WNC
Wistron NeWeb Corp.

啟碁科技
Wistron NeWeb Corp.

2019
企業社會責任報告書
Corporate Social Responsibility Report

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About this Report

Since 2011, WNC has published a Corporate Social Responsibility Report annually to present non-financial performance and achievements of the company's operations, its efforts with regards to environmental health and safety, and the exercise of its social responsibilities towards all stakeholders. This report is produced in both Chinese and English, and is posted on WNC's website: http://www.wnc.com.tw.

Publication

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Report Aspects

The scope of the information disclosed in this report covers WNC's comprehensive performance and achievements in aspects relating to corporate social responsibility from January 2019 to December 2019. The report covers information regarding operations at WNC's headquarters in the Hsinchu Science Park, Taiwan, S1 site located on Lihsin Rd., VI and S2 sites located in the Tainan Science Park, and includes selected information from its major factories in China and Vietnam (listed below). The contents of this report do not cover subsidiaries or branches in Europe, the United States, Japan, and other corporate entities that do not have direct control over WNC's operations.

- WNC (Kunshan) Corporation, herein referred to as "WNC (Kunshan)"
- Wistron NeWeb (Kunshan) Corporation, herein referred to as "Wistron NeWeb (Kunshan)"
- NeWeb Service (Kunshan) Corporation, herein referred to as "NeWeb Service"
- WebCom Communication (Kunshan) Corporation– Kunshan Plant, herein referred to as "WebCom (Kunshan)"
- WebCom Communication (Kunshan) Corporation– Nanjing Branch, herein referred to as "WebCom (Nanjing)"
- WNC Vietnam Co., Ltd, herein referred to as "V1"

Report Methodology and Guidelines

The report has been compiled in accordance with the GRI Standards published by the Global Reporting Initiative (GRI) while referencing the contents issued in 2016. The contents updated in 2018 were used as a reference when compiling GRI 303 and GRI 403. The report has been inspected by an independent third party, namely SGS Taiwan Limited, and has been verified to meet the requirements of GRI Standards Core option and AA1000 Assurance Standard type 1, moderate level. The Assurance Statement is enclosed in the appendix for reference.

This report covers the same organizational boundary and uses the same calculation methods as the previous year's report. The International Generic Indicators are adopted to present the performance data of corporate social responsibility. Additional information will be provided for any estimation. Financial figures in this report are expressed in New Taiwan dollars (NT$) unless otherwise specified, and the exchange rate of 4.3090 between the Chinese Yuan (RMB) and New Taiwan Dollars as of the end of 2019 is used. All figures disclosed in Chapter 1.2 Operational Performance have been audited by KPMG.

Verification and issuance of ISO 9001, ISO 14001, ISO 50001, IATF 16949, OHSAS 18001, IECQ QC 080000, ANSI/ESD S20.20, TL 9000, FSC™ Chain-of-Custody and CNS 15506 certificates were performed by TÜV Rheinland; ISO/IEC 17025 by the Taiwan Accreditation Foundation; ISO/IEC 27001 by SGS Taiwan Ltd.; and ISO 14064-1 Greenhouse Gas Inventory at WNC's sites in Taiwan and China by the BSI Taiwan Branch and the China Quality Certification Center respectively.

(In case of any discrepancies between the Chinese version and its English translation, the Chinese version shall prevail.)

A Message from the Chairman

Firstly, I would like to express my gratitude to all of our employees, customers, suppliers, partners and investors. Thanks to your trust, support and hard work, in the face of a rapidly changing macro-economic and technological environment, combined with escalating market competition, WNC achieved a new financial milestone in 2019: record annual revenue of NT$ 62.2 billion (about US$ 2 billion). In addition, our S2 site in Tainan and V1 site in Vietnam were completed and began operations. While continuing to expand production capacity and raise product quality, we are also introducing Industry 4.0 concepts and digitally transforming our business models with the objective of upgrading collaborative information exchange and efficiency of daily operations.

