in remote townships. In 2019, we celebrated a fantastic, fruitful time with adults and children from the Pinglin Elementary School, Jinping Elementary School, Old Five Old Foundation, Hsinchu City East District Senior Learning Center, and Angel Percussion Band. Every loving heart, every minute of caring and interaction, every gift, all tangible and intangible contributions represent Alpha Networks' commitment to giving back to society.

When faced with the mounting US-China trade war and the recent COVID-19 outbreak, how will the treacherous, unpredictable future affect the industry ecology? How will the commercialization of 5G change people's lives? We need to tread lightly and steadfastly and uphold our original intent to implement the company's core values to the organization's internal processes in order to embrace greater responsibilities and challenges through expertise, efficiency, and quality. As a result, Alpha will be able to **make positive contributions in economic, environmental, and social dimensions**. Let us dedicate ourselves to creating a sustainable, magnificent home for the sake of the common good.

Chairman

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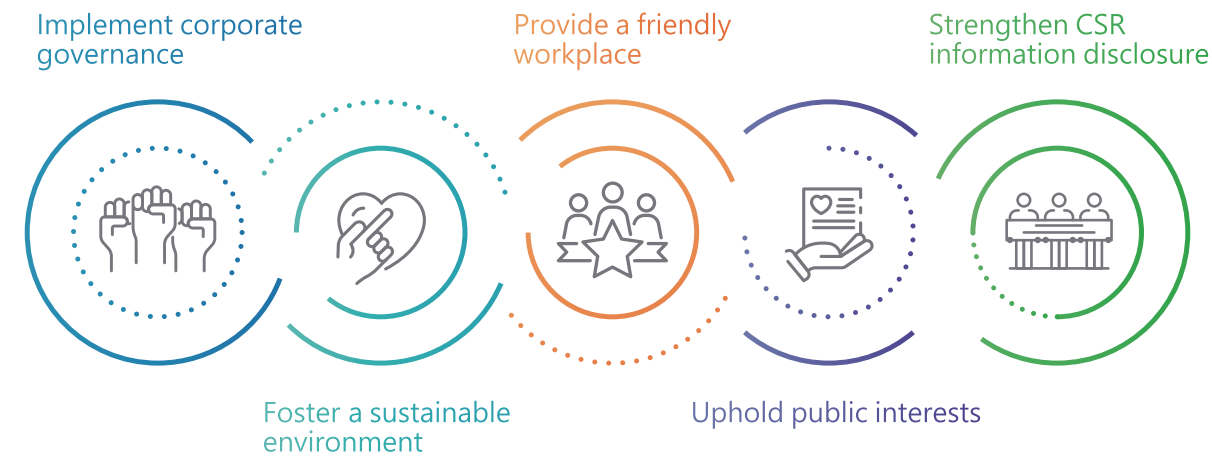




Integrity, fairness, legal compliance and abiding by business ethics

Corporate Social Responsibility Policy

Alpha upholds the following principles in the practice of its CSR:



RBA Policy

Alpha actively supports the Code of Conduct - Responsible Business Alliance, RBA Version 6.0, (previously known as the EICC) 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.

In addition to the continued review of our own progress in labor, health and safety, environment and ethics, and agreeing to on-site audits by third-party verification bodies, we are also committed to actively asking our suppliers adopt the tools and standards of RBA. To fulfill this commitment and build a business environment for sustainable development, we have formulated RBA related

policies based on integrity and making no compromises. We will strive to work relentlessly for the rights and interests of the electronic industry supply chain and operators.

Alpha is committed to forging a long-term relationship with our suppliers in order to foster a brighter future together. In addition, they will be expected to comply with RBA regulations, thereby fulfilling our corporate social responsibilities.

Ethics Policy

All business activities at Alpha must uphold the principles of integrity and fairness, comply with laws and regulations, and adhere to business ethics. Employees are prohibited from engaging in bribery, corruption, and accepting or giving of gifts, money and hospitality not commensurate with commercial value from suppliers, customers and stakeholders. The confidential information, assets and intellectual property of Alpha, customers and suppliers must be placed under strict protection.

Alpha believes strongly in ethical business management and all forms of inappropriate behavior are banned. A system for protecting the identity of whistleblowers and the accused has been put into place.

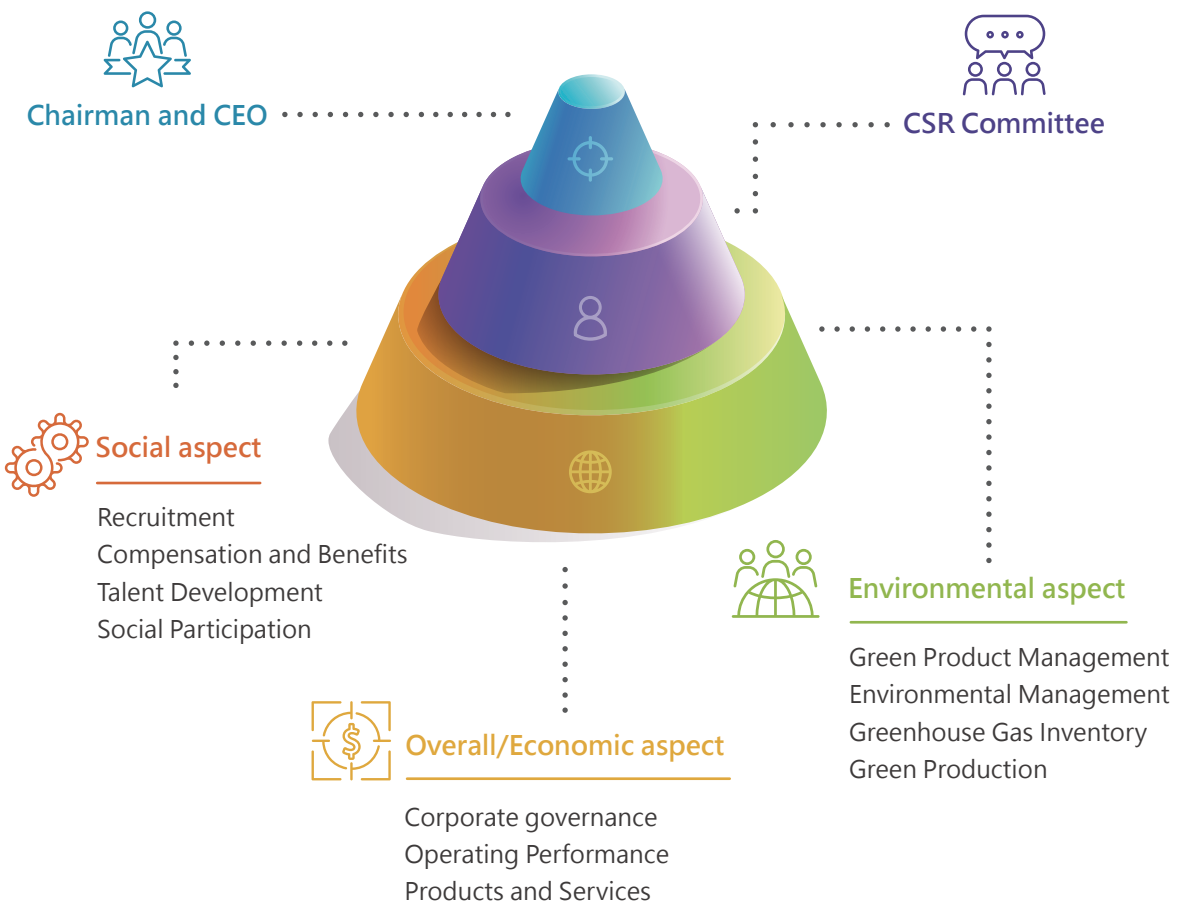
A channel for complaints is provided if any illegal behavior is detected. A thorough investigation will be carried out by Alpha with protection given to the whistleblower. The content and outcome of the investigation will also be strictly protected to avoid harming the rights and interests of relevant personnel.



Investing diverse resources to complete the CSR report

The CSR Committee is organized as follows:

The Alpha CSR Committee was authorized by Chairman April Huang to evaluate global sustainability trends, the Company's business development targets, as well as key issues in the corporate governance, environmental, and social aspects. Organizational resources such as the Chairman's Office, the President's Office, Legal Affairs, Corporate Auditor's Office, Finance & Accounting, Business Units, Manufacturing Center, Quality Assurance, Labor Safety, Human Resources, and the Alpha Foundation were then brought together to complete this CSR report.





Understanding the stakeholders' expectations towards Alpha through diverse communication channels

The Alpha CSR Committee convenes meetings to discuss the types of stakeholders. Seven main types of stakeholders were compiled including customers, employees, investors, suppliers, government agencies/neighborhood and the media. Different communication channels have been established for different stakeholders. Communication with stakeholders will hopefully give us a better idea of stakeholder requirements and expectations.

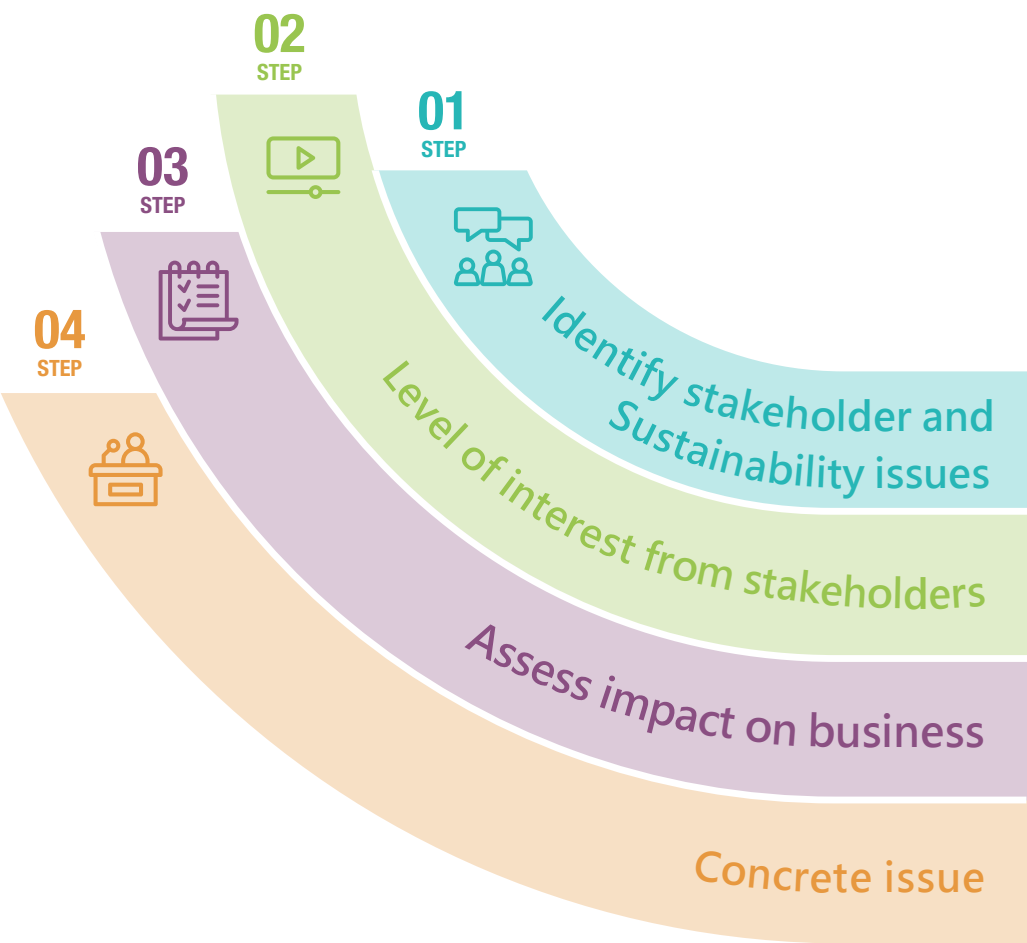
The opinions of stakeholders can be used to help Alpha examine and develop its corporate strategy, and to create value for Alpha and stakeholders.

● Seven main types of stakeholders



Note: In the 2019 report, government agencies/neighborhood are presented separately

● Identification Process of Materiality





Stakeholder Issues of Concern Survey

The Alpha CSR Committee convened a meeting to list the sustainable development issues linked to our Company based on the GRI Standards. The aspects to be surveyed included sustainable economy, sustainable environment, and sustainable society. 21 issues of concern to stakeholders were listed and compiled for the Alpha CSR Stakeholder Survey.

The survey was issued by the members of the CSR Committee to Alpha's CSR stakeholders.





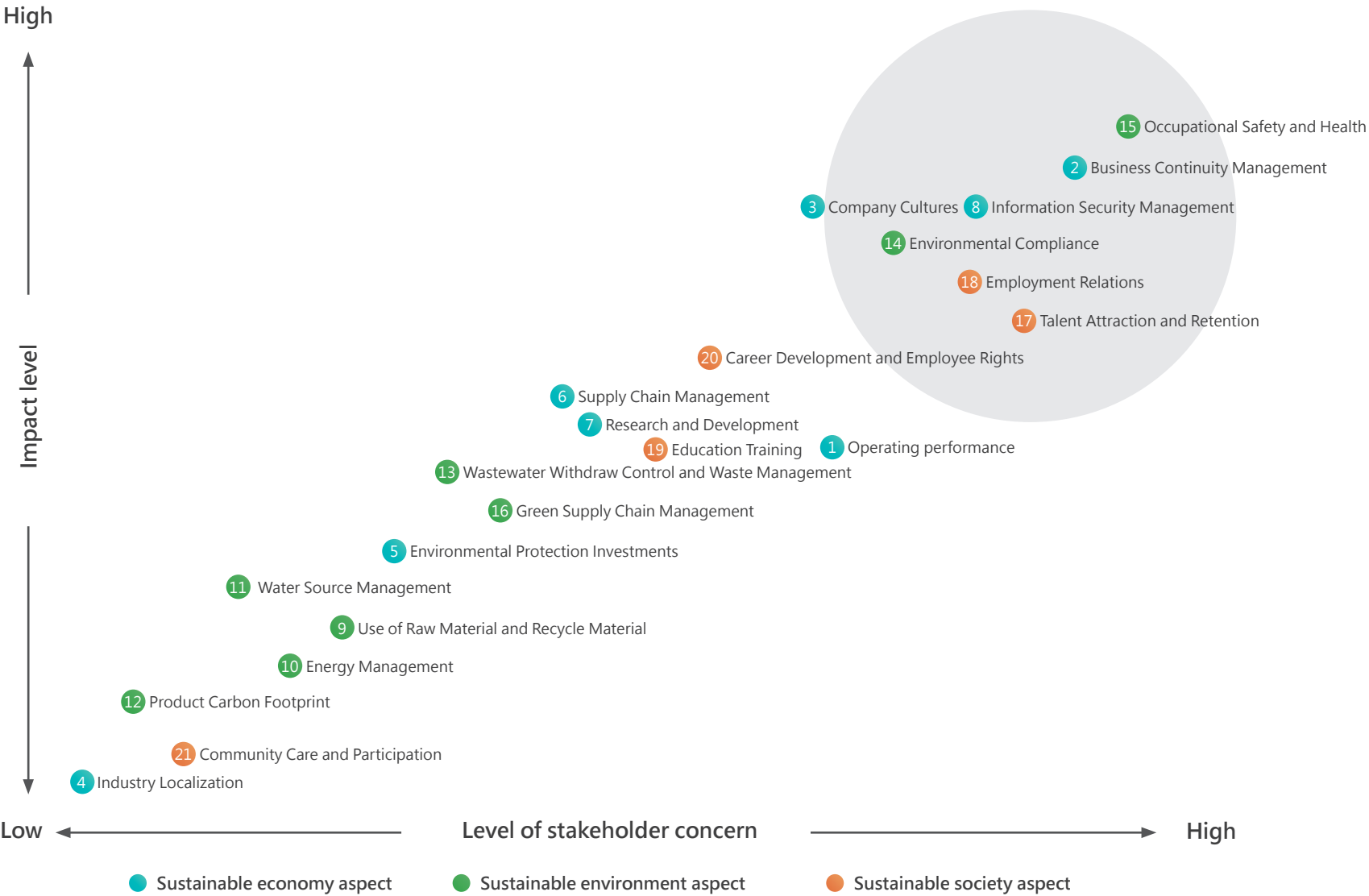
Identification and Sorting of the Stakeholders' Material Issues

The Alpha CSR Committee was convened to discuss the recovered surveys. The level of stakeholder interest in each issue and impact on operations were analyzed to determine the seven issues most material to Alpha: Operating Performance, Company Cultures, Information Security Management, Environmental Regulation Compliance, Occupational Safety and Health, Talent Attraction and Retention, Employment Relations. A formal response to stakeholder concerns was issued by using the GRI Standards as the basis for disclosure in the CSR report. The handling of material issues is indicated in the GRI Index and explained for each indicator.

List of Material Issues			
1	Operating performance	12	Product Carbon Footprint
2	Business Continuity Management	13	Wastewater Withdraw Control and Waste Management
3	Company Cultures	14	Environmental Compliance
4	Industry Localization	15	Occupational Safety and Health
5	Environmental Protection Investments	16	Green Supply Chain Management
6	Supply Chain Management	17	Talent Attraction and Retention
7	Research and Development	18	Employment Relations
8	Information Security Management	19	Education Training
9	Use of Raw Material and Recycle Material	20	Career Development and Employee Rights
10	Energy Management	21	Community Care and Participation
11	Water Source Management		

Major Issues of Concerns			
2	Business Continuity Management	15	Occupational Safety and Health
3	Company Cultures	17	Talent Attraction and Retention
8	Information Security Management	18	Employment Relations
14	Environmental Compliance		

● Stakeholders' Material issues and business impact distribution chart





Stakeholder Communication Mechanism

Alpha 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 and to compile them in a systematic manner to serve as an important reference for compiling the CSR report for next year.

The Alpha website (<http://www.alphanetworks.com>), public e-mail address (see Alpha website < CSR > Stakeholder Contact Information), annual report, and market observation post system (<http://mops.twse.com.tw>) serve as our routine channels for communication. Stakeholders can use the above channels to find out about important Alpha information and contact the relevant units.

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

Stakeholders	Material Issue of Concern	Communication Channel and Frequency
Customers	<ul style="list-style-type: none">• Business Continuity Management• Information Security Management• Supply Chain Management• Company Culture	<ul style="list-style-type: none">• Customers satisfaction survey (annual)• Quarterly business review (quarterly)• Customer complaints management system (ad hoc)• Supplier conference (ad hoc)• Client information security questionnaire survey (ad hoc)
Employees	<ul style="list-style-type: none">• Talent Attraction and Retention• Employment relations• Occupational Safety and Health• Education Training• Business Continuity Management• Research and Development	<ul style="list-style-type: none">• Employer-Employee Meeting (quarterly)• Employee Welfare Committee (monthly)• Education Training Platform (ad hoc)• Corporate website (ad hoc)

Stakeholders	Material Issue of Concern	Communication Channel and Frequency
Investors	<ul style="list-style-type: none">• Operating performance• Company Culture• Environmental, Social, and Governance (ESG)	<ul style="list-style-type: none">• Shareholders' Meeting (annual)• Investor conference (annual)• Market Observation Post System (ad hoc)• Corporate website (ad hoc)
Suppliers	<ul style="list-style-type: none">• Business Continuity Management• Environmental Compliance• Company Culture• Supply Chain Management	<ul style="list-style-type: none">• Supplier platform (ad hoc)• Supplier evaluation (ad hoc)• Supplier conference (ad hoc)• Supplier visit (ad hoc)
Government agencies	<ul style="list-style-type: none">• Education Training• Business Continuity Management• Investments in Environmental Protection	<ul style="list-style-type: none">• Education training for safety and Health• Corporate website (ad hoc)
Neighborhood	<ul style="list-style-type: none">• Water Source Management• Wastewater Withdraw Control and Waste Management• Environmental Compliance	<ul style="list-style-type: none">• Corporate website (ad hoc)
Media	<ul style="list-style-type: none">• Operating performance• Business Continuity Management• Company Culture	<ul style="list-style-type: none">• Press release (ad hoc)• Press conference (ad hoc)

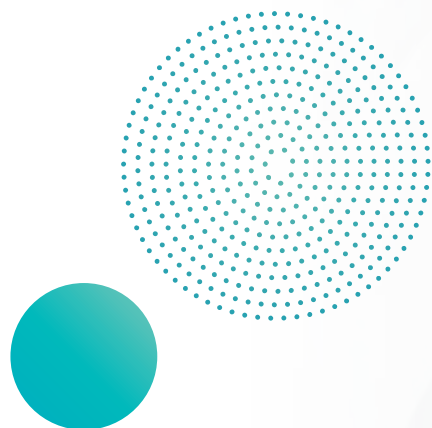
Sustainable Development

Company Operations and Development

Operating Performance | Sustainable Products and Services

Corporate Governance | Ethical Management

Risk Analysis and Management



A globally recognized, professional networking DMS supplier



Sustainable Development

- Company Operations and Development
- Operating Performance
- Sustainable Products and Services
- Corporate Governance
- Ethical Management
- Risk Analysis and Management

Friendly Workplace

- Recruitment
- Compensation and Benefits
- Talent Development
- Social Engagement

Sustainable Environment Development

- Green product Management
- Environmental Management
- Greenhouse Gas Inventory
- Safety and Health
- Supply Chain Management and Social Relations
- Conflict Minerals Due Diligence
- Green Production and Continuous Improvement
- Customer Satisfaction Survey Analysis

Appendix

- GRI Standard Index
- Accuracy of Disclosure

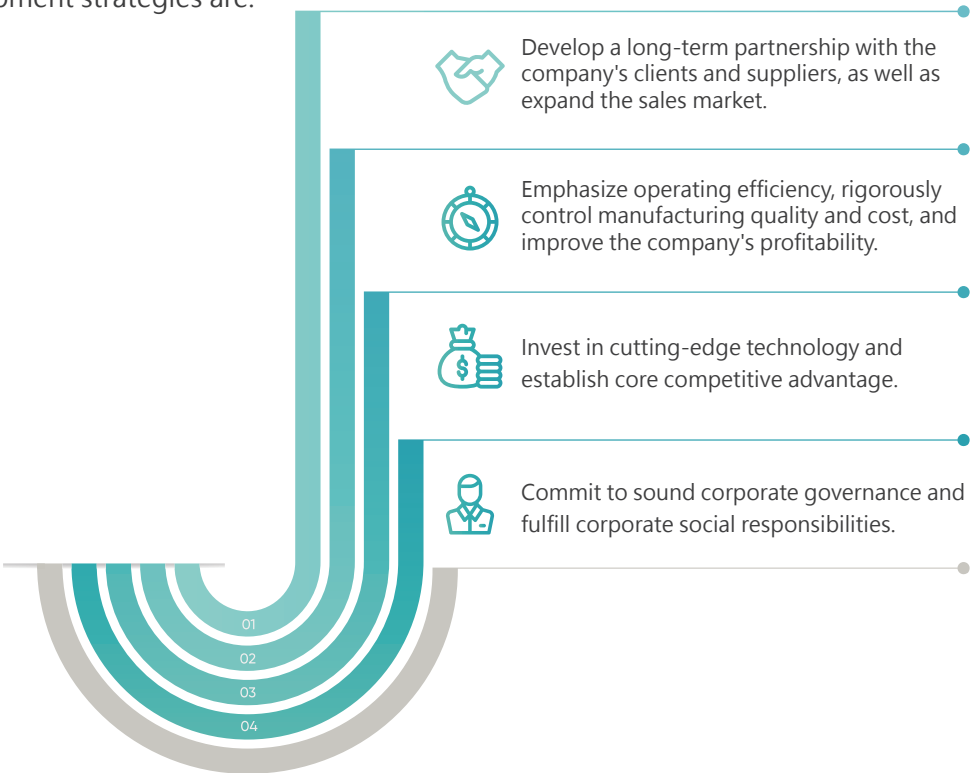
Company Operations and Development

Using advanced technology to provide customers with outstanding solutions at the best value

About Alpha

Alpha Networks Inc. was established in 2003. After D-Link split the branded and OEM businesses in 2003, Alpha focused on the design, development and manufacturing of network communication products. Alpha now provides customer the full range of DMS services spanning product software/hardware design, system integration, mechanical design, product testing and certification.

In order to increase profitability and ensure sustainability, Alpha's long-term development strategies are:



Alpha possesses the most comprehensive product line in the network communication industry including LAN/MAN, wireless broadband, digital multimedia, and mobile enterprise solutions. Alpha not only continues to develop our core technology and high-end integrated products but also proactively develops sales channels to provide clients with comprehensive solutions. Despite the volatility and uncertainty of international economics and trade, the network communication industry is still looking promising in light of developments in technological applications such as 5G, IoT, and AI.

Company Name	Alpha Networks Inc.
Chairman	April Huang
Headquarters	Hsinchu, Taiwan
Establishment Date	2003/09/04
Public Listing Date	2004/12/20 (TWSE: 3380)
2019 Capital	NT 5.426 billion
2019 Revenue	NT 15.826 billion(consolidated revenues)
2019 Earnings per Share	NT 0.44
2019 Total workforce	Over 4,100 (worldwide)

Sustainable Development

- Company Operations and Development
- Operating Performance
- Sustainable Products and Services
- Corporate Governance
- Ethical Management
- Risk Analysis and Management

Friendly Workplace

- Recruitment
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Providing comprehensive service and efficient local support

Global Presence

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

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

Our primary manufacturing sites are located in Taiwan and China. They consist of the Hsinchu Factory in Taiwan, the Dongguan Factory in South China, and the Changshu Factory in East China.

Sales subsidiaries have also been established in Tokyo (Japan), Irvine (southern California, USA) and Santa Clara (northern California, USA), and Dongguan (China) to better serve our customers.



• Hsinchu Factory



• Changshu Factory



• Dongguan Factory



Sustainable Development

- Company Operations and Development
- Operating Performance
- Sustainable Products and Services
- Corporate Governance
- Ethical Management
- Risk Analysis and Management

Friendly Workplace

- Recruitment
- Compensation and Benefits
- Talent Development
- Social Engagement

Sustainable Environment Development

- Green product Management
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- GRI Standard Index
- Accuracy of Disclosure

Management System

International management system certifications such as ISO 19001, TL9000, IATF-16949, ISO 14001, QC080000, ISO 14064-1 and AEO were actively introduced at the three Alpha manufacturing sites.

System/Factory	Alpha Networks (Hsinchu)	Alpha Networks (Dongguan)	Alpha Networks (Changshu)
ISO 9001:2015	●	●	●
TL 9000 R6.0 / R5.5	●	●	●
IECQ C080000:2017	●	●	●
ISO 14064-1:2006	●		
ISO 14001:2015	●	●	●
IATF 16949:2016	●		●
AEO	●		
C-TPAT		●	●
OHSAS 18001:2007		●	
ISO 27001:2013	●		



Sustainable Development

Friendly Workplace

Sustainable Environment Development

Appendix

Memberships

Alpha 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:

Business Unit	Associations and Technology alliances	Type	Note
DM BU	HDMI (High-Definition Multimedia Interface)	Adopter	
	Dolby Laboratories	Authorized Manufacturer	
	HDCP (High-Bandwidth Digital Content Protection)	Adopter	
	Z-Wave Alliance	Member	
	Apple Authorized MFi Manufacturing Licensee	Authorized Manufacturer	
Business Unit	Associations and Technology alliances	Type	Note
WB BU	Wi-Fi Alliance	Member	
	Taiwan Association of Information and Communication Standard (TAICS)	Member	May make proposals and speak

Business Unit	Associations and Technology alliances	Type	Note
MES BU	Driver Information Platform Development Alliance (DIPDA)	Member	
	Taiwan Vehicle Team (Taiwan V-Team)	Member	
	Autonomous Driving Systems Industrial Platform	Member	
	Automotive Ethernet Alliance	Member	
Business Unit	Associations and Technology alliances	Type	Note
HCF	IPC (Institute for Interconnecting and Packaging Electronic Circuits)	Member	Only ALPHA CIT lecturers may certify and conduct IPC7711/7721 courses
Business Unit	Associations and Technology alliances	Type	Note
LAN MAN BU	25G/50G Ethernet Consortium	Adopter	
	Telecom Infrastructure Project	Member	
	OCP (Open Compute Project)	Member	
Business Unit	Associations and Technology alliances	Type	Note
QAC	QuEST Forum	Member	Joined the organization in conjunction with the TL9000 system, Alpha pays annual member fees and submit monthly statistics

Sustainable Development

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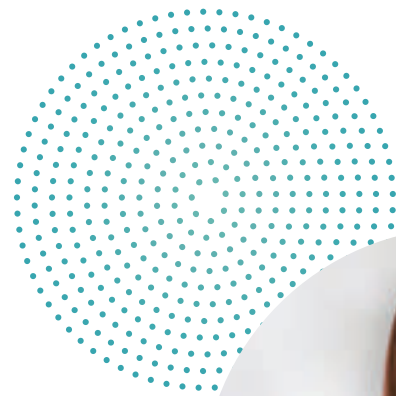
GRI Standard Index
Accuracy of Disclosure

Participation in trade shows

In tapping into new markets and increasing international reputation, Alpha Networks attended numerous domestic and international exhibitions including the MWC (Mobile World Congress), BBWF (Broadband World Forum), and TIP (Telecom Infra Project), reaching into international telecom markets and 5G vertical integration markets.

In terms of domestic exhibitions, Alpha Networks has participated in COMPUTEX to showcase our 5G enterprise network solutions such as customized VPNs and helping our clients to embrace smart/digital technology in a bid to improving production and management efficiency. Additionally, Alpha Networks also exhibited its 5G new generation communication platform for production lines at the Taiwan Automation Intelligence and Robot Show (TAIROS). The 5G FR1 frequency network equipment and products are slated for unveiling in 2020.

By participating in domestic and overseas exhibitions, Alpha Networks hopes to develop new clients and tap into the local markets to provide them with comprehensive 5G network communication product solutions. In doing so, Alpha provides the intricate network infrastructure that is necessary for building 5G smart cities in the era of Big Data and IoT.



Sustainable Development

Friendly Workplace

Sustainable Environment Development

Appendix

Operating Performance

Operating Performance and Financial Information

Alpha's consolidated revenue for 2019 was NT\$15.826 billion and the consolidated gross profit ratio was 16.5%, a 3% increase compared to 13.5% of the previous year. The company's net operating income was NT\$232 million and consolidated net income was NT\$239 million, equivalent to an EPS of NT\$0.44. Alpha Networks has demonstrated made headways in new product development and new client development, and the sound performance is expected to continue this year. In late 2019, Alpha added a strategic partner by investing in Hitron through private placement and public acquisition. Both parties will strive to unleash their synergy by complementing each other's technologies and product lines in a bid to expand to new markets.

The consolidated operating performance, related financial information, profit analysis of Alpha over the last five years as well as its 2019 revenue portfolio are presented below in graph form. For more information about Alpha's operating performance and finances, please refer to the "Alpha Networks Inc. 2019 Annual Report" or check with the Market Observation Post System.



Income Statement

Item/Year	2015	2016	2017	2018	2019
Operating revenue	22,995,238	21,830,730	19,057,109	15,608,222	15,825,808
Operating costs	20,095,471	18,647,259	16,164,744	13,504,544	13,211,807
Gross profit	2,899,767	3,183,471	2,892,365	2,103,678	2,614,001
Operating expenses	2,801,336	2,534,479	2,280,474	2,303,706	2,381,896
Operating profit & Loss	98,431	648,992	611,891	(200,028)	232,105
Non-operating income and expenses	(359,522)	154,581	84,463	115,742	107,688
Income (loss) before tax	(261,091)	803,573	696,354	(84,286)	339,793
Income tax expenses	79,017	195,534	147,816	3,723	100,890
Net Income (loss)	(340,108)	608,039	548,538	(88,009)	238,903

Unit: Thousand NTD

Related Financial Information

Item/Year	2015	2016	2017	2018	2019
Total assets	14,313,914	14,261,424	13,724,615	14,929,075	25,000,368
Ordinary share capital	4,429,144	4,344,697	4,443,967	5,435,172	5,425,901
Total equity	8,411,088	8,518,656	8,694,960	10,393,751	9,980,798
Cash dividend (note)	579,293	217,130	451,630	543,743	543,262
Book value per share/ Dollar	19.37	19.62	19.58	19.12	18.39
Cash dividends per share/ Dollar (note)	1.20	0.50	1.04	1.00	1.00
Average closing price per share/Dollar	18.10	18.36	23.80	19.88	21.08

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

Unit: Thousand NTD

Sustainable Development

Friendly Workplace

Sustainable Environment Development

Appendix

Profitability

Item/Year	2015	2016	2017	2018	2019
Return on assets (%)	(2)	4	4	(1)	1
Return on equity (%)	(4)	7	6	(1)	2
Profit Before Tax to Capital Stock (%)	(6)	18	16	(2)	6
Net profit ratio (%)	(1)	3	3	(1)	1
Earnings per share (NTD)	(0.74)	1.40	1.26	(0.17)	0.44

Project Grants

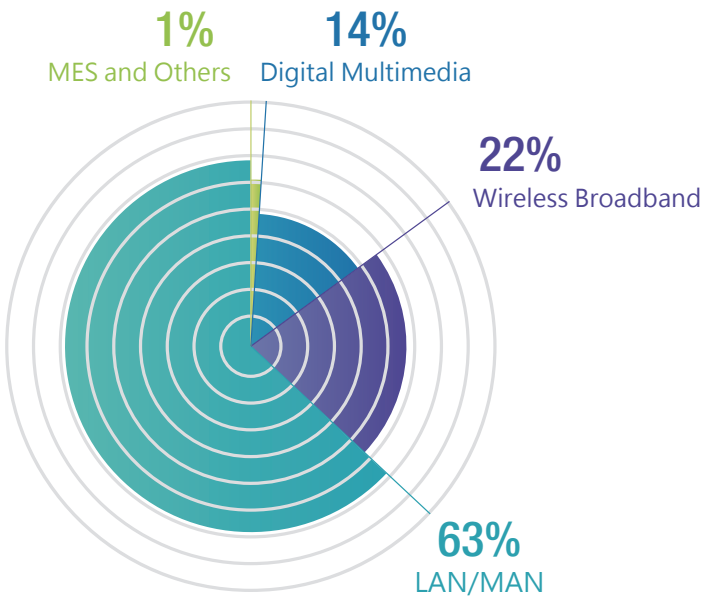
Technology development at Alpha focuses on the development, manufacturing and support of network communications equipment. Alpha is now actively investing in the development of 5G mobile communications, Advanced Driver Assistance Systems (ADAS), Internet-of-Vehicle applications.

Alpha is now leveraging its outstanding R&D and technology integration capability along with support for the government's "industrial innovation upgrade" policy to secure related grants and tax deductions from the government.

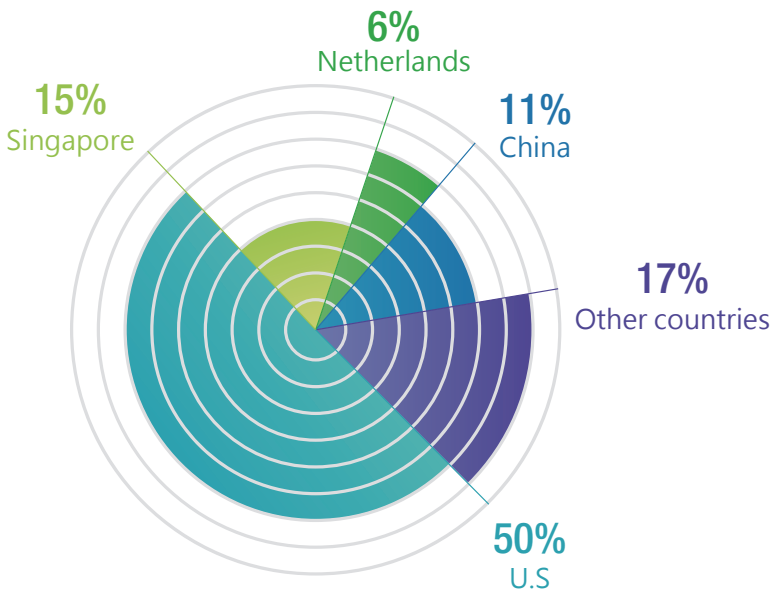
Location	Project	Grant Type	Grant Basis
Alpha Networks	Investment credit	Tax credits obtained	Statute for Industrial Innovation - Industrial Development Bureau, MOEA
Alpha Networks	Technology Development Program - A+ Industrial Innovation R&D Program - "M-ECHO Project Grant"	Grant received (note)	Statute for Industrial Innovation - Industrial Development Bureau, MOEA

Note: Income from technology development programs are in the form of multi-year grants.

2019 Revenues by Product Categories



2019 Reveune By Region



Sustainable Development

Friendly Workplace

Sustainable Environment Development

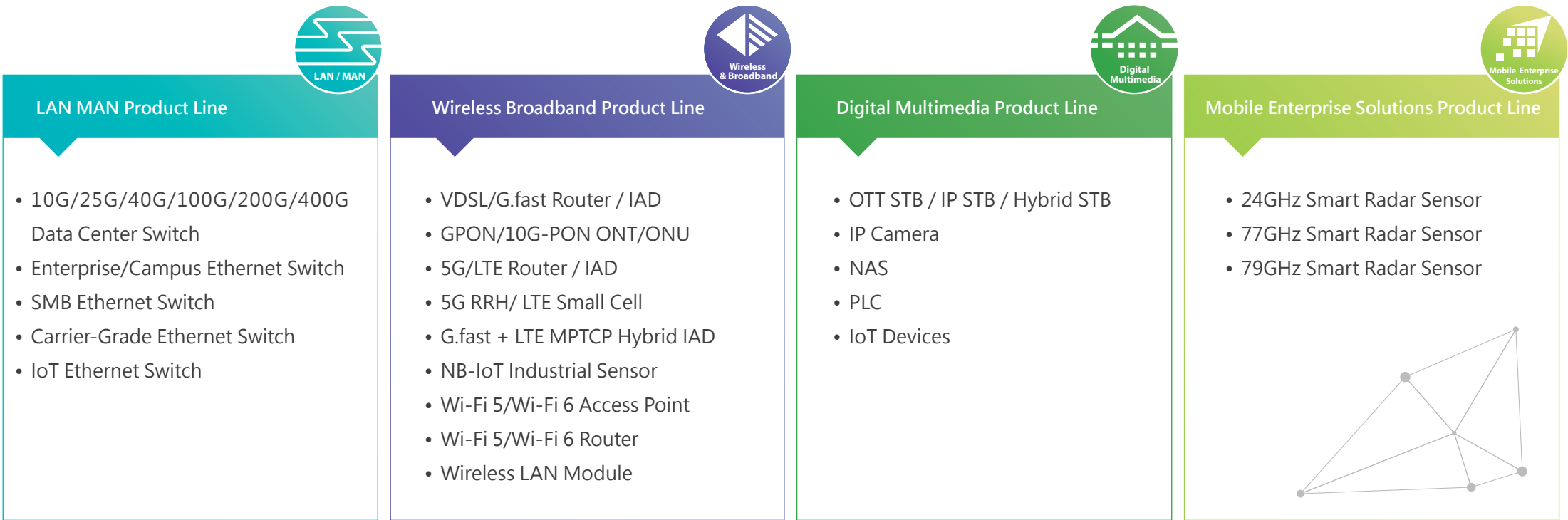
Appendix

Sustainable Products and Services

Investing in advanced technology and reinforcing core competitiveness

5G has become the key technology in the network communication industry that in turn facilitates developments in various vertical application services as well as digital transformation in different industries. There will be rapid developments in IoT, AI, and edge computing applications, and the EV market will soon take off too. The company continues to research core technologies, develop high-end integrated products, rigorously expand sales channels, and provide clients with comprehensive solutions. Alpha possesses the essential technological know-how for new-age network communication, and we will carry on bolstering our core competitiveness to seize new market opportunities.