In recent years we have seen ever more frequent abnormal climate events and large-scale natural disasters. To adapt to the environmental impacts arising from climate change, reduction of energy and waste materials has become a key mission of WNC. In 2019, in addition to evaluation of the adoption of a range of renewable energy solutions in our S2 and V1 plants, our S1 plant is planning the addition of a waste water treatment facility. The new S2 plant will feature rainwater recycling equipment in order to improve overall water usage efficiency. All of our sites are introducing waste recycling measures. And in 2019 waste recycling in the Taiwan area reached 82%.

In 2018 we introduced the WNC Ethics and Anti-Corruption Code of Conduct online training module in Taiwan, and in 2019 the Integrity Commitment Self-Assessment survey was expanded to include China and Vietnam sites. In addition, to respond to international trends we formulated and announced the WNC Modern Slavery Statement. To protect and promote the physical and mental health of colleagues as well as ensure a healthy working environment we have continued to promote a number of healthy workplace initiatives at each of our sites, including the Good Food Movement - Healthy Days Everyday initiative, free influenza vaccinations, regular health examinations with follow-up management, and occasional health promotion activities and courses. In addition the WNC Employee Assistance Program offers employees mental health, legal, financial, and management consulting services. In 2019 the S1 site was recognized by the awarding of an Outstanding Healthy Workplace Vitality Award by the MoHW's Health Promotion Administration.

In order to respond to human resource needs and at the same time develop young talent, in addition to continuing industry-academia partnership initiatives such as new technology projects and summer holiday internships, we have also expanded the scope of our industry specialization classes, which assist academic talent interested in careers in the tech industries to put what they have learnt into practice and to get a head start in their careers. Up to the end of 2019 a total of 113 students from our industry specialization classes were working for us, a retention rate of 92.6%. With regards to social participation WNC continues to focus on the support of disadvantaged younger students. In addition to the continuing injection of educational resources into remote schools in Hsinchu County, we also have a long-term program in place supporting the Miaoli Taiwan Fund for Families and Children. In 2019 100 colleagues adopted 27 special education students from remote locations and will support them in their lives until they reach 18 years of age, including through simple written correspondence. In this way during their learning years the students will receive sufficient nurturing to fully realize their potential.

In 2019 WNC continued to be a leader in corporate patent issuance in the field of network communications in Taiwan. In terms of overall corporate social responsibility performance, in addition to placing among the top 50 in the Large Enterprises Group for Excellence in CSR by CommonWealth Magazine, second prize in the Ministry of Economic Affairs "Buying Power" social innovation product and service purchasing prize incentive mechanism, Taiwan Corporate Sustainability Awards: Gold Medal in the Corporate Sustainability Report Awards category, and ranking in the top 20% of listed companies in the TWSE's Corporate Governance Evaluation. In addition, WNC was ranked by 1111 Job Bank as one of the 20 Companies with the Happiest Employees in 2019 (IT & IC manufacturing category), and was also awarded an elite award in the SGS CSR Awards.

Chairman

謝宏波

In step with a rapid expansion in global sales and in the number of operational sites, as well as the uncertainties created by political, economic and environmental factors, we deeply understand that our stakeholders have higher and higher expectations with regards to information disclosure, integrity of governance, environmental protection actions, and our reinvestment in society. In order to ensure consistency in our long-term operational strategies and objectives we will appropriately utilize internal resources of the company to meet the expectations of stakeholders, while following the principle of materiality. We will continue to exercise our corporate social responsibilities as a corporate citizen in the pursuit of the following long term goals:

- Creating an outstanding work environment and corporate governance mechanism
- Consolidating core competitive strengths so as to generate diverse and balanced value for all stakeholders
- Creating green manufacturing facilities in order to reduce greenhouse gases and increase adoption of renewable energy
- Establishing a sustainable operations value chain with customers and suppliers
- Supporting the education of disadvantaged students in order to expand their learning and development opportunities