1. The company's current product (service) lineup



Sustainable Development

Company Operations and Development
Operating Performance
Sustainable Products and Services
Corporate Governance
Ethical Management
Risk Analysis and Management

Friendly Workplace

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2. New products and technologies under development



LAN / MAN

LAN MAN Product Line

- Cloud-based SDN Switch
- Multi-Giga (1G/2.5G/5G/10Gbps) PoE(802.3bt)Ethernet Switch
- 5G Mobile Fronthaul/Backhaul Ethernet Switch
- Network Function Virtualization Platform Technology
- Edge Computing Platform
- XGS-PON OLT



Wireless & Broadband

Wireless Broadband Product Line

- G.fast +Wi-Fi 6 CPE
- Wi-Fi 6 & 6E Access Point
- Wi-Fi 6 Mesh AP/Router
- 5G RAN End-to-End Solution
- 5G FWA CPE
- 5G Small Cell
- NB-IoT Industrial Sensor Module



Digital Multimedia

Digital Multimedia Product Line

- Smart Surveillance solution
- Intelligent Video and Audio Analytics



Mobile Enterprise Solutions

Mobile Enterprise Solutions Product Line

- mmWave Radar with Image Fusion Technology
- AVM & Radar Sensor System
- AVB Ethernet Gateway



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Industry Competition

Global advances in technology have led to breakthroughs in wired and wireless product technologies. The rapid evolution of new technology also translates into shorter product life cycles and uncertainty during new product development. To lower costs or simplify product functionality, many vendors have now adopted a strategy of competing on price.

Alpha has a complete product range of any network equipment maker in Taiwan. Our many years of experience with product development and design means we can provide a one-stop solution for large international brands. The network communications industry will continue to develop in the direction of smart applications and integration in the future. Networking technology will become faster as well. Only vendors capable of developing the full range of network communications software and hardware technologies will be equipped to provide customers with the latest and the most complete solution.

Product Development Trends

1. Mobile broadband roll-out and upgrade

More global users enjoy mobile broadband service and the streaming of videos on the go, thereby increasing the demand for high-speed mobile Internet access. As the 4G LTE market continues to exhibit high levels of growth, 2018 saw the first commercial deployment of 5G networks, and the 5G mobile communication network will be commercialized in 2020.

2. 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. As a result, mobile network operators

will continue to expand the bandwidth and apply MultiPath TCP (MPTCP) to improve the external bandwidth of homes. The implementation of FTTH and FTTdp fiber-optics technologies will facilitate the development of diversified products.

3. 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 be increased.

4. Increase in Wi-Fi transmission speed and applications

Wi-Fi 5 (802.11ac) has become the mainstream market standard, and the trend is developing towards the higher speed Wi-Fi 6 (802.11ax) 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.

5. Smart home development trends

The incorporation of artificial intelligence into the design of smart home products will become a trend in home security surveillance and smart homes. Advances in voice control and image recognition will also lead to even more smart applications.



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Research and Development Focus

1. LAN/MAN Business Unit

Alpha's developments in Ethernet switches span across switches designed for data centers, corporations, telecommunication operators, or industries. The enormous data traffic at datacenters stimulates an increase in the number of 25G and 100G switches, while the demand for 400G high-speed switches is also emerging. With developments in 5G edge computing and IoT, the company has not only developed switches supporting 5G mobile network needs but also the MEC software integration platform. As wireless Internet ushers in the age of Wi-Fi 6 high-speed transmission, the demand for 2.5G switches will also rise. On the other hand, with more power-hungry network equipment and applications required, the need for switches with high-power power over Ethernet (PoE+ +) capability will also increase.

2. Wireless Broadband Business Unit

As global 5G network deployment accelerates, telecommunication operators have also deployed Fixed Wireless Access (FWA) applications that will, in turn, generate demand for the company's routers and small base stations. In the 5G corporate vertical market, Alpha has developed radio unit (RU) and end-to-end solutions that can be customized and applied flexibly to a wide range of vertical scenarios. While telecommunication operators are expediting upgrades in fixed network infrastructure, Alpha has upgraded copper line VDSL to G.fast in terms of FTTx OLT and terminal equipment development, and the demand for 10G-PON fiber optics broadband will also increase gradually. Also, the increase in the number of high-speed Wi-Fi 6 terminal devices will foster new demands in the company's Wi-Fi 6 corporate wireless AP and home routers.

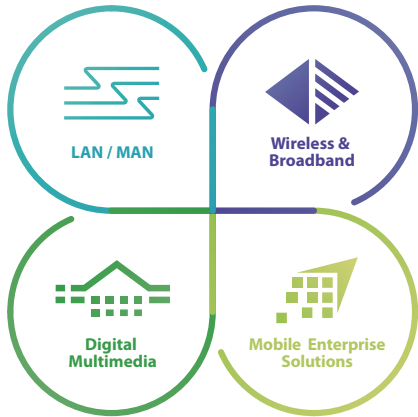
3. Digital Multimedia Business Unit

Development trends in security surveillance and AI have generated needs in IP-Cams and IVA (Intelligent Video Analysis) applications. Alpha's digital multimedia

network product line will continue to focus energy on the development of IP-Cams, smart identification, and analysis applications. In the home security surveillance market, outdoor battery-powered IP-Camp, and smart doorbell surveillance application will provide the most momentum for growth. Besides continuing to focus on smart home applications, the company will develop corporate security surveillance solutions to provide our clients with competitive and differentiated products.

4. Mobile Enterprise Solutions Business Unit

With developments in the Advanced Driver Assistance Systems (ADAS) market, Alpha's 24GHz mmWave radar sensors have successfully achieved mass production and are now marketed overseas, while the mmWave radar technology is currently being applied to smart parking. The company will keep on developing 77GHz and 79GHz radars in conjunction with the passenger car Automatic Vehicle Monitoring System (AVM) to improve sensing precision. Alpha possesses proprietary mmWave radar development and algorithm technologies that can be used to create customized products for our clients. Furthermore, the company will consolidate radar sensing, IP-Cam, and network communication technologies in a bid to capitalize on the IoV market opportunities.



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Manufacturing and Quality Services

At Alpha, we believe in “getting quality right the first time.”

Before the product enters production, in order to ensure the competency of the colleagues who have a direct influence over the product's quality, the company will provide related training and re-training to make sure of their qualifications. This is to guarantee that the production line colleagues will be able to manufacture products of exceptional quality.

All products undergo rigorous and thorough design validation before the start of mass production, including quality testing, product safety certification, electromagnetic interference, and resistance testing, compatibility certification testing, environmental and reliability testing, and more. All products go through a series of checks to ensure compliance with international standards.

Before products enter production, all parts go through exhaustive incoming material inspection to keep defective parts out of the production line. Quality on the production line is constantly monitored by quality control personnel during the production process.

Once production is complete, final products are sample tested by quality control personnel to ensure that their functionality and appearance are up to standard. An electrostatic protection policy is implemented throughout the material transport, R&D, production, production process control, inspection, testing, and repair processes to ensure that sensitive parts are not damaged by static electricity.

Comprehensive after-sales support is provided by Alpha once a product has been shipped.

We are therefore committed to the following:

- Make it a matter of honor to get quality right the first time.
- The pursuit of excellence through continuous review and improvement.
- Manufacture the products that customers need and provide customers with satisfactory service.

Intellectual Property

Education and training

Through regular and irregular, training and internal announcements, the company will instill the concept of intellectual property rights, trade secret-related laws and regulations, as well as the importance of using authorized software, together with its legal implications. For new employees, Alpha will promote intellectual property rights and trade secret-related management and principles during orientation training and the legal implications will be clearly stated in the employment contract.

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 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 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 customer's 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 customers are used legally during business activities without violating any of the relevant laws.

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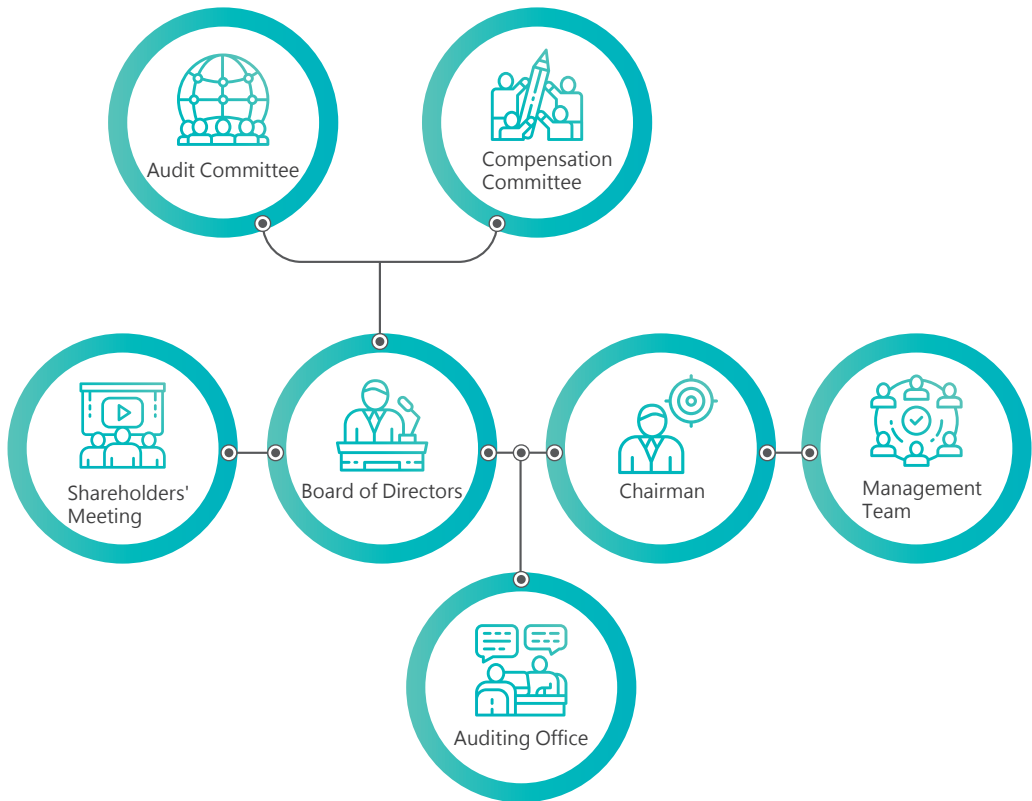
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Corporate Governance

To ensure ethical business management, Alpha complies with the Company Act, Securities Exchange Act and other relevant laws. We also formulated the "Ethical Corporate Management Best Practice Principles", "CSR Best Practice Principles", "Insider Trading Prevention Management Regulations", and "Code of Ethical Conduct" to protect shareholder rights and interests, strengthen the function of the Board of Directors, and boost the effectiveness of the Audit Committee and Compensation Committee in order to improve the company's business performance and realize the ideal of sustainable corporate development.

Governance Structure
Board of Directors



The top governance body at Alpha is the Board of Directors. In accordance with the Articles of Incorporation, between 5~9 directors may be elected to the Board for terms of 3 years and for successive terms. At least 3 of all directors shall be independent directors. Directors are elected from a list of nominated candidates. The "Rules Governing the Election of Board Directors" and the "Corporate Governance Best Practice Principles" explicitly calls for diversity in the overall composition and membership of the Board of Directors such as having different professional backgrounds, professional specialties and genders.

The 6th Alpha Board of Directors is composed of Nine directors that have the necessary wealth of experience or professional qualifications in business, legal affairs, finance, accounting or company operations. The Nine directors include 3 independent directors, of which 1 is woman. Please refer to the Minutes for 2019 annual shareholders' Meeting, annual report or the TWSE market observation post system website for the directors' resumes, positions with other companies and continuing education.

The responsibilities of the Board include supervising corporate compliance, financial transparency, appointment and removal of executives, and deciding on important company issues. The management team assists the Board with its decision-making by providing information or briefings on business operations and situation. The Alpha "Rules Governing the Agenda of the Board of Directors" and "Audit Committee Organic Charter" all include regulations on avoiding conflicts of interests. If a director or the institutional investor they represent has a conflict of interest with any matter on the agenda, they shall explain the conflict of interest during the meeting of the Board or the audit Committee. If the company's interests may be harmed then the director shall recuse himself/herself from the discussion and voting, nor may they exercise the proxy votes of other directors.

The Alpha Board of Directors is convened at least once every quarter. In 2019, the Board was convened 5 times and the average attendance of each director was 100%. Important resolutions passed by the Board are also announced on the TWSE Market Observation Post System and the corporate website in a timely manner.

The Audit Committee and Compensation Committee were established as functional committees by Alpha to achieve the goals of operational transparency, respect for shareholders' interests and ensure the sound operation of the Board.

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Audit Committee

The Audit Committee at Alpha was established on June 15, 2012. The Committee shall be convened at least once a quarter and was convened 5 times in 2019. The Committee is made up of all independent directors and shall have at least 3 members, one of whom shall come from an accounting or financial background. Committee members serve 3-year terms and may be elected for successive terms. The purpose of the Committee is to supervise the expression of financial reports, the appointment (dismissal) of accountants, ensure the effective implementation of internal controls, compliance with the relevant laws and regulations, and managing existing or potential risks to the company.

● Members of the Board of directors

Title	Name	Gender
Chairman	April Huang	Female
Director and President	Yu-Chin Lin	Male
Institutional director	D-Link Corp.	Male
Institutional director representative	Joseph Wang	
Institutional director	D-Link Corp.	Male
Institutional director representative	Richard Lin	
Institutional director	Qisda Corp.	Male
Institutional director representative	Peter Chen	
Director	John Lee	Male
Independent director	Harry Huang	Male
Audit Committee member		
Independent director	Mao-Chao Lin	Male
Audit Committee member		
Compensation Committee member		
Independent director	Ming-Der Shieh	Male
Audit Committee member		

Auditing Office

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 Dongguan and Alpha 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.

Alpha embraces ethical business practices and adheres to the law. Effective internal controls and a dedicated enforcement unit have been put into place and are now implemented throughout Alpha including Alpha Dongguan and Alpha Changshu.

The internal control system at Alpha is based on the relevant regulations of the "Standards for Publicly Held Companies to Internal Control Systems." In addition to annual self-reviews of internal control systems, the effectiveness of Alpha's 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.

Compensation Committee

A Compensation Committee was established by Alpha on December 23, 2011. 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) and these are paid in cash. Executive compensation includes fixed components such as base salary, bonuses, and benefits as well as variable components in the form of bonuses, dividends (cash/stock), stocks (restricted stock/treasury stock) and stock options. 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 account and reviewed by the Compensation Committee. It is then submitted to the Board of Directors for approval and implementation.

The Compensation Committee shall be convened at least two times each year and was convened two times in 2019. Meetings may be convened at any time if necessary. Members 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.

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Ethical Management

Regulation Compliance

Ethics, fairness, compliance and adherence to business ethics have always been the overriding principles in the business activities of Alpha. Company 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, and intellectual property rights as well as business regulations in Taiwan where we are headquartered, Alpha 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 has established a legal affairs office for legal compliance and advice. Proper compliance is enforced in concert with professional advice from external consultants and quarterly internal updates on regulations, as well as education from time to time in order to reduce and control the risks in company operations. The aim is also to protect the rights and interests of our employees and shareholders.

Whistleblower System

To protect the legal interests of stakeholders, Alpha has not only appointed dedicated personnel for communicating with the relevant stakeholders but also set up whistleblower mailbox for stakeholders to serve as the proper channel for complaints. Stakeholders can report any violations of corporate governance or illegal activity through this channel. The whistleblower mailbox for stakeholders is handled by dedicated personnel at Alpha to protect the identity of the whistleblower and the contents of their complaint.

Whistleblower mailbox for stakeholders: improvement@alphanetworks.com

Information Security Management Policy

In protecting the information security of the company, our clients and partners, Alpha is committed to building a secure information environment. On December 14, 2019, the company passed the ISO/IEC27001 information security management system certification, and relevant security policies and regulations were stipulated in accordance with the management system. Information security is implemented and improved through the ongoing internal audit mechanism in order to effectively

preserve the confidentiality, integrity and availability of the information asset. Management processes for IT equipment usage, network communications, account permissions, removal of computer equipment, physical printing and remote connections have been put into place based on the Information Security Management Regulation to ensure strict management of information at each stage of use and to reduce the risks to 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.

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Risk Analysis and Management

Observing risk-related issues in order to prevent and control them

Alpha collects and studies the risk issues of concern to each stakeholder through each functional organization. Strategic analysis tools are used to assess the impact of process risks in order to prevent and minimize the risks; the following risks have been identified by Alpha:

Potential Risks	Risk Sources	Response Measures
Natural disasters	<ul style="list-style-type: none">• Earthquake• power outage• fire• Notifiable infectious diseases	<ul style="list-style-type: none">• Fire safety education and training carried out quarterly• BVP event drill carried out each year• Carry out disaster recovery in accordance with the disaster recovery regulations
Information security	<ul style="list-style-type: none">• System functionality crash/malfunction• Hacker attack• Protection of customer privacy	<ul style="list-style-type: none">• Obtain ISO/IEC27001 information security management certification• Construct a comprehensive data center environmental monitoring system to ensure the security of physical environment for information systems.• Perform regular backups of information and data, set up off-site backup and recovery system, and in accordance with the integrity and availability of data• Set up information security systems such as firewalls, network anti-virus and mail filtering. Define rules governing the use of network and computer equipment to prevent information security risks• Preventive measures are implemented with regards to potential information security risks and internal information communication management is conducted in conjunction with the Legal Affairs Department per the requirements by the clients
Supply chain disruption	Raw material shortage	<ul style="list-style-type: none">• Form strategic alliance with suppliers that have high supply risk• Monitor market supply and demand to adjust delivery times as necessary and prepare safety inventory levels• Establish alternative materials• Look for spot markets• Discuss response measures with suppliers or ask for materials to be supplied early
Financial risk	<ul style="list-style-type: none">• Bad debt• Exchange rate	<ul style="list-style-type: none">• Conduct general risk assessments for related businesses on correspondent banks, customers and suppliers. Implement any necessary controls to reduce credit risk• Establish a currency hedging mechanism to avoid risks from currency rate fluctuations
Environmental Compliance	Legal policy/standard changes	<ul style="list-style-type: none">• Establish dedicated unit• Ad hoc/regular updating of regulatory information and hosting of education & training
Product development trends	<ul style="list-style-type: none">• New technology changes the demands in the consumer market• Schedule and changes for stipulating new technology specifications, as well as the restrictions of the telecommunication laws in various countries	<ul style="list-style-type: none">• Regularly convenes strategy meetings to discuss the digitization of the business model and production automation with the product planner of various business groups in order to confirm the accuracy of technology R&D, product development and design, and market needs• Maintain close collaboration and contact with relevant certification laboratories in accordance with the laws of various countries in order to respond to the future market developments in network communication applications such as 5G, AI and IoT

Friendly Workplace

Recruitment | Compensation and Benefits

Talent Development | Social Engagement

Attract, develop and inspire global talents



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Green product Management
 Environmental Management
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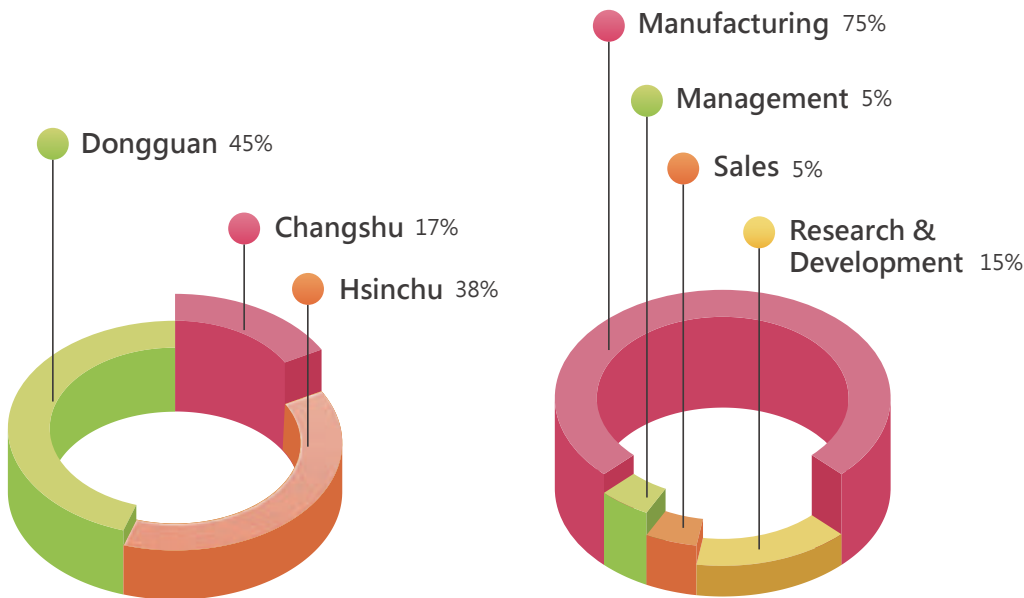
GRI Standard Index
 Accuracy of Disclosure