The emergence of COVID-19 at the end of 2019 and its subsequent escalation to become a global pandemic poses an unprecedented threat to mankind. The lockdown policies imposed by many countries in the wake of the pandemic had massive global impact in terms of human resources, logistics, transportation, production and commercial activity, not to mention the large numbers of lives lost due to the virus itself. Across WNC sites, in addition to the implementation of a range of prioritized epidemic prevention measures with the aim of ensuring the health and safety of all workers and of all work environments, across our three manufacturing locations (China, Taiwan, Vietnam) and

through close cooperation between all functional units, we have provided customers with appropriate response measures so that disruption to operations or supply chains is minimized. We believe that the economic barriers brought about by continuing international trade conflicts and geopolitics, and the supply chain reorganizations necessitated by large-scale natural disasters and serious epidemics, will test industry ever more severely, even to the point of necessitating transformation of business and operational modes and the lifestyles and work modes of the ordinary person. In this Internet of Everything era of high fusion of software and hardware and high integration of virtual and actual worlds, WNC's R&D capabilities, applied to new technologies such as 5G and AI, can help accelerate the optimization and proliferation of many types of communication mechanisms. WNC's operational flexibility and resilience means we can continue to pursue our core values of fundamentals advocacy, team cohesion, customer trust and value creation so as to deliver to customers high quality and reliable products and services.

In the face of so many market uncertainties and unforeseeable emerging global risks, in addition to the development of new products and new technologies focused on broadband access, smart homes, industry supply chain networks and smart transportation, optimization of operational processes, production capabilities and quality enhancement, from 2020 WNC will put all its efforts into a digital transformation project, which will boost operational efficiency and supply flexibility, allowing a more dynamic response capacity and supporting overall planning and development of global sales. At the same time by pro-active product portfolio transformation our profit structure will be improved and profitability boosted. As a corporate citizen WNC hopes to exert a positive impact on economic, environmental and social aspects and also hopes all stakeholders can continue to offer up constructive suggestions and feedback so we can together create a healthy, safe and harmonious living environment.

Sustainable Management

In 2012, WNC established and secured approval from the Board of Directors for its Corporate Social Responsibility Best-Practice Principles, Corporate Governance Best-Practice Principles, Ethical Corporate Management Best-Practice Principles, and Code of Ethical Conduct. These documents are updated in line with international trends, suggestions of the Taiwan Stock Exchange, and on-the-ground realities. WNC's Marketing and Corp. Communication Division and RBA Management Committee direct implementation efforts regarding sustainable development. Such efforts include the stipulation of policies and management regulations related to sustainable development, disclosure of progress and achievements in sustainable development, and assisting WNC's function units in implementing items related to sustainable development. Operations related to implementing sustainable development are conducted by various function units in accordance with their job duties, and comply with related WNC policies. Personnel in function units also pay close attention to related international initiatives and regulations to judge if management regulations and operational procedures for implementing sustainable development need to be updated. Starting in 2019, the President & CEO of WNC regularly (at least once a year) reports to the Board of Directors regarding communication with stakeholders on sustainable development, the plans WNC has regarding sustainable development, as well as progress made in this area.

CSR Report Organization

WNC's Corporate Social Responsibility Report is produced by a team formed by the Marketing and Corp. Communication Division and related units. The Marketing and Corp. Communication Division is in charge of coordination, information gathering, editing, design, layout arrangement and verification. It invites the top managers of related units to appoint representatives to serve as members of the report team. The Marketing Division holds a project kick-off meeting for report organization at the end of the year to explain and discuss the work plan. Members of the team and the responsible representative of the Marketing and Corp. Communication Division assume the responsibility for gathering, discussing and reviewing sustainability topics based on their day-to-day interaction with stakeholders. The report team summarizes the outcome of its work for the year in the CSR report and submits it to the Chairman for final approval. After regular external verification in Q2 it publishes the CSR report for the previous year in June.