Recruitment

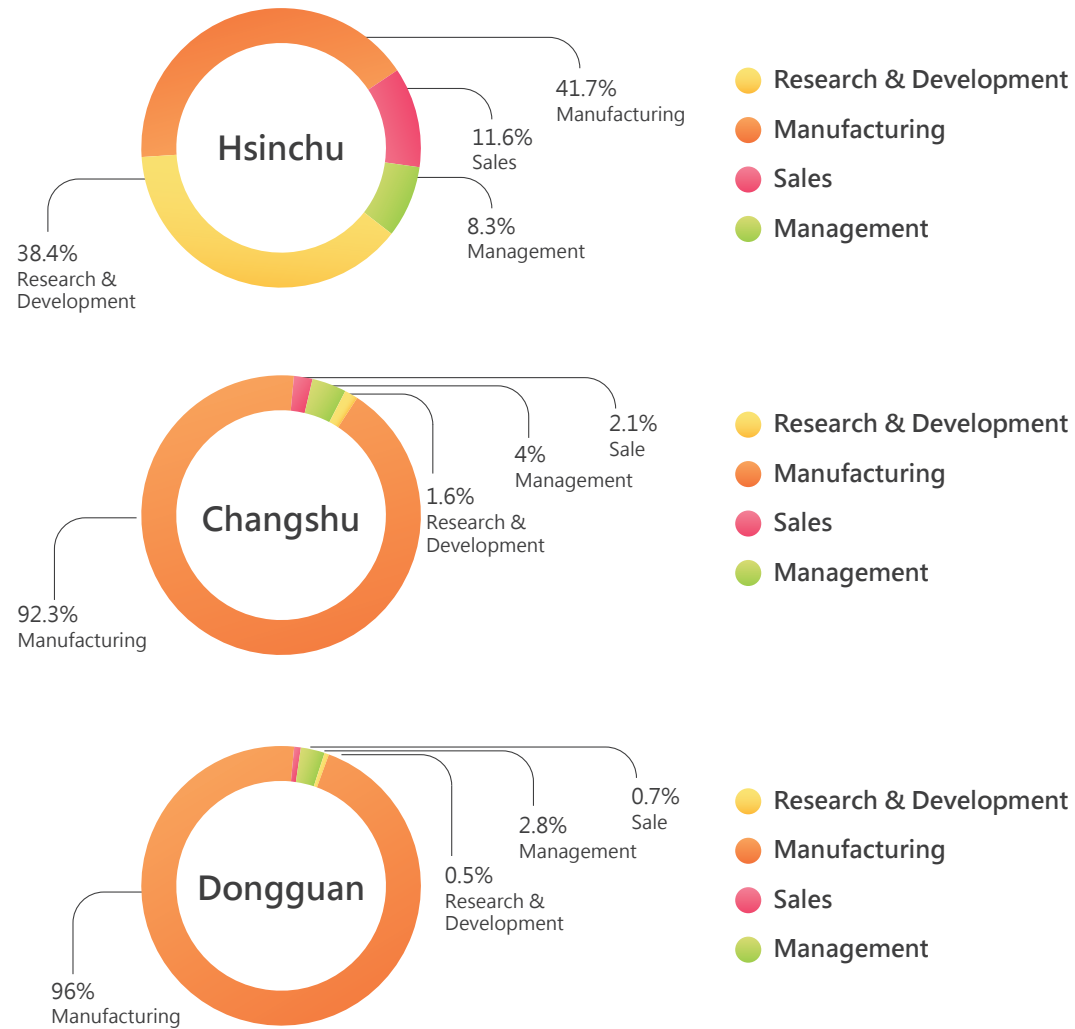
Diversity and equality at the workplace

Founded in 2003, Alpha Networks has 4,100 employees worldwide as of late 2019. Roughly 38% of our global workforce is located in Alpha's headquarters in Hsinchu Science Park, responsible for product development, marketing, and daily operations. Alpha's R&D locations are mainly situated in Taiwan, accounting for approximately 15% of the R&D staff. The primary production locations of the company are in Dongguan and Changshu, accounting for about 62% of Alpha's total workforce. Human resources distribution is as follows:

● Job Distribution



● Job Distribution per Factory



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- Ethical Management
- Risk Analysis and Management

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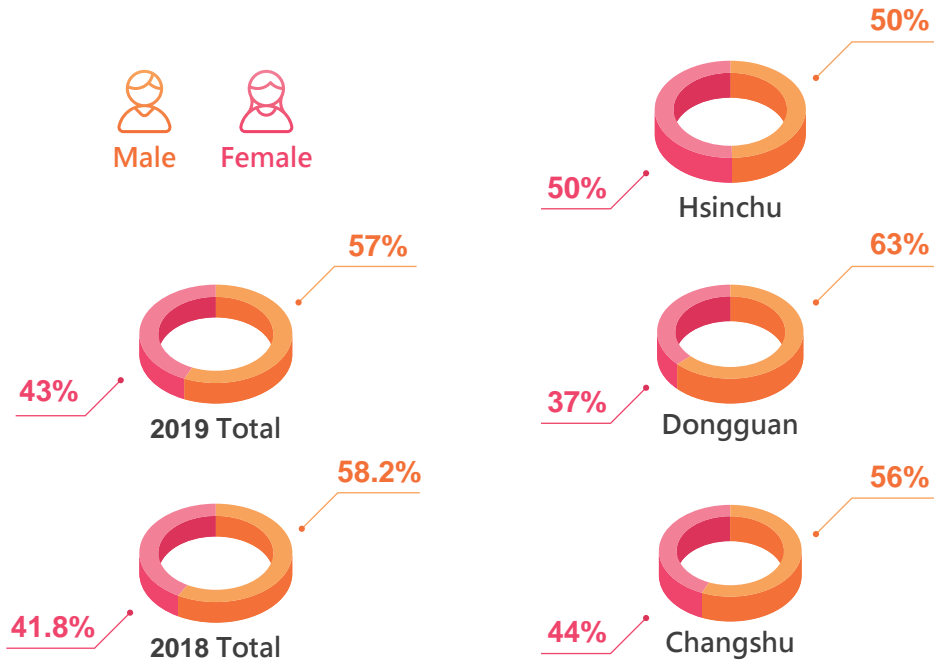
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- GRI Standard Index
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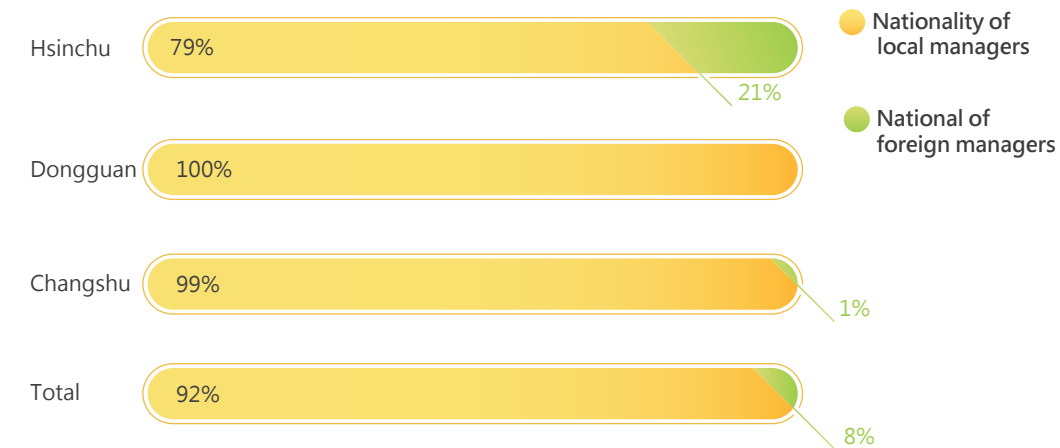
Alpha has upheld the spirit of "Responsible Business Alliance's Code of Conduct" and complied with local regulations to formulate various factories' employment policy to make sure that our employees are not discriminated against based on "ethnicity, skin color, age, gender, sexual orientation, race, religion, pregnancy, and other conditions protected by the law". The male and female staff constitutes 57% and 43% of the total factory workforce respectively, with the percentage of female employees showing an increase compared to last year. Considering the industry characteristics and labor market conditions, the gender ration at the factorys is relatively balanced.

More than 90% of the staff is made up of local citizens during 2018~2019. At the same time, in order to reach out to school campuses, Alpha (Hsinchu Factory) has conducted annual campus recruitments to attract graduates.

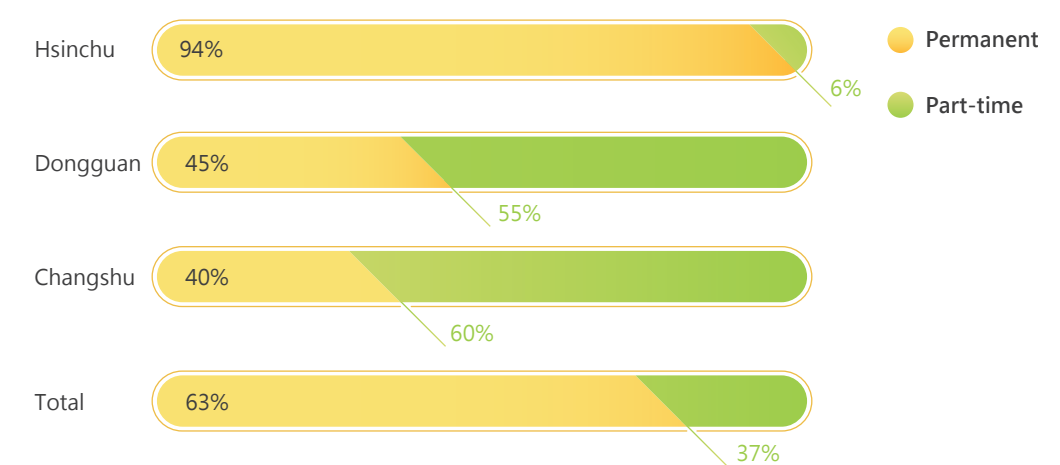
● Distribution of Gender



● Nationality of Management Position



● Type of Employment



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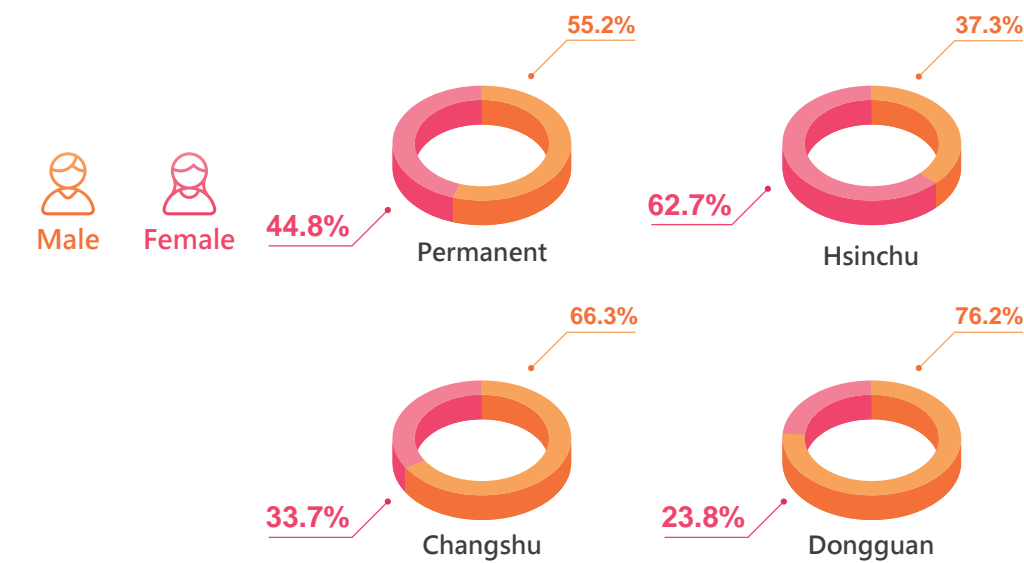
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● The age distribution of new Alpha employees in 2019 were as follows

Region	Number		Age				
	%	18~20	21~30	31~40	41~50	51~60	60~
Hsinchu	Number	0	290	116	94	12	0
	%	0.00%	56.64%	22.66%	18.36%	2.34%	0.00%
Dongguan	Number	73	208	98	7	0	0
	%	18.91%	53.89%	25.39%	1.81%	0.00%	0.00%
Changshu	Number	0	48	43	4	0	0
	%	0.00%	50.53%	45.26%	4.21%	0.00%	0
Total	Number	73	546	257	105	12	0
	%	7.35%	54.98%	25.88%	10.57%	1.21%	0.00%

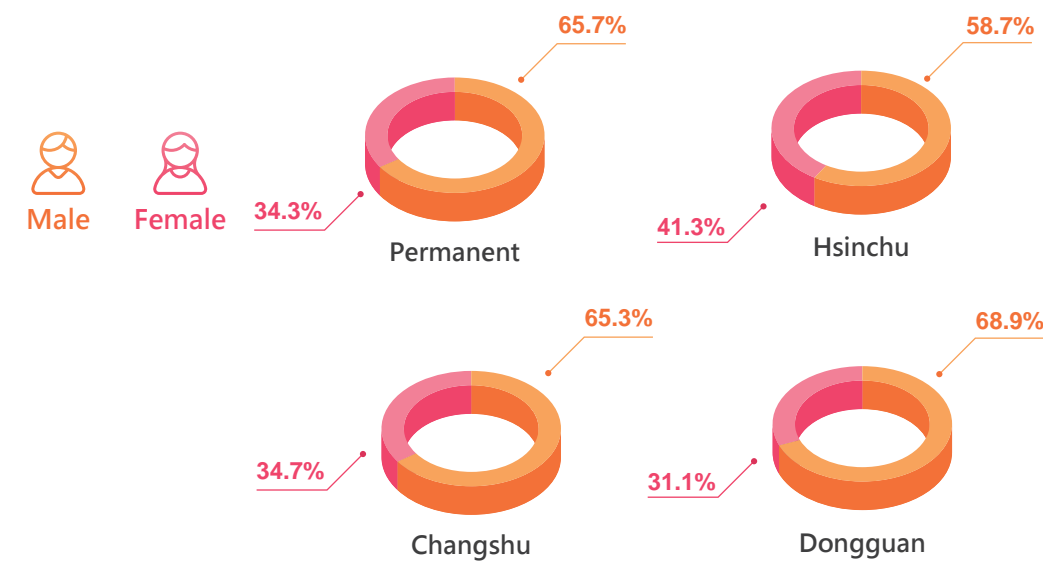
● Permanent Employee - New



● The distribution of ages for permanent employees that separated from Alpha during 2019 are as shown in the following table:

Region	Number		Age				
	%	18~20	21~30	31~40	41~50	51~60	60~
Hsinchu	Number	0	62	76	68	27	2
	%	0.00%	26.38%	32.34%	28.94%	11.49%	0.85%
Dongguan	Number	102	270	152	15	1	0
	%	18.89%	50%	28.15%	2.78%	0.19%	0.00%
Changshu	Number	0	87	77	6	0	0
	%	0.00%	51.18%	45.29%	3.53%	0.00%	0.00%
Total	Number	102	419	305	89	28	2
	%	10.79%	44.34%	32.28%	9.42%	2.96%	0.21%

● Permanent Employee - Resignation



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Compensation and Benefits

Fair compensation and benefits policy

In recruiting and retaining outstanding professional talents, Alpha has taken the market standard and local labor regulations into consideration to regularly review the association between the company's compensation/welfare measures and the market, so as to preserve the competitiveness of the talent market. Alpha employees' compensation and bonus are not influenced by personal attributes such as gender, race, nationality or age. The hiring and compensation of company employees are conducted based on their expertise, education and experience. Each employee's compensation is adjusted in accordance with the company's overall operating condition and individual performance evaluation.

● Distribution of Average Salaries among New Alpha Employees

Region	Type	Female	Male
Hsinchu	Direct employees	1.1	1.1
	Indirect employees	1.5	1.5

Note: Starting salary for new employees/ Statutory minimum wage

● Distribution of Starting Salaries among New Alpha Employees

Region	Type	Female	Male
Hsinchu	Direct employees	1	1
	Indirect employees	1	1

Note: Distribution of starting salaries for new employees = Starting salary of new female employees/ Starting salary of new male employees

Alpha (Hsinchu Factory) carries out retirement and the application thereof according to the Labor Standards Act and Labor Pension Act. Furthermore, where a fixed percentage of the employees' salaries is contributed to the pension account every month as per required by the law. The employer will contribute 6% and 2% of the employees' salary in accordance with the new and old labor pension system

respectively. According to the Labor Pension Act, only vocational school students and foreign colleagues do not require contributions to the pension account, all permanent employees are required to participate in the retirement plan. In particular, only 15 people chose the old labor pension system.

In addition, the permanent and contract employees at Alpha (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 factories (Dongguan Factory and Changshu Factory), all employees join the coverage of social insurance according to the local regulations since day one, and other social security measures such as monthly contribution to retirement pension and medical care are also implemented.

In order to implement the leave management system at Alpha (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.

At Alpha (Hsinchu Factory), pregnant employees are offered parking space, breastfeeding room, prenatal examination leave, paternity leave, family leave, marriage leave, and maternity subsidy in order to encourage our employees to get married and have children. 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 maternity leave and paternity leave. In 2019, 25 female employees applied for maternity leave, achieving a reinstatement rate of 72%. In the same year, 21 male employees applied for paternity leave, achieving a reinstatement rate of 100%.

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● Overview of Maternity and Nursery Leave at Alpha (Hsinchu Factory) Maternity/paternity leave and nursery leave among Alpha personnel

Female					Male		
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	Number of leave without pay after maternity leave/ Resignation	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
25	18	72.0%	7	28.0%	21	21	100%

In bolstering the company's endeavors in corporate governance information disclosure and social responsibilities, Alpha provides the mean and median salary of non-executive full-time employees, hoping to endow the company's employee remuneration statistics with more reference values and comparability.

In 2019, Alpha had 1,153 non-executive full-time employees with a mean salary of NT\$950,200 and a median salary of NT\$850,300. Comparison of the aforementioned 3 attributes with that of the previous year.

	2018	2019
Total number of non-executive full-time employees	1114	1153
Mean salary of non-executive full-time employees	NT\$922,000	NT\$950,200
Median salary	-	NT\$850,300



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Talent Development

Company's advancement relies on talent development

Training and Development

Alpha is aware that talents are the most valuable asset of the company, therefore we have spared no effort in training our employees. 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:

- Orientation training: We provide each employee with complete orientation training in areas such as company organization, core competence, internal system, and environmental safety and health, etc., helping the new employees to understand and blend into the company culture quickly.
- 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.
- Professional training: In order to continue the heritage of Alpha's internal expertise and knowledge, supervisors and the HR Department have organized internal training courses to facilitate the exchange and sharing of professional experiences across different job categories, thereby fostering a learning organization.
- External courses: Besides systematic internal training, Alpha also encourages employees to partake in related training courses such as R&D, safety regulations, labor safety, and human resources according to their function and personal development needs, thereby offering them comprehensive training channels.

With the dawning of 5G in 2019, Alpha's training arm has focused on the theme of mobile communication to launch relevant technical training courses such as 5G Network Structure in conjunction with other organizations including Tze-Chiang Foundation of Science & Technology and Industrial Technology Research Institute.

Lectures were also invited to conduct lectures at the R&D center in Chengdu. Alpha's Chairman John Lee also launched an internal course in 2019 entitled An Introduction to Wi-Fi 6 (802.11ax), where an easy-to-understand approach was applied to let our colleagues further understand Wi-Fi 6 as well as its applications and influences.