RBA Management Committee

WNC voluntarily abides by the Responsible Business Alliance (RBA) Code of Conduct and adopted its own Code of Conduct for all WNC employees, subsidiaries, and suppliers to follow. The WNC RBA Management Committee is established both at WNC (Taiwan) and major manufacturing sites in China and Vietnam. The committee directs WNC's CSR and RBA implementation efforts. The President & CEO serves as the highest-level manager receiving reports on issues. Major issues are submitted to the Board of Directors for examination and resolution.

WNC CSR Report Organization Team

WNC RBA Management Committee
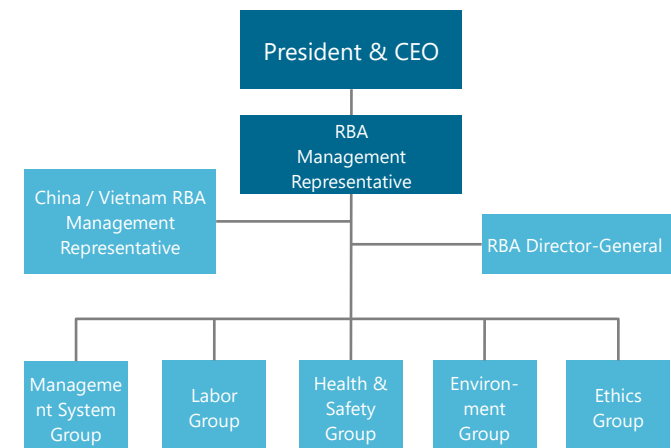
The WNC RBA Management Committee consists of the Environmental Group, Health and Safety Group, Labor Group, Ethics Group, and Management System Group. Each function unit (including the Global Supply Chain Management Division, Industrial Safety Dept., Facility Center, Quality Assurance Division, Finance Division, Human Resources Administration Division, Digital Management Information Systems Division, Marketing and Corp. Communication Division, and Legal & IP Center) assign representatives to serve as the officers for each group, and the officers convene management review meetings every year to discuss corporate social responsibility and RBA-related issues, assess risk in the RBA management system and set key performance indicators (KPIs).

In addition to the semi-annual performance examination, RBA internal auditor training courses and internal audits are held every year to ensure the effectiveness and completeness of the management system. In 2019, a total of 83 WNC employees in Taiwan, China, and Vietnam participated in the RBA internal auditor training courses, and completed RBA internal audits in Q3 and Q4. To conform to industry standards and respond to customer requirements, the RBA Validated Audit Program (VAP) is also conducted regularly across WNC's major sites. These audits are carried out in order to assess the WNC RBA management system in a fair and objective manner. Based on the results of the VAP audit, the daily work necessary for enhancing environmental protection, health and safety are implemented to improve the RBA management system. For specific customer needs, interim meetings are also convened. With regard to issues related to each group, relevant function units are responsible for the items' discussion and resolution as well as the execution and review of the resolution items.

For all WNC employees to better understand the meaning of corporate social responsibility, WNC provides CSR/RBA online courses in Taiwan and China during the orientation of new employees. On-line and live classroom course updates are also provided if necessitated by regulatory requirements, policy implementation, or customer requirements. The Marketing and Corp. Communication Division has collaborated with the WNC RBA Management Committee in compiling a WNC CSR Employee Handbook. The handbook is published in the CSR KM section on WNC's internal website. WNC also provides CSR training for employees of catering companies that provide services to WNC's sites in China. In 2019, a total of 36 employees of catering companies completed training.
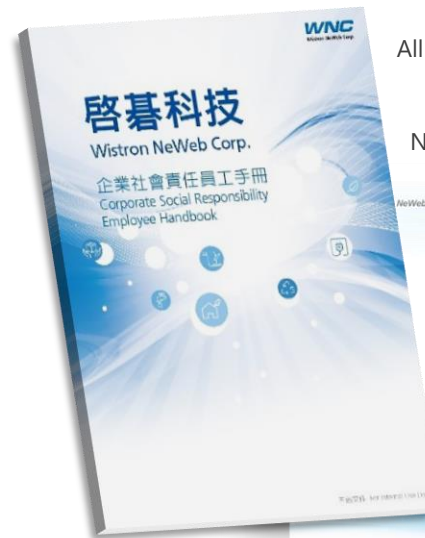
All employees • WNC CSR Employee Handbook

New employees •CSR/RBA on-line and live classroom course
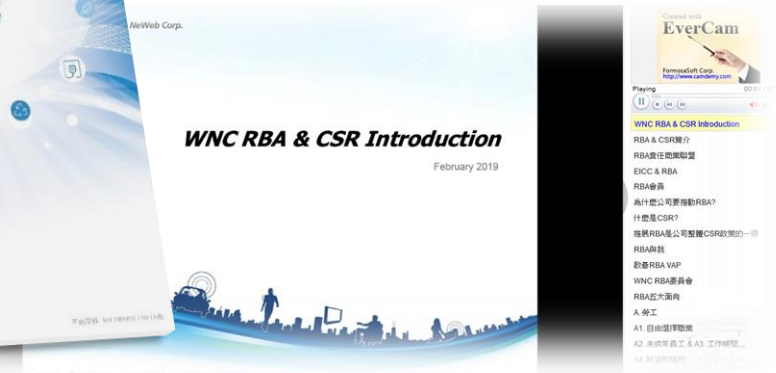
RBA internal auditors • RBA internal auditor training courses

Sustainability Results

Achievements

Excellence in CSR Award — Large Enterprises Group TOP 50

Annual audit result in CSR by EcoVadis — Gold Level

Corporate Sustainability Awards — Corporate Sustainability Report – Gold Medal

2019 SGS CSR Award — Annual Sustainable Elite

National Healthy Workplace Program — Health and Fitness Award (S1)

Buying Power — Social Innovation Products and Services Procurement Reward – Second Prize

1111 Job Bank — 2019 Happiest Employees

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Long-term Objectives

WNC Corporate Responsibility Policy

Consolidate core competitiveness and create balanced value for all interested parties

We are committed to sustainable development. Our business strategies must include comprehensive consideration of economic, environmental, and social aspects to reach an optimal balance and achieve continuous improvement.

Create sustainable operations and value chains with our customers and suppliers

We only cooperate with suppliers that comply with our CSR policies. Suppliers are required to strictly follow the laws and regulations that WNC and its customers comply with.

We achieve high customer satisfaction with high quality and efficiency and maintain long-term partnerships with customers.

Build green factories, achieving our goal of reducing greenhouse gas emissions, and expanding the use of renewable energy

We design and produce products and services that enhance the convenience of people's lives while minimizing impact on the environment.

Support the education of disadvantaged children and expand their study and development opportunities

We respect the community and society we live in and execute our duties as a corporate citizen to help how we can.

Create high quality workplaces and corporate governance systems

We provide employees with fair and reasonable remuneration according to average levels in the industry and offer training programs to develop employees' competence and expertise.

We offer a healthy and safe workplace and implement systematic environmental safety management measures, doing our best to prevent environmental pollution and occupational injuries.

We maintain healthy corporate governance, financial structures, and forward-looking business plans to provide our investors with appropriate returns.

Responding to United Nations Sustainable Development Goals (SDGs)

WNC's sustainable behavior in terms of eight of the 17 SDGs (United Nations Sustainable Development Goals) is summarized below:

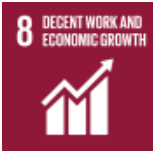| Action Plans		Execution Results in 2019	Chapter
3 GOOD HEALTH AND WELL-BEING Target 3: Good health and well-being	Promote a number of healthy workplace initiatives and offer the WNC Employee Assistance Program which provides employees with consultation services for vocational, familial, interpersonal, physical and emotional as well as mental illness issues.	■ Organized a free quadrivalent influenza vaccination event, in which 1536 WNC employees and personnel stationed at WNC sites were vaccinated. ■ Introduced the Employee Assistance Program (EAP), where 312 employees used the consultation service. The program received an average satisfaction score of 4.7 (maximum of 5) from employees. ■ As part of the 4D Club event, teams of professional chefs were invited to cook healthy foods according to a low-calorie menu planned by a dietician. A total of 2,663 healthy meals were produced in three months. Staff satisfaction reached 4.2 (out of 5), and 99.3% of staff were willing to participate in further activities. ■ Provided organic vegetables for group meals in the Good Food Movement—Healthy Days Everyday program, with the amount of purchases amounting to NT$10 million.	3.5.3 5.4.5
4 QUALITY EDUCATION Target 4: Quality education	■ WNC attaches great importance to employee's training and growth, and arranges a series of training courses for employees. ■ WNC understands the importance of education, and is committed to sponsoring Siang Bi Elementary School, Tunan Elementary School, and Meiyuan Elementary School.	■ WNC colleges held a total of 298 courses, and there were a total of 22,837 participants. ■ WNC employees underwent an average of 24.2 hours of training, with expenses related to employee training amounting to NT$ 10.74 million. The training courses received an overall satisfaction score of 4.5 (maximum of 5) from employees. ■ WNC and WNC employees donated a total of NT$500,000 to assist Tunan Elementary School in Hsinchu County and Siang Bi Elementary School in Miaoli County to sponsor the development of their featured education. ■ Worked with the Miaoli Taiwan Fund for Families and Children and solicited 100 employees to sponsor students in remote areas in Miaoli to donate a total of NT$300.000.	3.4.3 3.4.4 5.4.2
5 GENDER EQUALITY Target 5: Gender equality	Adhere to principles of respect for human rights to employ appropriate talent for corresponding positions. Do not consider gender as an advantage or disadvantage during evaluation. Provide employees with fair and reasonable remuneration according to average levels in the industry.	■ No complaints regarding discrimination were received in 2019. ■ The rates of male and female employees reinstated from parental leave were 100% and 69% respectively. ■ The ratio of female and male WNC employees receiving career development reviews was 0.66:1, which is slightly higher than the ratio of female and male employees at WNC, which is 0.56:1.	3.1.4 3.1.5 3.3.2
6 CLEAN WATER AND SANITATION Target 6: Clean water and sanitation	■ Provide safe and nutritious water and group meals for employees. ■ Improve process wastewater treatment efficiency to reduce pollution.	■ Conducted bi-monthly water quality tests of water dispensers and announced the results. The test results comply with all relevant standards. ■ S1 site purchased wastewater treatment equipment in 2019, and the equipment is expected to be operational in 2020.	3.5.2 4.4.2

	Action Plans	Execution Results in 2019	Chapter
Target 7: Affordable and clean energy	Adopt clean energy to increase diversity of resource usage.	A total of 1.8 GWh of electricity was generated from solar power in 2019, or approximately 1,090 tonnes of CO_2e was reduced. The annual power generation equates to a carbon absorption capacity of approximately 2.8 times that of Daan Forest Park.	4.4.1
Target 8: Decent work and economic growth	■ Recruit talent through internal and external recruitment channels; pay attention to employee career development and work-life balance to retain outstanding employees. ■ The WNC industry-academia partnership project classes cultivate professional engineering and technology talent through industry-academia collaboration and bridge the shortage of skilled workers in WNC.	■ The number of full-time employees at WNC increased by 12.7%, an addition of 1,452 new jobs. ■ The 3rd industry-academia partnership project class recruited a total of 53 students, and the student retention rate over the years has been 92.6%.	3.2 5.4.4
Target 12: Responsible consumption and production	■ WNC has established a set of Green Product Restricted Substances Management Procedures and a Standard for Restricted Usage of Environmentally Hazardous Substances, and has used the aforementioned standards to create a control list of hazardous substances that all of its suppliers must comply with. ■ Suppliers are required to meet WNC's CSR requirements and expectations to build a green supply chain. ■ Implementation of waste recycling and reuse programs to improve waste recycling rate. ■ Purchasing of products with green product labelling.	■ Received and fulfilled a total of 559 requests for green products from customers. In 2019, WNC's products did not violate any green product directives. ■ 64 suppliers have completed the WNC Supplier CSR audit, or 413 suppliers in total. ■ Five recycling projects were implemented, resulting in savings of NT$ 16.38 million. ■ WNC sites in Taiwan purchase office supplies, such as computers, printer cartridges, and paper towels that have green product labeling. The supplies purchased amounted to NT$ 46.34 million.	4.2.1 5.2.3 4.1.2 4.1.4
Target 13: Climate action	Implementation of measures in work environments to conserve energy and reduce our carbon footprint to ensure the effective use and management of limited resources; help raise environmental protection awareness by organizing related activities with the aim to reduce carbon emissions.	■ Total Scope 2 GHG emission intensity decreased by 14% in 2019 (base year: 2016). ■ Implemented the ISO 50001 energy management system, reducing emissions by 599 tonnes CO_2e and leading to energy savings of around NT$ 2.77 million. ■ Held three environmental protection activities, including a beach cleanup activity, "bring your own shopping bag" activity, and stair climbing activity. A total of 400 employees participated in these activities.	4.3 4.4.1 4.1.4