In 2019, employees in Hsinchu, Dongguan, and Changshu received training, accumulating a total of 35,847 training hours and 29,327 persons over the entire year. In order to encourage our colleagues to share their professional knowledge and expertise, Alpha (Hsinchu Factory) conducts Teacher's Day incentive activity every September, sending out e-cards and gift vouchers to internal lecturers as a token of appreciation for their contributions in training the company staff. In 2019, a total of 224 colleagues received the e-cards and vouchers. Alpha (Hsinchu Factory) offers subsidies for language training in English, Japanese, French, German, Spanish, and Russian in order to improve the language proficiency of our colleagues and the company's competitiveness.



- Orientation/Self development
- Management training
- Professional training



- Career Planning
- International assignment
- Cross function project
- Promotion and development according to performance



- Internal/ External training
- knowledge management
- Instructor
- e-learning platform

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Performance Management

A comprehensive performance management scheme and system has been set up to improve employee performance and ability. The system is used to measure the accomplishment of the company's short, medium and long-term goals, and to provide a basis for internal assignments, promotions, salary adjustments, prizes, bonuses, training, and development.

Performance management at Alpha includes the measuring of tangible work targets as well as assessments of conduct. At the start of the year, supervisors interview employees based on organizational business strategy and the department's annual targets. The interviews are used to set each employee's targets, action plans, and personal development plan. Half way through the year, the progress is jointly reviewed by the supervisor and employees to see if the targets need to be adjusted. For the end-of-year performance evaluation, employees shall first complete their assessment of the work targets, core competencies, and personal development plan. The supervisor then provides the employee with feedback based on performance interviews. The feedback is incorporated into the work targets for the coming year or into the employee's personal development plan to boost their ability. Alpha places a strong emphasis on communication between the supervisor and employee as well as communication frequency during the initial target setting, interim performance review, and end-of-year performance evaluation phases. This is to ensure that both parties are on the same page when it comes to the targets set and achieved.

Promotion Management

Alpha 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 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. Supervisors will arrange for employees slated for promotion to attend management competency courses if they are suitable for management roles.

Employee Events

With diverse employee activities such as year-end banquets, birthday parties, and clubs, the company also organizes various lectures from time to time, covering popular topics such as workplace communication, parenting, investment and financial management, and art appreciation. Alpha (Hsinchu Factory)'s welfare committee hosts company trips to bring employees closer to one another, allowing them to strike a balance between work and personal life.



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Social Engagement

Exerting Alpha's Expertise in Network Communication to Implement Mobile Technology Education

Since its inception in 2006, Alpha Foundation has been dedicated to 4 major areas: Education in Remote Townships, Community Development, Caring for the Disadvantaged, and Community Engagement. Furthermore, it has applied its expertise in network communication, which sees Alpha Foundation taking corporate volunteers to visit elementary schools in remote townships to improve their campus security surveillance and environment. Additionally, they also provide kids in remote townships with an opportunity to learn about AI technology and other new technologies in an effort to bridge the urban-rural digital divide.

On the other hand, the foundation also visited the East District Senior Citizen Center in Hsinchu City to conduct cloud technology and smart living-related classes so that senior citizens can learn about the Internet and apply its convenience to improve their quality of life.

Moreover, the foundation also sponsored St. Joseph Social Welfare Foundation's Angel Percussion Band by inviting the disabled group to perform at the company. While enjoying a musical feast, Alpha's associates can also appreciate the spirit of Everyone is Born for a Purpose.

It is hoped that the seeds of love sown by the Alpha Foundation will introduce more warmth to the land.

This year, Alpha Foundation donated Alpha Networks' IP cameras to the Pinglin Elementary School in Guanxi Town, Hsinchu County to reinforce campus security and let the students engage in school activities with peace of mind. The foundation also held the 2019 Alpha AI Networking Expert Lecture at the Jinping Elementary School in Jianshi Township, Hsinchu County, where our

corporate volunteers taught children networking and AI by conducting lively, interesting classes. Furthermore, an AI drawing website competition will be held to let them understand that similar to a human brain, AI is capable of ongoing "self-learning" and "deep learning" through database creation and linkage.

Alpha's corporate volunteers have introduced AI to the children in an easy to understand manner, thereby strengthening their soft power in the field of technology. Also, AI games and contests help to reinforce the positive influence of technology on school children, making it an invaluable learning experience for children living in remote townships. Children all loved the interesting learning approach made possible through network technology.

On the other hand, the Alpha Foundation continues to serve senior citizens; in collaboration with the East District Senior Citizen Center in Hsinchu City and Old Five Old Foundation to develop the Cloud Technology and Smart Living course was launched for senior citizens at the East District Senior Citizen Center in Hsinchu City, where Alpha's corporate volunteers taught them how to operate a mobile device so that they can check the hospital's patient registration status, bus schedule, train schedule, and ticketing via cloud technology. The diverse, everyday life-related classes brought smiles to many senior citizens.

In the future, Alpha Foundation will continue to uphold the goal of contributing to society based on the company's mobile communication core competence. Furthermore, network equipment will be combined with corporate volunteers to promote technology and network communication education. By upholding the philosophy of "giving back to society", Alpha aspires to bring together people's benevolence using our expertise in network communication for the purposes of engendering warmth and hope.

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Environmental protection is an important element of the Alpha business spirit

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Environmental protection is an important element of the Alpha business spirit

Stringent measures are taken by Alpha to ensure that all products comply with the EU RoHS, WEEE and other directives. Product performance is also continuously being refined to comply with the requirements of the EU ErP directive. Life Cycle Thinking (LCT) is already introduced in the product development phase. The green design philosophy is also being progressively added with adjustments made as necessary based on changes in international environmental protection regulations.



Design and recyclable for 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 disassembly manuals and WEEE 3R report are also produced. The goal of achieving a high product recycling rate has now been achieved.

Pollution prevention

LCT is introduced at the product development phase in the hopes of identifying a product's key environmental considerations and minimizing its environmental impact during resource extraction, manufacturing, distribution and sale, use, disposal and recovery



Energy conservation

Product energy efficiency is based on the guidance of the EU ErP, the (EC) No.1275/2008 implementing directive for Parliament and of the Council with regard to Ecodesign requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment, and (EC) No.278/2009 implementing directive for external power supplies.

Low toxicity

In addition to the introduction of lead-free production processes through the green product management platform and strict internal controls, all parts manufactured by Alpha comply with the requirements of EU RoHS directive and REACH regulations.

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Green product Management

Establishing a regulatory database and HS management platform to manage materials

Green Purchasing

To fulfill our environmental responsibility as a global citizen, practice sustainable development of green products, embrace green production and green consumption, as well as reduce the use of natural resources and toxic substances, Alpha has now adopted green purchasing and requires suppliers to comply with the requirements of the signing the Non-use Guarantee Statement.



Green Regulation and Database Establish

• International Green 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 six 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 non-compliant 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.



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International, regional, national and customer-defined green regulations:

Regulation	Content	Effective date
Restriction of Hazardous Substances Directive (RoHS)	The RoHS Directive is an environmental protection directive that took effect on July 1, 2006, in the EU restricting the use of six major chemical substances (Pb/Cd/Hg/Cr6+/PBB/PBDE) in electronic and electrical products in the EU market. The directive was updated on July 1, 2011 to formally include RoHS into the declarations for the CE Mark; On June 24, 2015, the (EU) 2015/863 amendment took effect adding four Phthalates (PAEs) (DEHP/BBP/DBP/DIBP) to the restricted list as well.	2002/95/EC: 2006.07.01 2011/65/EU :2011.07.21 2015/863/EU:2019.07.22
China-Restriction of Hazardous Substances(China RoHS)	The China-RoHS was formally issued on February 28 2006. All electronic IT products manufactured in or imported into China are now required to undergo CCC verification of hazardous substances based on the product list defined the "Key Management Catalogues."	2006.2.28
Bureau of Standards, Metrology and Inspection(BSMI)	The BSMI in Taiwan added electronic and electrical products in 91 IT and audio-visual categories to the CNS 16663 section 5 requirements on "Content labeling." RoHS was added to the "required commodity inspection" standard along with the CNS 15663 Section 4 "content labeling" testing requirements as well. Mandatory testing for RoHS took effect from July 1, 2017.	2017.7.01 BSMI Commodity Inspection Mark
Waste Electrical and Electronic Equipment Directive 2002/96/EC(WEEE)	The EU 2002/96/EC "Waste Electrical and Electronic Equipment Directive" was officially issued in 2003. The purpose of the directive is to reduce the amount of waste electrical and electronic equipment, as well as encourage the recovery, reuse and recycle of electrical and electronic products. The goal of the directive is to promote sustainable production and consumption, and to improve the actual environmental performance of participating electrical and electronic equipment throughout their life cycle.	2002/96/EC:2003.02.13 2012/19/EC:2012.07.04
California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)	The Safe Drinking Water and Toxic Enforcement Act of 1986 required all businesses selling goods within the boundaries of California to inform residents of the state the amount of chemicals that the home furnishings they purchase or the products in their workplace may contain or emit into the environment.	Implemented from 1986
Sweden offers tariff reductions or exemptions for restricting the use of certain chemical compounds in electrical and electronic products	The Swedish government offers tariff reductions and exemptions on the restricted use of Bromine, Chlorine and Phosphor compounds in some electrical and electronic products	Took effect on April 1, 2017, and enforced from July 1, 2017
TÜV Green Product Mark	A voluntary standard for consumer products and their impact on the environment. A variety of related certification requirements and standards are compiled for different products. Products that pass testing are issued the green product mark to facilitate identification of eco-friendly products by the consumer.	Voluntary certification mark
Eco-design Requirements for Energy-related Products Directive(ErP)	The ErP Directive (2005/32/EC) of the European Council is aimed at reducing the environmental impact of energy-related products including total energy power consumption throughout the product life cycle. The directive sets out a framework for defining the energy- saving requirements for all energy-using products in homes, tertiary industries and the industrial sector. Implementing Directive (EC) No.1275/2008 for standby and off mode electric power consumption of electrical and electronic household and office equipment Amending Directive (EU) 2019/1782 for external power supplies Implementing Directive (EC) No.107/2009 for simple set-top boxes Amending Directive (EU) No.801/2013 for network communications equipment with power consumption in standby mode.	Implemented from 2008
California Energy Commission	Encompasses all products that use external power supplies (such as chargers and adapters) including mobile phones, home cordless phones, portable music players, hand-held gaming devices, and toys. These products were also required to make more efficient use of energy in standby mode and during use.	New mandatory testing method for battery charging systems introduced on November 16, 2016.
EU Code of Conduct on Energy Consumption of Broadband Communication Equipment	The eco-design objectives for broadband infrastructure must conform to the EU Code of Conduct on Energy Consumption of Broadband Communication Equipment	2019 Announcement Broadband Equipment Code of Conduct – Version 7.0

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• Building a Regulatory Database

Alpha clearly defines hazardous substance usage standards for products able to and environment-related control requirements by regularly updating the green product control guidelines. Alpha 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 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's 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 Regulatory Database” has been set up for storage and queries to facilitate effective communication.

Environmental compliance by Alpha in 2019 resulted in no litigation or serious fines for violations of environmental laws and regulations.



Hazardous Substance Management

A Green Product Management System (GPM) has been implemented by Alpha in response to the international environmental regulations and customer. In addition to control procedures, suppliers are also required to sign written declarations and submit third-party test reports to ensure that products comply with the rules of the restricted substances list, avoid the effects of hazardous substances, and to ensure that the product adheres to the spirit of environmental friendliness from development through to after production.



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1. Restriction of Hazardous Substances

All Alpha 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. The GPM system's management mechanism ensures that all products are in compliance.



2. Hazardous Substance Management System Certification

The Electrical and Electronic Components and Products Hazardous Substance Process Management System Requirements (HSPM) were issued by the International Electrotechnical Commission (IEC) in October 2005.

3. XRF Inspection

To comply with the EU RoHS directive as well as each country's requirements on rapid testing of hazardous substance content in electronic and electrical products, Alpha uses XRF inspection to quickly and effectively test for substances such as Pb、Cd、Hg、Cr⁶⁺、PBB、PBDE. Products can be sold with assurance once their compliance with green products have been verified.

Product Disassembly and Recovery Design

ALPHA consider 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. Recovery and disassembly (3R) and EU WEEE directive (WEEE) all form the basis of green product design. Recyclable materials are therefore chosen by Alpha during system design to better comply with EU environmental requirements.

Product energy-saving design

ALPHA in product design stage, consider energy efficiency and reduction of energy consumption. While product in standby and off modes, compliance EU related Product directive (EC) No.1275:2008 (Lot6) and (EU) No.801:2009 (Lot26) the networks equipment standby and off modes energy consumption requirement.



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Environmental Management

Launching environmental protection activities to mitigate the environmental impact

Environmental Policy/HSF Policy

- Adhere and comply with environmental laws and the RoHS directive
- Develop green products with fully HSF products as the ultimate goal
- Promote recycling of resources and waste reduction
- Continue to improve processes to reduce their environmental impact
- Improve environmental awareness among employees and to participate directly in environmental protection initiatives
- Conserve energy and improve energy efficiency

There were no violations of local environmental laws or regulations by Alpha in 2019. Related items are outlined in the following section.



Alpha Networks has participated in environmental protection initiatives such as the 2019 Fall Beach Cleanup Activity held by the Bureau of Environmental Protection, Hsinchu City.

- Alpha Networks received a certificate of appreciation from the Hsinchu City Government



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Wastewater Management

Wastewater produced by Alpha consists of domestic wastewater and kitchen wastewater. As the wastewater is not from the production process so voluntary disclosure covers only domestic wastewater.

Discharge 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. 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.

Flow meter calibration:

A calibration rule is used to measure and record the overflow height of the triangular weir conduit at the site. The flow rate shown on the display is then compared against the flow rate calculated using the formula.

● Factory Wastewater Discharge, 2017 ~ 2019 (Tonnes)

Year	2017	2018	2019
Hsinchu Factory	30,083	24,008	257,61
Changshu Factory	70,694	45,511	44,739
Dongguan Factory	116,656	100,704	88,275

Source - Hsinchu Factory – Meter readings reported to the Science Park Administration’ s sewage treatment factory each month.
Changshu Factory and Dongyuan 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).



● 2019 Discharger water quality test result (depending on the test schedule of respective factories)

Test item	pH	BOD	COD	SS	Oil	Anionic Surfactants	Ammonia-Nitrogen	Phosphate, PO4 ³⁻ (Total Phosphate)
Hsinchu Actual value	7.5	176 mg/L	368 mg/L	104mg/L	13 mg/L	1.22 mg/L	-	-
Hsinchu Controlled value	5~9	300 mg/L	500 mg/L	300 mg/L	25 mg/L	10 mg/L	-	-
Dongguan Actual value	7.12	4.3 mg/L	19 mg/L	6 mg/L	0.18 mg/L	ND mg/L	0.342 mg/L	0.06 mg/L
Dongguan Controlled value	6~9	300 mg/L	500 mg/L	400 mg/L	100 mg/L	20 mg/L	-	-
Changshu Actual value	7.49	-	48 mg/L	24 mg/L	0.17 mg/L	0.12 mg/L	28.2 mg/L	1.67 mg/L
Changshu Controlled value	6~9	-	500 mg/L	400 mg/L	100 mg/L	20 mg/L	45 mg/L	8 mg/L

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

Drinking Water Maintenance Management

Alpha 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 three 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.

Drinking water quality standard:

Hsinchu: 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 5749-2006 (Standards for drinking water quality)

Dongguang factory: Compliant with CJ 94-2005 (Water quality standards for fine drinking water)

● 2019 Drinking water quality test results (based on the data from the 4th Quarter)

Test item	E.coli count (Unit: CFU/100mL)	Total bacteria count (Unit: CFU/mL)
Hsinchu Factory	< 1	< 5
Changshu Factory	Not detected	-
Dongguan Factory	Not detected	Not detected

Source - Alpha Networks drinking water quality test report

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Waste Management

A waste management procedure has been formulated by Alpha 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's waste. To meet the waste reduction target, Hsinchu Factory strengthened its awareness campaign on waste sorting and marking in 2017. Statistics suggest that there was a significant decrease in the amount of resource waste, and general industrial waste in 2019 compared to 2018. Analyses revealed that the main reasons are attributed to: increased production capacity, equipment, and construction (generating an increased scrap metal of 24,489.3kg) and the processing of semi-finished products in Taiwan (increasing waste cardboard boxes by 42,070kg). In particular, recyclable waste and general industrial waste increased by 68,008.3kg and 5,420kg, respectively.

The amount of hazardous industrial waste in 2019 increased by 20,460.1kg compared to 2018. This is attributed to an increase of waste PCBs from waste electronic components and accessories by 19,548kg in 2019.

The company continues to strengthen the labeling of waste categories in order to achieve the goal of waste reduction.

● Waste Output of Each Factory Between 2017 ~ 2019 year(Kg):

Type		Factory	2017	2018	2019	Method of disposal
General waste	Resource waste	Hsinchu	32,381	23,618	91,626.3	Recycle
		Dongguan	304,074.65	208,711.82	206,219.73	Recycle
		Changshu	337,571.8	731,242.6	275,866.1	Recycle
Hazardous industrial waste		Hsinchu	11,067	12,933	33,453.1	Incineration/Physical treatment
		Dongguan	600	600	600	Processed by EPA-accredited contractors
		Changshu	36,606.8	26,231.46	24,973.18	Trimming (Recycle) Waste organic solvent (Incineration) Waste oil rags (Incineration)
		Hsinchu	10,710	8,960	14,380	Incineration
General industrial waste		Dongguan	200	180	160	Incineration
		Changshu	36,500	127,072.1	202,475	Recycled by contractor

Noise Control

Noise control at Alpha (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 (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.

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 (Hsinchu Factory) retains 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 discharge standards set by law.

● 2019 Flue Exhaust Inspection Result

Hsinchu Factory						
Flue No. P002	Lead		Particulate pollutant		Total nonmethane hydrocarbon (NMHC)	
	Actual value	ND(mgNm³)	Actual value	<1(mg/Nm³)	Actual value	18(ppm)
	Emission standard	10(mgNm³)	Emission standard	100(mgNm³)	Emission standard	*
Flue No. P003	Lead		Particulate pollutant		Total nonmethane hydrocarbon (NMHC)	
	Actual value	ND(mgNm³)	Actual value	<1(mg/Nm³)	Actual value	9(ppm)
	Emission standard	10(mgNm³)	Emission standard	100(mgNm³)	Emission standard	*
Flue No. P004	Lead		Particulate pollutant		Total nonmethane hydrocarbon (NMHC)	
	Actual value	0.133(mgNm³)	Actual value	<1 (mg/Nm³)	Actual value	12(ppm)
	Emission standard	10(mgNm³)	Emission standard	100(mgNm³)	Emission standard	*

Source - Alpha (Hsinchu Factory) flue exhaust test report

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Dongguan Factory							
	Test Item	Emission concentration (mg/m³)	Emission limit (mg/m³)		Test Item	Emission concentration (mg/m³)	Emission limit (mg/m³)
SMT workshop exhaust 1#	Benzene	0.08	12	SMT workshop exhaust 2#	Benzene	0.07	12
	Toluene	ND	40		Toluene	ND	40
	Xylen	ND	80		Xylen	ND	70
	Lead	0.04	0.70		Lead	ND	0.70
	Tin	ND	8.5		Tin	ND	8.5
	Test Item	Emission concentration (mg/m³)	Emission limit (mg/m³)		Test Item	Emission concentration (mg/m³)	Emission limit (mg/m³)
SMT workshop exhaust 3#	Benzene	ND	12	SMT workshop exhaust 4#	Benzene	0.07	12
	Toluene	ND	40		Toluene	ND	40
	Xylen	ND	70		Xylen	ND	70
	Lead	0.006	0.70		Lead	0.04	0.07
	Tin	ND	8.5		Tin	ND	8.5
	Test Item	Emission concentration (mg/m³)	Emission limit (mg/m³)		Test Item	Emission concentration (mg/m³)	Emission limit (mg/m³)
SMT workshop exhaust 5#	Benzene	ND	12				
	Toluene	ND	40				
	Xylen	ND	70				
	Lead	0.005	0.70				
	Tin	ND	8.5				

Source - Alpha Networks (Dongguan Factory) environmental testing report

Changshu Factory			
	Item	Tin and its compounds	Non-methane hydrocarbon (counted as carbon)
Flue No. 1	Emission concentration (mg/ m³)	0.031	0.53
	Limit value(mg/ m³)	8.5	120
	Item	Tin and its compounds	Non-methane hydrocarbon (counted as carbon)
Flue No. 2	Emission concentration (mg/ m³)	0.005	0.42
	Limit value (mg/ m³)	8.5	120
	Item	Tin and its compounds	Non-methane hydrocarbon (counted as carbon)
Flue No. 3	Emission concentration (mg/ m³)	0.003	0.83
	Limit value (mg/ m³)	8.5	120
	Item	Tin and its compounds	Non-methane hydrocarbon (counted as carbon)
Flue No. 4	Emission concentration (mg/ m³)	0.004	1.35
	Limit value (mg/ m³)	8.5	120
	(mg/ m³)	Tin and its compounds	Non-methane hydrocarbon (counted as carbon)
Flue No. 5	Emission concentration (mg/ m³)	0.003	0.43
	Limit value (mg/ m³)	8.5	120

Source - Alpha (Changshu Factory) Emissions test report



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Fire Safety Equipment Inspection and Reporting

The three types of maintenance cycle for fire safety equipment at Alpha (Hsinchu Factory) are monthly maintenance, quarterly maintenance, and annual inspection/registration. 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.