Sustainable Goals and Results

Long-term goals	Short-term Goals		Execution Results in 2019
Create high quality workplaces and corporate governance systems	■ Independent board members do not serve for more than three terms. ■ Independent board members increased by one. Total number of independent board members now exceeds the number stipulated by law. ■ At least one board member is female.		■ Rated in the top 20% among all companies in the Corporate Governance Evaluation. ■ A total of nine BOD members were elected one of whom is female. ■ Included as a component of the TWSE Corporate Governance 100 Index and the Taiwan High Salary 100 Index.
	■ Achieve zero major occupational accidents.		■ Achieved the goal of zero major occupational accidents.
	■ Have zero cases of regulatory violations and major lawsuits (referring to lawsuits exceeding NT$2,000,000 in amount or related to product trading)		■ Achieved the goal of zero cases of regulatory violations and major lawsuits. ■ The completion rate for the WNC Ethics and Anti-Corruption Code of Conduct online course was 100%. ■ All managers and employees who are prone to integrity lapses answered the annual self-evaluation questionnaire on the Code of Ethical Conduct.
Build green factories, achieve our goal of reducing greenhouse gas emissions, and expand the use of renewable energy	Renewable energy	■ Generate 5.0 GWh of solar power from 2019 to 2022.	■ A total of 1.8 GWh of electricity was generated from solar power in 2019, or approximately 1,090 tonnes of CO_2e was reduced. The annual power generation equates to a carbon absorption capacity of approximately 2.8 times that of Daan Forest Park.
	Greenhouse gases	■ Reduce total Scope 2 GHG emissions of each unit (tonnes of CO_2e/revenues in millions of NT$) by 5% in 2022 (base year: 2019).	■ Total Scope 2 GHG emission intensity for 2019 decreased by 14% compared to 2016, which is an achievement rate of 143%.
	Electricity	■ Taiwan sites: Reduce energy consumption per million NT of business revenue (unit: GJ/NT$ million) by 2% in 2020 (base year: 2019). ■ China sites: Reduce energy consumption by 2% in 2020 (base year: 2019).	■ Implemented energy conservation measures and the electricity saved was 1.13% of the total electricity consumption, or about NT$ 2.77 million in electricity use.
	Water resources	■ Taiwan sites: Reduce water withdrawal per million NT of business revenue (cubic meters/NT$ million) by 5% in 2021 (base year: 2019). ■ China sites: Reduce water withdrawal by 2% in 2020 (base year: 2019).	■ Implemented water conservation and recycling programs. The saved and recycled water made up approximately 14.8% of the total water withdrawn by WNC, which saved about NT$ 5.18 million in water withdrawal costs.
	Waste	■ Achieve waste recycling rate of 81% and 84% for WNC's sites in Taiwan and China respectively in 2020.	■ Taiwan sites: Obtained a waste recycling rate of 83%. ■ China sites: Waste generation density (tonnes/NT$ million) was reduced by 12.6%.
Create sustainable operations and value chains with our customers and suppliers	■ Complete the CSR audit for 50 suppliers in 2020.		■ 76 new suppliers responded to the "Supplier CSR Investigation Plan." ■ 64 suppliers have completed the WNC Supplier CSR audit. ■ Obtained a 91.5% response rate in the conflict minerals investigation.
	■ Obtain a customer satisfaction score of 90.		■ Obtained a customer satisfaction score of 94.
Support the education of disadvantaged children and expand their study and development opportunities	■ Enroll 60 more students for the WNC Industry-academia Partnership Project classes in 2020. ■ Expand the scope of cooperation with the Taiwan Fund for Children and Families in Miaoli in supporting children from remote locations.		■ Worked with the China University of Science and Technology (CUST) to provide students with on-the-job training opportunities. A total of 113 students are recruited as of 2019. ■ Worked with the Miaoli Taiwan Fund for Families and Children and solicited 100 employees to sponsor students in remote areas in Miaoli to donate a total of NT$300.000.