Building Public Safety Inspection, Certification and Registration

Alpha (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.

- Fire Safety Equipment Inspection and Registration Results, 2019

Source - Fire safety equipment inspection and registration form

- Building public safety inspection, certification and registration results, 2019

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

Energy Resource Management

Alpha 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 (Hsinchu Factory) but also achieve the goals of energy conservation, GHG reduction, and safety & health management.

- Loading adjustment of chillers and related equipment
Objective: Automatic adjustment according to the ambient temperature to achieve energy conservation and carbon reduction.
Method: The loading of the chillers and related equipment is adjusted automatically based on the ambient temperature and the desired temperature in order to attain optimal system stability, efficiency, and minimal energy consumption.

Benefits:

Annual power consumption/Month	January	February	March	April	May	June
Actual power consumption of chillers and related equipment in 2017	88,060	121,570	134,580	184,530	223,790	234,610
Actual power consumption of chillers and related equipment in 2018	73,510	129,660	144,360	208,910	209,270	268,830
Actual power consumption of chillers and related equipment in 2019	107,600	114,410	160,510	196,850	207,100	248,180
Annual power consumption/Month	July	August	September	October	November	December
Actual power consumption of chillers and related equipment in 2017	288,340	217,920	194,830	136,150	114,960	117,090
Actual power consumption of chillers and related equipment in 2018	221,320	189,110	174,610	140,880	114,410	202,470
Actual power consumption of chillers and related equipment in 2019	264,630	209,090	160,910	142,280	117,640	124,150

Source - Digital power meter

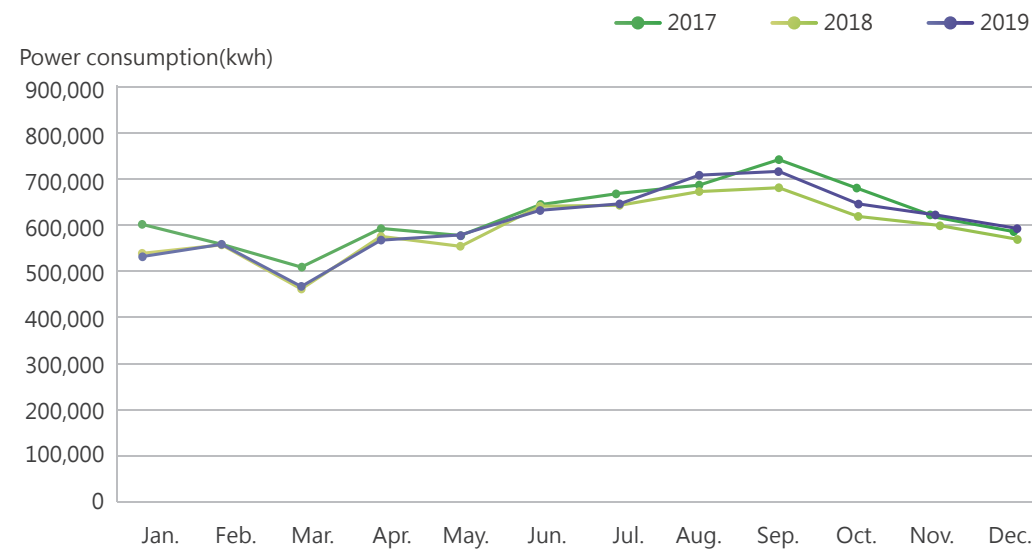
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● Power consumption management at HsinChu Factory



Month	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Y2017	558,400	496,600	602,800	583,200	670,000	702,400	725,600	798,000	715,600	634,600	592,000	532,400
Y2018	556,400	431,600	580,800	552,800	666,000	668,400	708,000	718,400	636,800	612,400	572,400	531,200
Y2019	566,000	446,800	578,800	594,800	663,200	682,400	764,000	774,000	682,000	649,600	612,000	616,400

Source - Monthly power consumption statement and electricity bills throughout the year (including external units such as convenience stores and telecom companies)



● Actual Power Consumption Statistics(kwh)

Month	Jan.				Feb.				Mar.			
	Power Consumption	Heating Power Consumption	Cooling Power Consumption	Steam Power Consumption	Power Consumption	Heating Power Consumption	Cooling Power Consumption	Steam Power Consumption	Power Consumption	Heating Power Consumption	Cooling Power Consumption	Steam Power Consumption
Y2017	470,340	0	88,060	0	372,030	0	121,570	0	468,220	0	134,580	0
Y2018	482,890	0	73,510	0	301,940	0	129,660	0	436,440	0	144,360	0
Y2019	458,400	0	107,600	0	332,390	0	114,410	0	418,290	0	160,510	0

Month	Apr.				May.				Jun.			
	Power Consumption	Heating Power Consumption	Cooling Power Consumption	Steam Power Consumption	Power Consumption	Heating Power Consumption	Cooling Power Consumption	Steam Power Consumption	Power Consumption	Heating Power Consumption	Cooling Power Consumption	Steam Power Consumption
Y2017	398,670	0	184,530	0	446,210	0	223,790	0	467,790	0	234,610	0
Y2018	343,890	0	208,910	0	456,730	0	209,270	0	399,570	0	268,830	0
Y2019	397,950	0	196,850	0	456,100	0	207,100	0	434,200	0	248,180	0

Month	Jul.				Aug.				Sep.			
	Power Consumption	Heating Power Consumption	Cooling Power Consumption	Steam Power Consumption	Power Consumption	Heating Power Consumption	Cooling Power Consumption	Steam Power Consumption	Power Consumption	Heating Power Consumption	Cooling Power Consumption	Steam Power Consumption
Y2017	437,260	0	288,340	0	580,080	0	217,920	0	520,770	0	194,830	0
Y2018	486,680	0	221,320	0	529,290	0	189,110	0	462,190	0	174,610	0
Y2019	499,370	0	264,630	0	564,910	0	209,090	0	521,090	0	160,910	0

Month	Oct.				Nov.				Dec.			
	Power Consumption	Heating Power Consumption	Cooling Power Consumption	Steam Power Consumption	Power Consumption	Heating Power Consumption	Cooling Power Consumption	Steam Power Consumption	Power Consumption	Heating Power Consumption	Cooling Power Consumption	Steam Power Consumption
Y2017	497,850	0	136,150	0	477,040	0	114,960	0	415,310	0	117,090	0
Y2018	471,520	0	140,880	0	457,990	0	114,410	0	328,730	0	202,470	0
Y2019	507,320	0	142,280	0	494,360	0	117,640	0	492,250	0	124,150	0

Source - Monthly power consumption statement and electricity bills throughout the year (including external units such as convenience stores and telecom companies)

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Greenhouse Gas Inventory

Enforcing GHG emissions inventory to mitigate global warming

Alpha is keenly aware of the impacts that greenhouse gases (GHG) are making on the Earth's climate, ecology and environment. Due to global green policies, the green economy and to fulfill our corporate responsibility as a global citizen, GHG inventories are conducted by Alpha to help slow the pace of global warming, effectively track and manage GHG emissions, as well as promote voluntary GHG reduction plans. As a result, Alpha won an excellence award from the Hsinchu Science-based Industrial Park Carbon Reduction Award.

The increasing severity of global climate change has led to a concerted international push on energy conservation and GHG reduction initiatives. In response to the impact of global climate change, Alpha has joined the Carbon Disclosure Project (CDP). We also engage in disclosure of enterprise emissions (ISO 14064-1) and product carbon footprint inventory (ISO 14067/PAS 2050) to track our GHG emissions and make reductions when appropriate.

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.

Carbon Disclosure

Since 2013, Alpha has participated in the Carbon Disclosure Project (CDP) by registering a GHG emissions audit on the project website (<https://www.cdproject.net>). After completing the disclosure, CDP will announce the company's annual disclosure score and performance for the reference of our clients and related stakeholders. In 2019, the project consists of disclosure items such as Climate change, Water Security, and Supplier engagement. Alpha will continue to monitor global climate change-related topics and strive to make improvements.



- Alpha disclosure and performance from 2017 to 2019

Result/Year	2017	2018	2019
Climate Change	D	D	C
Water Security	C	D	B-
Supplier Engagement Rating	-	B-	B-

Source - Data courtesy of CDP official website



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Greenhouse Gas Emissions

The operational boundaries of Alpha (Hsinchu Factory) encompass direct, energy-indirect and other indirect greenhouse gas emissions. Types of GHG identified by Alpha: Carbon dioxide (CO₂), Methane (CH₄), Nitrous oxide (N₂O) and Hydrofluorocarbons (HFCs). In particular, PFCs, SF₆, and biochar within scope 1 and 2 are not identified as sources of emissions.

Alpha (Hsinchu Factory) set the 2008 inventory as the baseline year. Our Scope 1 direction emissions of GHG in the baseline year amounted to 130.11 tons of CO₂e and accounted for 1.68% of all Company emissions. Scope 2 indirect emissions came from electricity and in 2008 amounted to 7610.38 tons of CO₂e, or 98.32% of all Company emissions. Total emissions (Scope 1 and Scope 2) were therefore 7740.49 tons of CO₂e.

2008 GHG emissions ratio by category

Greenhouse Gas Category	CO ₂ (Tons of CO ₂ e/year)	CH ₄ (Tons of CO ₂ e/year)	N ₂ O (Tons of CO ₂ e/year)	HFCs (Tons of CO ₂ e/year)	(Tons of CO ₂ e/year)	Ratio (%)
scope 1	76.31	52.94	0.82	0.03	130.11	1.68%
scope 2	7,610.38	0.00	0.00	0.00	7,610.38	98.32%
Total	7,686.69	52.94	0.82	0.03	7,740.49	100.00%
% of total emissions	99.30%	0.68%	0.01%	0.00%	100.00%	-



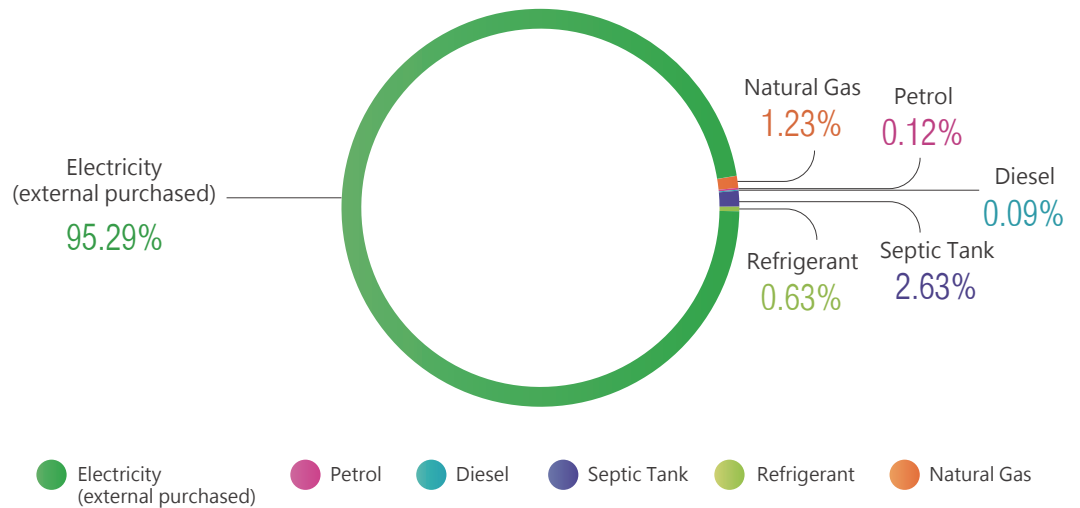
In 2018, Alpha (Hsinchu Factory) GHG emissions from all sources (Scope 1 and Scope 2) totaled 4142.6 tons of CO₂e. Scope 1 direct GHG emissions were 194.92 tons of CO₂e and accounted for 4.71% of all Company emissions. Scope 2 indirect GHG emissions were 3947.68 tons of CO₂e, or 95.29% of all Company emissions.

2018 GHG emissions ratio by category

Greenhouse Gas Category	CO ₂ (Tons of CO ₂ e/year)	CH ₄ (Tons of CO ₂ e/year)	N ₂ O (Tons of CO ₂ e/year)	HFCs (Tons of CO ₂ e/year)	(Tons of CO ₂ e/year)	Ratio (%)
scope 1	59.59	109.21	0.22	25.90	194.92	4.71%
scope 2	3,947.68	0.00	0.00	0.00	3,947.68	95.29%
Total	4,007.27	109.21	0.22	25.90	4,142.60	100.00%
% of total emissions	96.73%	2.64%	0.01%	0.63%	100.00%	-

External verification: Our 2018 GHG report was verified by TÜV Rheinland Taiwan Ltd. Electricity (externally purchased) 95.29%, septic tank 2.63%, gas1.23%, refrigerant 0.63%, petrol 0.12%, diesel 0.09%.

Distribution of GHG emissions from each source, 2018



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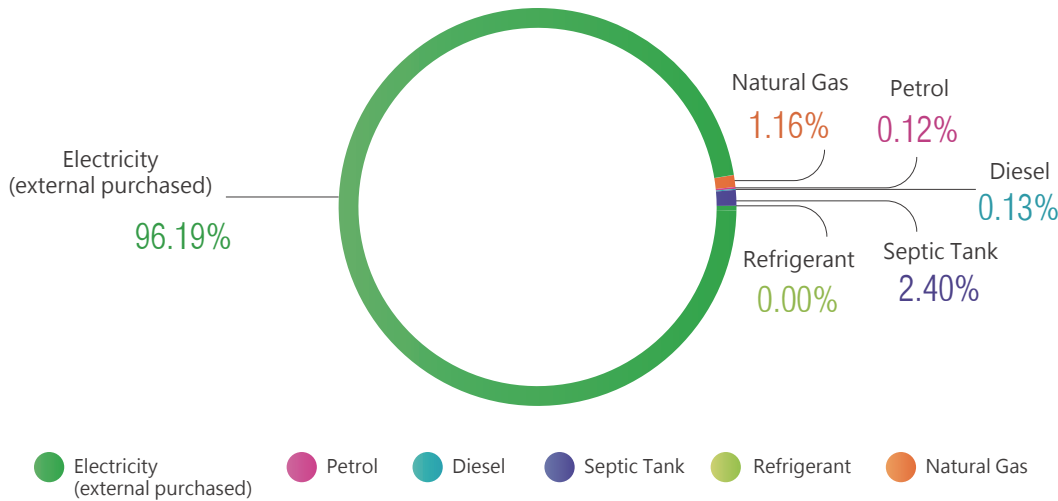
In 2019, Alpha (Hsinchu Factory) GHG emissions from all sources (Scope 1 and Scope 2) totaled 4168.06 tons of CO₂e. Scope 1 direct GHG emissions were 158.67 tons of CO₂e and accounted for 3.81% of all Company emissions. Scope 2 indirect GHG emissions were 4009.39 tons of CO₂e, or 96.19% of all Company emissions.

2019 GHG emissions ratio by category

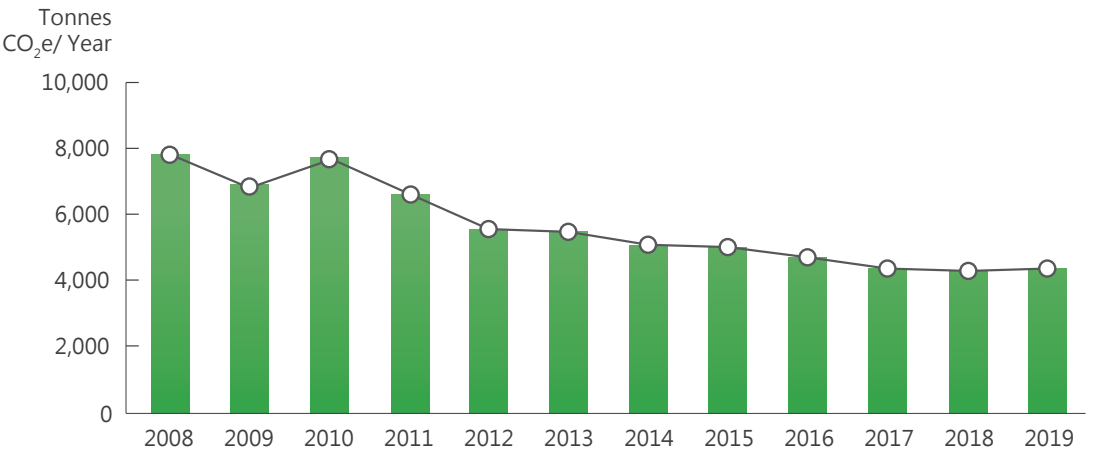
Greenhouse Gas Category	CO ₂ (Tons of CO ₂ e/year)	CH ₄ (Tons of CO ₂ e/year)	N ₂ O (Tons of CO ₂ e/year)	HFCs (Tons of CO ₂ e/year)	(Tons of CO ₂ e/year)	Ratio (%)
scope 1	58.46	99.98	0.24	0.00	158.67	3.81%
scope 2	4009.39	0.00	0.00	0.00	4009.39	96.19%
Total	4067.85	99.98	0.24	0.00	4168.06	100.00%
% of total emissions	97.60%	2.40%	0.01%	0.00%	100.00%	-

External verification: Our 2019 GHG report was verified by TÜV Rheinland Taiwan Ltd. Electricity (externally purchased) 96.19%, septic tank 2.40%, gas1.16%, refrigerant 0.00%, petrol 0.12%, diesel 0.13%.

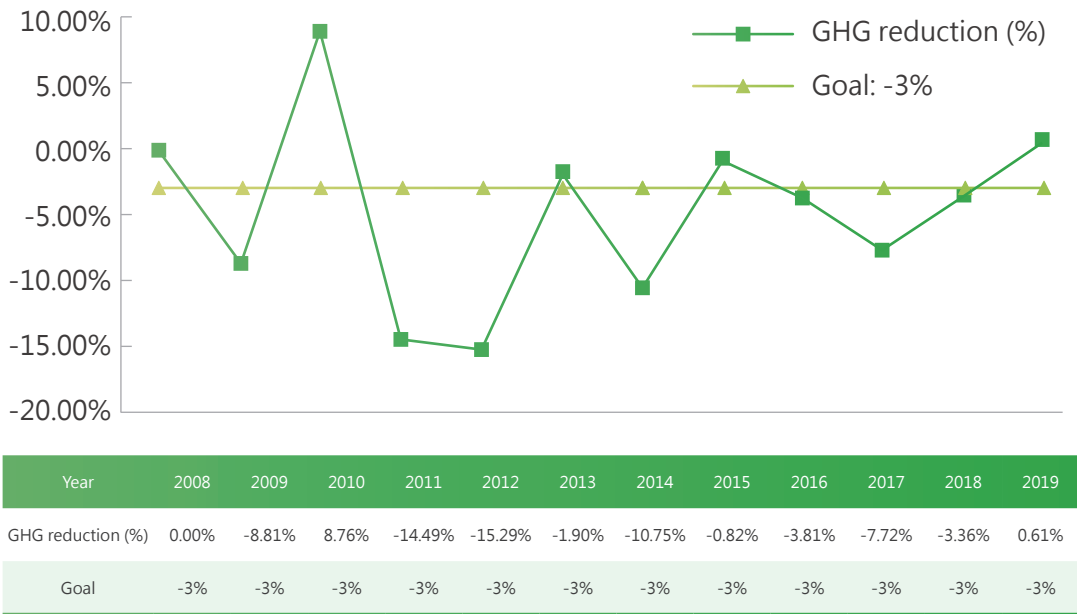
Distribution of GHG emissions from each source, 2019



Greenhouse Gas Emissions between 2008 ~ 2019



Percentage of Reduction in Greenhouse Gases between 2008~2019



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Safety and Health

Caring about safety and health – Providing employees with a sound working environment

Alpha Safety and Health Policy:

- All unit managers are committed to enforcing and participating in routine safety and health management activities.
- Protect the safety and health of all employees by preventing the occurrence of occupational disasters.
- Obey and comply with domestic safety & health laws as well as any other related regulations.
- Improve the effectiveness of safety and health management through continuous reviews and improvements.
- Safety, production and quality are all of equal importance.

The Alpha Safety and Health Committee is made up of workers' representatives in accordance with the "Safety and Health Committee Regulations." Workers make up 100% of the Committee including those involved in internal organizational administration.

Safety and health activities at Alpha (Hsinchu Factory) in 2019 focused on Voluntary inspection:

- Voluntary inspections were regularly conducted on the environment of each unit, facilities and special operations.
- Safety observation and audit: Random safety observations and audits were conducted to protect the safety of employees and prevent the occurrence of occupational disasters by reducing the number of unsafe environments and behaviors.

- Chemical control banding management: Chemical investigations are conducted in accordance with the Management Regulations Governing the Evaluation and Control Banding of Hazardous Chemicals, control banding is enforced for health-related hazardous chemicals. Hazard education courses are held to strengthen awareness on safe use of chemicals.
- Detection of Factory risk factors: To monitor the working environment of factory employees and assess their level of exposure to determine if it is in compliance with the law, Alpha commissions external measurement organizations to carry out environmental monitoring at the factory (including the offices and workshops). CO₂, illumination, organic solvent concentrations and noise measurements are taken in accordance with the "Working Environment Measurement Management Procedure" to protect the safety and health of workers.
- Safety and Health training:
Fire prevention training: Internal fire drills, response exercises and internal firefighting teams are organized every quarter. Classes and actual exercises are used to help prevent disasters.
Intruder and abnormal postal package exercise:
Intruder and abnormal postal package exercises are held for security and receiving room personnel to improve their disaster prevention and response skills.
- Safety and Health training for new and current employees: Safety and health management regulations are enforced to strength the safety, hygiene and health awareness of new and current employees as well as prevent disasters. Occupational Safety and Health management knowledge and skills are also cultivated to support the company's occupational Safety and Health management program.
- Civil defense corps training: To strengthen the safety awareness of employees

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assigned to the response teams, emergency response and civil defense corps training are organized every year to improve their emergency response capabilities

- Ionizing radiation in-service training:
To strengthen the safety and protection awareness of employees working with ionizing radiation, in-service training for ionizing radiation is organized every year.

- Number of people that underwent safety and health training at Alpha (Hsinchu Factory) in 2019:

Type	No. of employees
New employee safety and health training	554
Current employee safety and health training	273
Fire training	93
Civil defense corps training	77
In-service training for ionizing radiation safety	12







- Number of people that underwent safety and health training at overseas sites in 2019:

Type	Factory	No. of employees
Hazardous chemical operator training and spill drill	Alpha (Dongguan Factory)	7
	Alpha (Changshu Factory)	8
New employee occupational safety training	Alpha (Dongguan Factory)	2,938
	Alpha (Changshu Factory)	120
Factory-wide fire evacuation drill	Alpha (Dongguan Factory)	1,800
	Alpha (Changshu Factory)	613

Occupational Injury Statistics

Alpha has defined management regulations on incident reporting and investigation. Work-related injuries, ill health, disease and accidents are investigated through an effective investigation and response mechanism to trace the origin and potential causes. Mistakes in the Safety and Health management system are identified for effective corrective and preventive measures to be taken. This ensures that the same work-related injuries, ill health, disease and incidents do reoccur.

- The 2019 occupational injury statistics for each factory are tabled below

Factory	Alpha (Hsinchu Factory)		Alpha (Dongguan Factory)		Alpha (Changshu Factory)	
Type						
Frequency of Disabling Injuries	0	0	0	0	0	0
Days lost due to disabling injuries	0	0	0	0	0	0
Disabling Injury Frequency Rate (I.R.)	0	0	0	0	0	0
Lost Days Rate (L.D.R.)	0	0	0	0	0	0
Occupational Disease Rate (O.D.R.)	0	0	0	0	0	0
Absentee Rate (A.R.)	0.72	1.73	4.47	3.68	2.63	2.77
Work-related Fatalities	0	0	0	0	0	0

Note 1: Occupational injury records cover occupational injuries that occur on-site while working. It does not include injuries from traffic accidents while commuting to and from work.
Note 2: Disabling Injury Frequency Rate (I.R.) = Frequency of Disabling Injuries / Total work hours x 200,000
Note 3: Lost Days Rate (L.D.R.) = Days lost due to disabling injuries / Total work hours x 200,000
Note 4: Occupational Disease Rate (O.D.R.) = Incidence of Occupational Diseases / Total work hours x 200,000
Note 5: Absentee Rate (A.R.) = Total Absentee Hours (Sick leave and special leave) / Total work hours x 100%

Contractor Safety and Health Management

The outcomes of contractor safety and health management at Alpha (Hsinchu Factory) are compiled below:
A total of 129 applications for construction work were made including 75 cases related to special high-risk operations on-site. A total of 233 people entering the site for the first time received hazard warnings and safety & health training. No occupational injuries resulting in more than one day of lost work occurred at Alpha (Hsinchu Factory) during the course of 2019.

- Management statistics for contractor carrying out work on-site at Alpha (Hsinchu Factory) in 2019

Control type	Work application	Industrial safety training for on-site contractors	Special operations applications
Number	129 cases	233 people	75 cases

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Food Hygiene and Safety

Food safety management measures have been implemented at all Alpha sites to provide employees with safe, hygienic and health group catering:
A "Catering Committee" was set up to review group catering, make improvements, and ensure food safety/hygiene for all employees.

Catering contracts were defined with clearly defined management responsibilities and measures for incoming ingredients, ingredients processing, utensil safety, caterer management, and environment/equipment maintenance management.

Qualified catering contractors are chosen through a strict selection process. Catering conditions are inspected daily, and caterers are required to comply with food safety and hygiene related laws.



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Health Promotion

Employee Health Care

1. A dispensary staffed with two occupational health nurses have been set up. Contract specialists also hold clinics on-site three times each month to promote health care, health promotion and special protection.
2. On-site health exams that exceed statutory requirements are provided every year. The results of the health exams are categorized for management. Full-time factory health instructors and on-site physicians provide management measures such as one-on-one interviews, re-exams and follow-ups. Data from the past three years are provided in the health report to help employees manage their health over time. In 2019, the annual health exam participation rate was 97%.
3. A list of personnel assigned to special hazardous operations such as noise and ionizing radiation is compiled by industrial safety personnel every year and provided with physical and health exams appropriate to their workplace. The examination rate in 2019 was 100%.

Two key management initiatives "Prevention of Work-triggered Cerebrovascular Disease" and "Maternal Health Protection" were developed in accordance with the law. One-on-one follow-up measures such as risk assessment and tiered management are used to prevent the occurrence of cerebrovascular disease and to ensure the maternal health of female employees. To take care of mothers, a reporting system lets the company occupational health nurse keep track of pregnant employees. Protective care and interviews can then be conducted to eliminate potential hazards at work and provide related consultation/care during and after the pregnancy. A warm and comfortable expressing environment is provided for the use of female employees.

4. A "Musculoskeletal Symptoms Survey Form" is filled out by employees during their annual health exam. The data is analyzed so that suitable health education, physician interviews, and follow-up preventive/corrective actions can be provided. A "Preventive Human Factor Engineering in the Office" seminar is hosted every month when the physician is on-site. All employees are required to attend.

5. In order to help employees discover potential health problems in advance, Alpha regularly organizes cancer screening services (including abdominal ultrasound and women's healthcare), hoping to achieve "early detection and early treatment", and thereby lowering the severity of the illness and its impact on personal life.
6. Organizes preventive services from time to time, such as influenza vaccination at their own expense. A total of 120 persons signed up for the service.
7. Holds lectures from time to time; in 2019, 1 lecture-Traditional Chinese medicine healthcare lecture on shoulder, neck, and lower back pain was held and attended by 36 colleagues.
8. Hosts 1 blood drive that saw participation from 81 colleagues, donating a total of 114 bags of blood.



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Supply Chain Management and Social Relations

Implement supplier management to fulfill corporate social responsibilities

Alpha requires all local suppliers to comply completely with all relevant laws and regulations. Alpha also takes a close interest in the management of labor rights, environmental protection, safety and health risks by the supply chain.

Alpha using the Code of Conduct - Responsible Business Alliance (RBA) as a guide. Alpha requires supplier's accomplishments in labor, safety and health, environmental protection, management system and business ethics. All new suppliers are now required to sign the "Responsible Business Alliance (RBA) Statement" and explicitly commit to the fulfillment of their to be compliant with the 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 to also 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.

Supplier order management

Alpha has developed its own supplier transaction platform. We adhere rigorously to privacy laws and confidentiality agreements in order to create a secure and smooth-running platform environment.

Supplier Management

1. 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 based on each department's evaluation of vendor performance in five domains: quality, cost, delivery, service and technical. The evaluation outcomes are used as the basis for adoption of key parts and to motivate suppliers.

2. Monthly/Quarterly Supplier Evaluations
- Supplier Quality Performance Evaluation
Evaluation time: An evaluation of supplier performance during the preceding month is provided by the 15th day of each month.
Supplier evaluation standard: Supplier quality is graded in the following manner as defined in the "Incoming Material Management Procedure":
Excellent (Grade A): ≥ 95 ,
Good (Grade B): 94~90,
Acceptable (Grade C): 89~85,
Inferior (Grade D): 84~80,
Poor (Grade E): < 80 .
A supplier quality evaluation score of 80 is required for a qualified supplier.

In 2019, the excellent (A), good (B) grade suppliers accounted for 98.2% of total suppliers, and there were 2 poor (E) grade suppliers.

Alpha offered guidance to these poor (E) grade suppliers and demanded them to make improvements, while ongoing guidance was also provided to acceptable (C) and inferior (D) grade suppliers to address their problems in order to improve the overall quality of delivered products.

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Accuracy of Disclosure

- Supplier Rating
- 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 key Alpha 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 below 70 are designated as non-preferred suppliers.

In 2019, 609 suppliers were evaluated, resulting in one "not commended" supplier. Alpha has ceased all transactions with the supplier in accordance with the Supplier Evaluation Operation Guidelines.

Supplier Quality Performance Assessment form

Content	Score distribution			Total score
	CQC	Supply Chain Management Center	Engineering Units	
Quality	45			45
Cost		20		20
Delivery		10		10
Service	5	5	5	15
Technical			10	10
Total score	50	35	15	100

- 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 (Hsinchu factory), Alpha (Dongguan factory), Alpha (Changshu factory). The supplier is expected to upload the MCD with Alpha in order to comply with international regulations.

Supplier training is conducted once quarterly at the Hsinchu, Dongguan, and Changshu Factory. In 2019, a total of 61 employees from 46 suppliers were trained at the said factories.

2019 Training Schedule for Suppliers

Class location/time	Q1	Q2	Q3	Q4
Alpha Networks (Hsinchu Factory) No. 8 Li-hsing 7th Rd., Science-based Industrial Park, Hsinchu City	3/15(Fri)	6/12(Wed)	9/11(Wed)	12/11(Wed)
Alpha Networks (Dongguan Factory) Xingang Road, Xin'an Area, Chang An, Dongguan City Guangdong Province)	3/22(Fri)	6/21(Fri)	9/20(Fri)	12/20(Fri)
Alpha Networks (Changshu Factory) No.369, Yintong Road, Southeast Development Zone Changshu, Jiangsu Province)	3/21(Thur)	6/20(Thur)	9/19(Thur)	12/19(Thur)

- Supplier Purchasing Contract
- To build a green supply chain, Alpha suppliers are required to adhere strictly to our "Hazardous Substance Guidelines." Test report from independent third-party bodies must be submitted where necessary. Source management is practiced for supplier production processes, green product design and hazardous substances. Green management principles have also been incorporated into the supplier management system. "Supplier Purchasing Contracts" were signed with a total of 54 material suppliers in 2019. In the future, Alpha will continue to sign purchasing contract guarantees with the suppliers that we deal with to ensure the products we design and manufacture can also comply with customers' RoHS-related international regulatory requirements and fulfill the goal of building a Green Supply Chain.

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Corporate Social Responsibility Audit

As CSR has become an important topic in corporate sustainability, Alpha hopes that suppliers can contribute to the fulfillment of CSR and establish stable, long-term partnerships.

Alpha Networks conducted supplier audit on 108 suppliers in 2019 including 54 annual supplier audits and 54 new supplier audits. The "Supplier CSR Code of Conduct" was developed using the Code of Conduct-Responsible Business Alliance (RBA) as a guide. New suppliers are required to fill out the RBA Self-Assessment Questionnaire, which is also used to learn about a supplier's accomplishments in labor, health and safety, environmental protection, management system, and business ethics. All new suppliers are now required to sign the Responsible Business Alliance (RBA) Code of Conduct Statement and explicitly commit to the fulfillment of their CSR.

Supplier Partnerships

Alpha values our interactions with suppliers and learning from each other. In addition to routine business reviews, awards are also presented during the annual supplier convention to outstanding suppliers or those that made a special contribution to thank them for their support. The quality of products and services are also reviewed and goals set with suppliers during the convention. Alpha and our partners also update each other on the latest industry developments so that we can jointly provide products and services that meet the needs of that market.



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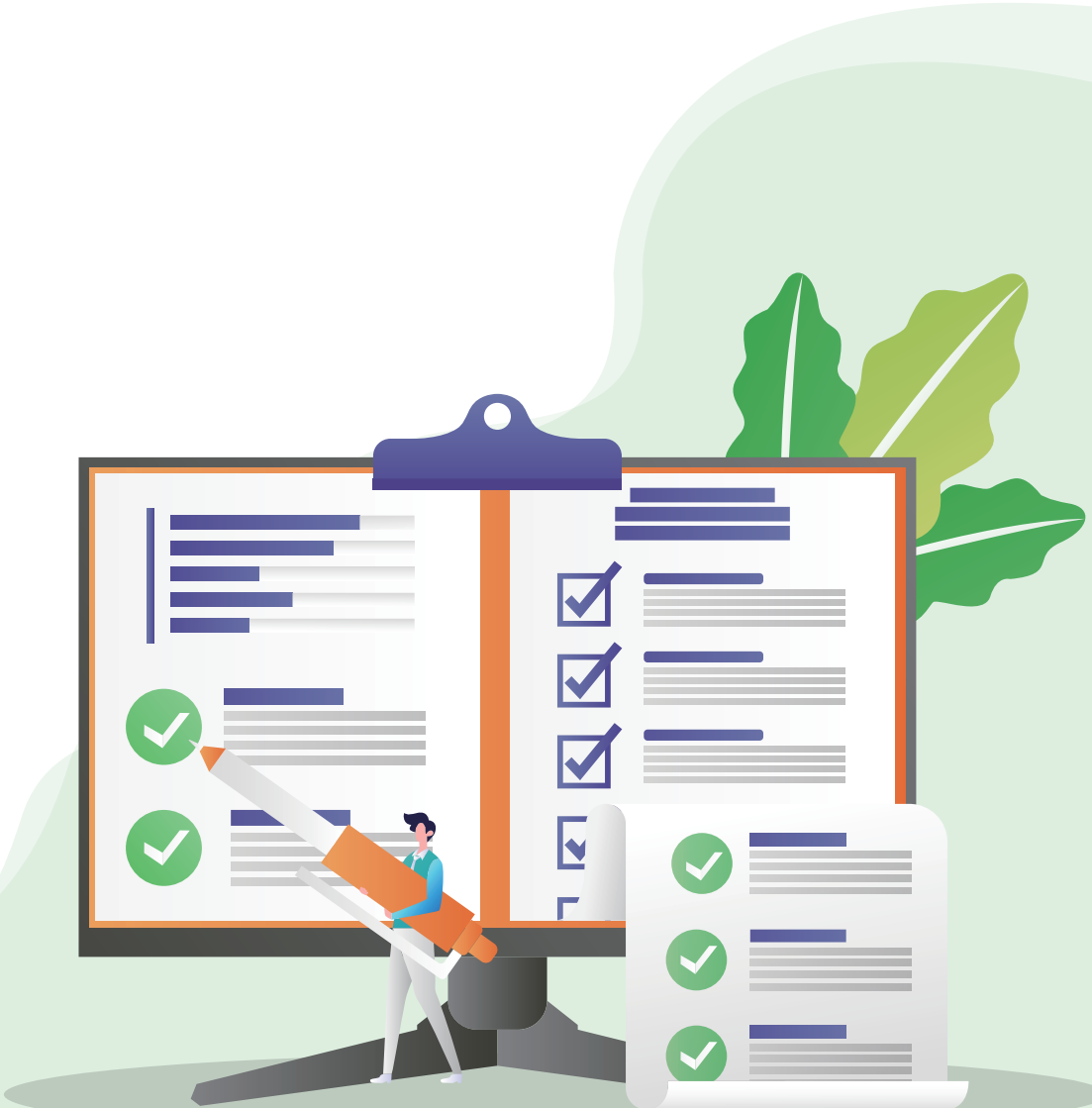
Conflict Minerals Due Diligence

Demanding suppliers to disclose the source of raw materials
– Banning the use of conflict minerals

Conflict Minerals Policy

Alpha 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 investigations are also regularly conducted. The latest survey was started from June 2019 till the end of January of 2020, 408 suppliers have signed the declaration and responded to the CMRT survey.



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Green Production and Continuous Improvement

Investing in the R&D and manufacturing of green products and implementing ongoing improvement

Green Commitment

Alpha is actively investing in the green product R&D and manufacturing processes. We are also promoting environmental awareness among all employees. ISO 9001, TL9000, IATF16949, ISO14001, QC080000, ISO14064-1 and AEO management systems are strictly enforced during all production activities. The goal of achieving IATF 16949 certification in 2018 has been set to maximize the benefits of green activism.

**ISO9001 / TL9000/ IATF16949
Quality Policy**

- Do the right things at the first time.
- Time continuous improvement for better quality.
- 100% Customer Satisfaction.

**QC 080000 / ISO 14001
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**

- All employees and suppliers must adhere to the policy to ensure the safety of Alpha and related business partners' assets.
- Practice risk management Policy statement: Strengthen supply chain security management through the identification of threats to security, risk assessment and risk management process so that the necessary risk reduction and control measures can be implemented.
- 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.

**ISO 14064-1
Greenhouse Gas Inventory and
Policy Statement**

Everyone at Alpha is committed to fulfilling our corporate environmental and social responsibility as a quality contract manufacturing enterprise for networking products against a backdrop of global warming. 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 lowcarbon options. Increase transparency and reduce product carbon footprints.

Note:
Greenhouse Gases (GHG) ISO 14064-1 Guidelines for the quantification and reporting of GHG emissions and reductions at the organizational level.

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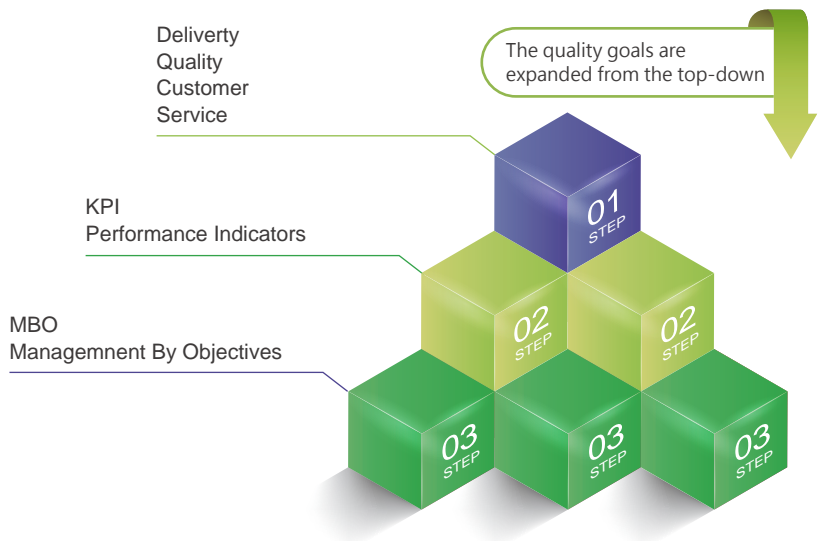
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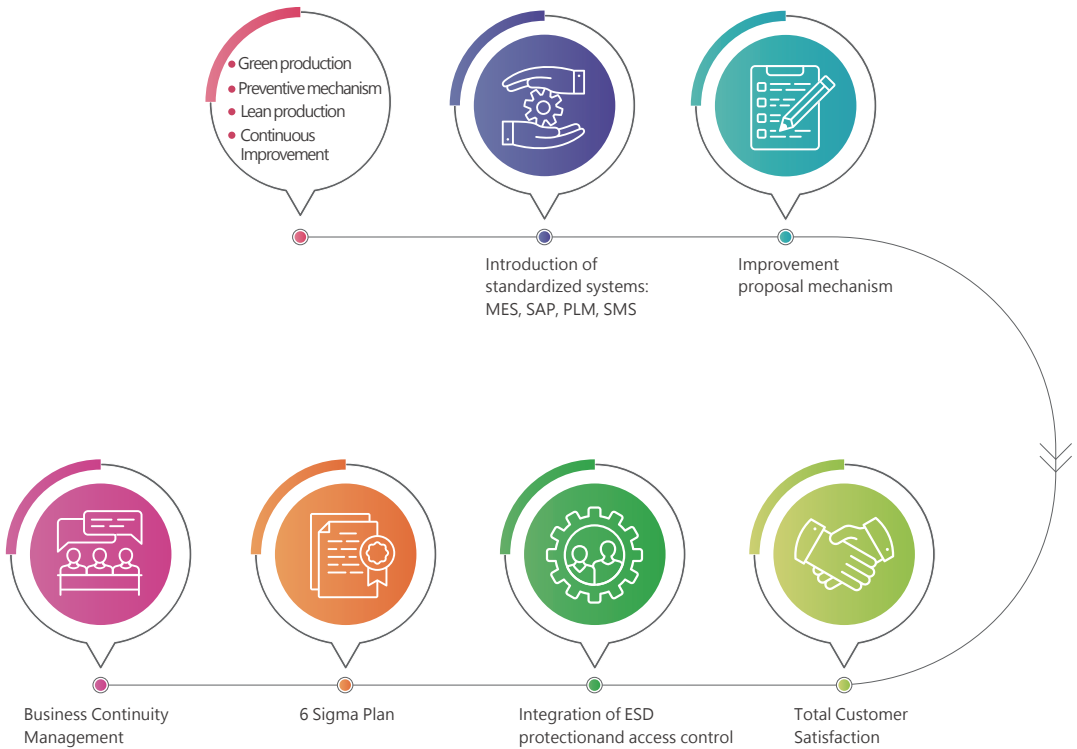
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To meet our **Delivery, Quality, Customer and Service Goals**, Alpha develops our corporate vision, unit organizational goals (KPI, MBO) and employees' individual performance goals from the top to down every year. Different quality techniques, tools and systems are introduced around our corporate values of **Integrity, Customer Values, Agility and Collaboration** to ensure compliance with the quality management standards of green production from product development through to production and manufacturing.

The same set of manufacturing system and quality management standards are used at all Alpha production sites, including 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 Productive 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 anti-static protection measures and mechanisms are in place for all parts and products during the manufacturing process, all sites including Alpha (Hsinchu Factory), Alpha (Dongguang Factory), and Alpha (Changshu Factory) follow the ANSI/ESD 20.20 electro-static discharge protection certification standard. An access control system also permits only authorized personnel to enter the site after passing ESD measurement to ensure that ESD protection is fully enforced.



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Business Continuity Management

To ensure the continuity of operations and reduce the impact of major faults or disasters on critical business processes, Alpha introduced the Business Continuity Management (BCM) in 2014. Two disaster drills (including power outage, natural disaster, infectious diseases, IT failure, supply chain interruption and major accident on production line, etc.) are conducted at different times each year to contain operational impact of any disasters.

In 2019, the Hsinchu Factory carried out 6 disaster drills, namely product shortage caused by MOSFET shortage; power outage to part of the production line caused by an earthquake; data interruption caused by a cyberattack; production interruption caused by fire; production interruption caused by dangerous infectious disease; production interruption caused by malfunctioning key equipment. The outcome of all the drills satisfied the predetermined target.

Business continuity management policy : Alpha Networks Inc. strives to provide quality networking products and to form partnerships for mutual growth with our customers.



The top priority in our business continuity management is to provide customers with diverse, high-quality and uninterrupted manufacturing services for networking products.

- Conduct business impact analysis and risk assessment. Formulate business continuity strategy and restore operations to normal as quickly as possible.
- Allocate and invest the necessary resources in the event of a disaster or impact. Continue to review further improvements.
- Protect the interests of customers and stakeholders as much as possible.

Continuous Improvement Activities

6-Sigma is a technique for improving business quality process management. The business goal of "zero defect" is used to drive large decreases in cost of quality. Improvements in financial performance and breakthroughs in business competitiveness can then be ultimately realized.

2018 6σ activity outcomes:
Cost savings achieved by the 7 project activities in 2018: 1,208,697 RMB

Year	Circle	Presentation Time	Participating Units
2013	6	2013/12/26	SMT, WS, PE, MD2, SQE, IPQC
2014	8	2015/01/14	SMT, IPQC, SQE, RMA, Label Room, PTH, Assy & PK
2015	6	2016/01/16	IPQC, PTH, SQE, CE, Assy & PK, Testing
2016	7	2016/12/13	IE, PE, SMT, CQC, Assy & PK, Testing
2017	12	2017/12/20	IT/IE/TDD/Labor Safety/HR, MD1, SCM, MTD, MD2, RMA, CQC, PM/Finance, MDD
2018	7	2018/12/28	IE,TDD,MD1,SCM,MTD,MD2,IQC,RMA,SQE,MDD,PM

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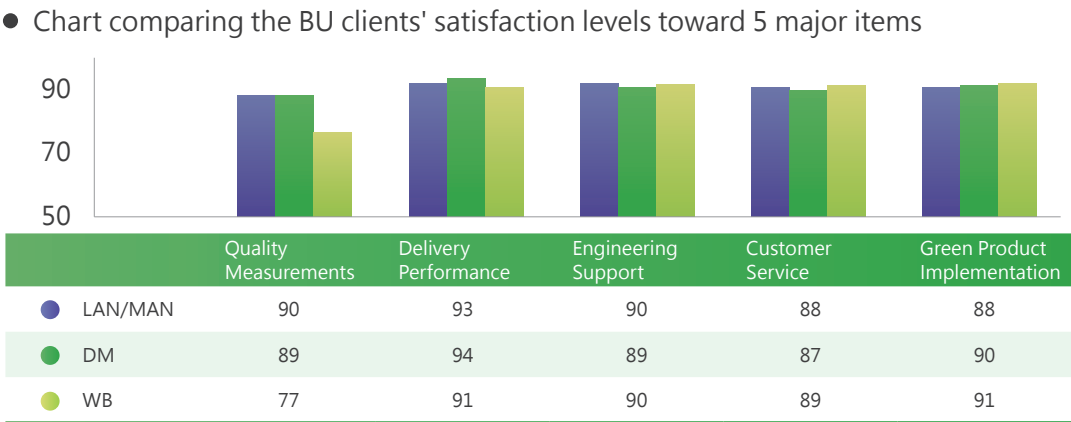
Listening to the voices of the customers through the customer satisfaction survey

Alpha conducts customer satisfaction surveys to establish a customer need oriented quality system, where objective techniques are applied to evaluate the level of customer satisfaction towards the company's products or services. The aim is to ascertain the gap between customer needs and expectations in order to use it as the basis for improving the quality system, ultimately achieving the objective of sustainability.

Analysis of variance conducted for the satisfaction levels of different customer groups

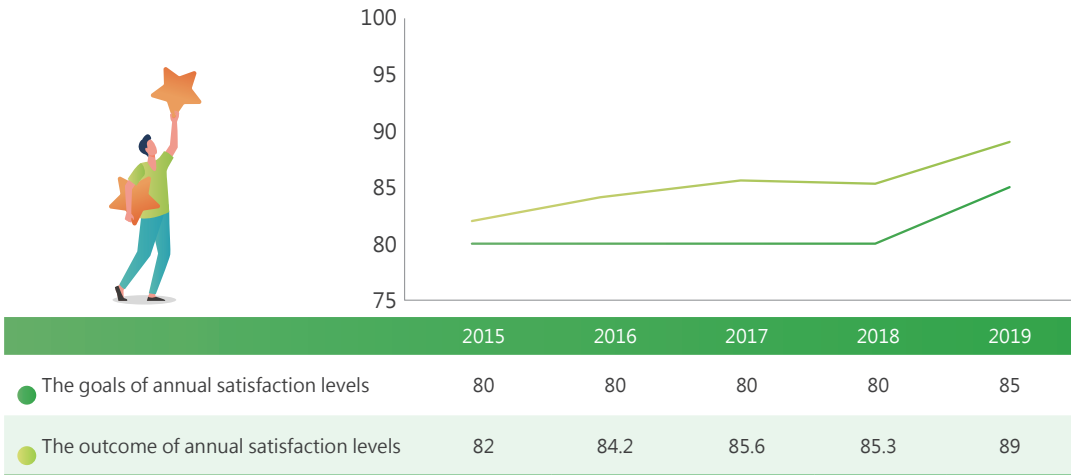
The average scores of Alpha Networks' survey conducted on various customer groups are illustrated below:

- 1. Satisfaction questionnaire score reveals that the customers' satisfaction levels of Engineering Support and Customer Service are more consistent, but the satisfaction levels of Quality Measurements are significantly different between different customers.
- 2. Apart from relatively lower satisfaction levels towards Quality Measurements, WB BU clients have expressed consistent satisfaction levels for the other 4 items.



The goals and outcome of annual satisfaction levels over the years

● The annual satisfaction targets and outcomes during 2015-2019 are tabulated below



From the above table, it is evident that the clients' satisfaction level towards Alpha's services has improved in 2019.

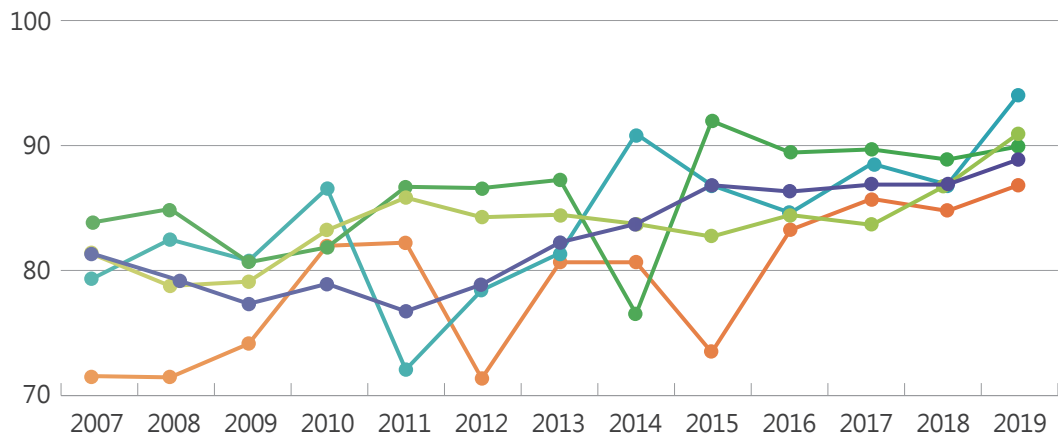
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Satisfaction investigate annual run chart of various themes



Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Quality Measurements	71	71	74	81	82	71	80	80	73	83	85	84	86
Delivery Performance	79	82	80	86	72	78	81	90	86	84	88	86	93
Engineering Support	81	78	79	83	85	84	84	83	82	84	83	86	90
Customer Service	81	79	77	78	76	78	82	83	86	86	86	86	88
Green Product Implementation	83	84	80	81	86	86	86	76	91	89	89	88	89

From the above table, it is evident that the clients' satisfaction level towards Alpha's services has improved in 2019.

Conclusion and recommendation

Through the customer satisfaction questionnaire survey, the aim is to objectively assess whether Alpha's products and services can meet our diverse clients' needs, so as to use the survey as a reference for future improvements.

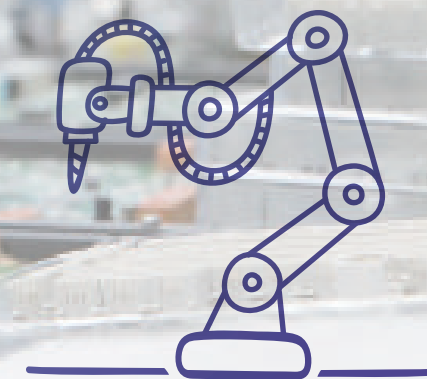
- 1. The 2019 survey results reveal that all the main items have obtained a score higher than the target value of 85 points.
- 2. Quality Measurements is the item the clients were most unsatisfied with in 2019, particularly WB BU clients.
- 3. In 2019, WB BU clients were most unsatisfied with Alpha's services. In particular, one client gave a score that is lower than the target value for services rendered. The responsible unit will propose improvement measures for the items that the client felt the most unsatisfied with.

For items that received satisfactory feedback from our clients, we will continue to keep up the good work; for items that were less than satisfactory, we will vigorously ascertain the cause and come up with solutions in a bid to provide the best products and services.



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General Disclosure

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GRI 102: 2019 General Disclosure	102-1	Name of the organization	About Alpha	12
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	102-3	Location of headquarters	About Alpha	13
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	102-6	Market served	About Alpha	13
	102-7	Scale of organization	About Alpha	12
	102-8	Information on employees and other workers	Recruitment	29
	102-9	Supply chain	Supply Chain Management and Social Relations	57
	102-10	Significant changes to the organization and its supply chain	No significant changes	N/A
	102-11	Precautionary Principles or approach	Risk Analysis and Management	27
	102-12	External initiatives	Alpha Policies	5
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GRI 102: 2019 General Disclosure	102-41 Collective bargaining agreements	No union organization at present	N/A	
	102-42 Identifying and selecting stakeholders	Stakeholder Communication and Identification	7	
	102-43 Approach to stakeholder engagement	Stakeholder Communication Mechanism	10	
	102-44 Key topics and concerns raised	Stakeholder Issues of Concern Survey	8	
	102-45 Entities included in the consolidated financial statements	Operating Performance	17	
	102-46 Defining report content and topic boundaries	About this Report Stakeholder Communication and Identification	3 7	
	102-47 List of material topics	Identification and Sorting of Material Issues	9	
	102-48 Restatements of information	None	N/A	There is no restatements of information to previous reports
	102-49 Changes in reporting	Stakeholder Communication and Identification	7	
	102-50 Reporting period	About this Report	3	
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Business Continuity Management

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GRI 103: 2019 management approach	103-2	The management approach and its components	Risk Analysis and Management	27
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Information Security Management

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GRI 103: 2019 management approach	103-1	Explanation of the material topic and its Boundary	Information security management policy	26
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		Information security management policy	Information security management policy	26

Recruitment and Retention

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GRI 103: 2019 management approach	103-2	The management approach and its components	Recruitment	29

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GRI 403: Occupational safety and health	103-2	The management approach and its components	Talent Development	34

Environmental Compliance

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GRI 103: 2019 management approach	103-2	The management approach and its components	Green Product Management	40
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			Environmental Management	44
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Occupational Safety and Health

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GRI 103: 2019 management approach	103-2	The management approach and its components	Safety and Health	53
GRI 403: Occupational health and safety	403-1	Workers representation in formal joint worker-management health and safety committees	Safety and Health	53
GRI 403: Occupational health and safety	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Occupational Injury Statistics	54

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Accuracy of Disclosure

This Report was prepared in accordance with the GRI Standard 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. The Assurance Statement is included in the Appendix for reference.



Independent Assurance Statement

Introduction:
TÜV Rheinland (Guangdong) Ltd., member of TÜV Rheinland Group, Germany (TÜV , We) has been entrusted by the management of Alpha Networks Inc. (Alpha, the Company) to conduct independent assurance of Alpha Corporate Social Responsibility Report 2019 (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 Report 2019.

The intended users of this assurance statement are stakeholders having relevance to the Alpha overall Sustainability Performance and impacts of its business activities during 2019 (January 2019 ~ December 2019). TÜV Rheinland 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:
The Independent Assurance was carried out in accordance with AccountAbility, U.K Standard AA1000 Assurance Standard (2008) with 2018 Addendum and related standards AA1000 AccountAbility Principles (2018), AA1000 SES (2015), Principles of Inclusivity, Materiality, Responsiveness and Impact, Global Reporting Initiative (GRI) , ‘In accordance’-Core option” reporting guidelines as per GRI-Standards.

Scope & Type of Assurance:
Our Assurance engagement covers the following:

- Alpha Corporate Sustainability performance as described in the report 2019 in accordance with GRI reporting guidelines and performance indicators and according disclosure on management approach (DMAs) from Economic, Environment & Social category, also defined in Reporting boundaries.
- Evaluation of disclosed information in the report as per the Assurance Standards.
- Type-1, Moderate Level as per AA1000 Assurance Standard (2008) with 2018 Addendum

Limitation: 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. We have not observed any significant situations to limit our assurance activity. The verification is carried out based on the data and information provided by Alpha, assuming they are complete and true. We did not verify the reported financial data as same is verified by another third party in annual report.

Assurance Methodology:
TÜV has challenged the report contents and assess the process undertaken by Alpha from source to aggregate in disclosure of information related to Sustainability performance. Our judgment is based on the objective review of reported and based on the principles defined in the assurance standards, the principles of inclusiveness, materiality, responsiveness and impact, and the integrity of the data provided in the report.

Analytical methods and the performance of interviews as well as verification of data, done as random sampling, to verify and validate the correctness of reported data and contents in light of contractual agreement and the factual Alpha Corporate Social Responsibility strategy (CSR) as mentioned in the report. Our work included consultation with over 15 Alpha representatives including senior management and relevant employees. The approach deemed to be appropriate for the purpose of assurance of the report since all data therein could be verified through original proofs, verified database entries.

The Assurance was performed by our multidisciplinary team of experienced professionals in the field of Corporate Sustainability, Environment, Social and Stakeholder Engagement. We are of the opinion that our work offers a sufficient and substantiated basis to enable us to come to a conclusion mentioned below and based on the content of our contract.

1 |

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 material issues were completely analyzed and the relative information of sustainable development was disclosed.

Responsiveness:
Alpha has implemented the policy including environment and safety, hazardous substances, quality, intelligent property management and corporate social responsibility. The 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 Corporate Social Responsibility Report 2019 meets the requirement of Type-1, Moderate Level Assurance according to AA1000AS (2008) with 2018 Addendum and Global Reporting Initiative (GRI) , ‘In accordance’-Core option” reporting guidelines as per GRI-Standards.
- The Report includes statements and claims that reflects Alpha achievements and challenges supported by documentary evidences 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 shall not bear any liability or responsibility to a third party for perception and decision about Alpha based on this Assurance Statement.



For TÜV Rheinland Group



Vito C. C. Lin
Lead Verifier

Taipei, May 4th, 2020

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