Communication with Stakeholders

Communicating with stakeholders in a timely and appropriate manner is a basic responsibility of a corporate citizen. WNC strives for pragmatic operations and steady development. Considering business modes and customer requirements, WNC adopts a conservative and low-profile attitude in any form of advertisement or promotion, while still trying to maintain smooth communications and mutual trust with its stakeholders through diverse means. To identify key stakeholders of WNC and substantive issues so as to determine this report's main objectives and contents, we assembled sales managers and corresponding employee representatives from the following stakeholder-related segments of WNC: finance, investor relations, marketing and corporate communication, CRM administrators, human resources administration, employee relations, digital management information systems, global supply chain management, supplier quality management, and the RBA committee. We conducted survey of material topics to collect feedback from selected employees of each unit and stakeholders (internal survey) to analyze and sort the results based on respective business scope and related interested parties, interested parties' degrees of concern with these issues, and their impact on WNC's operations. In 2019, a total of 32 internal surveys were collected.
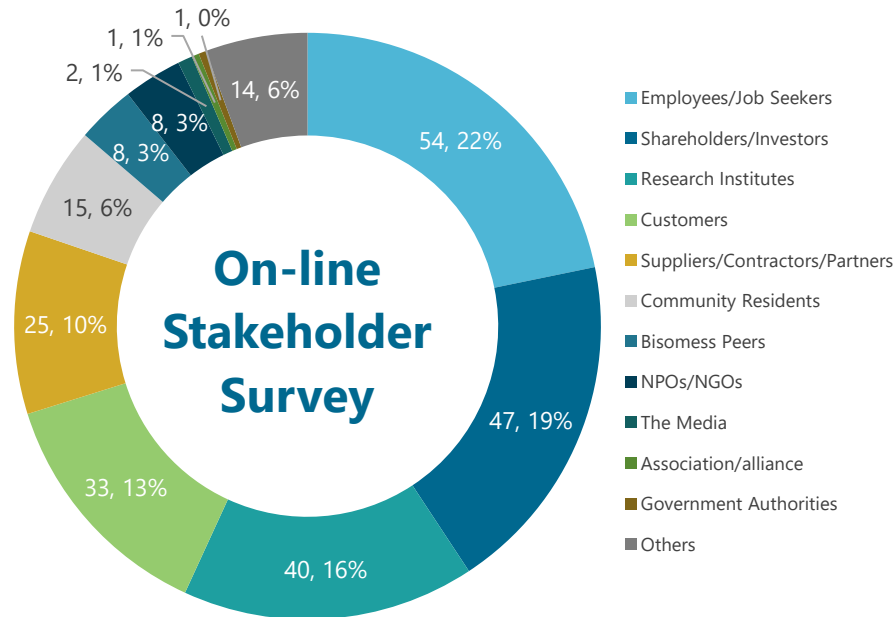
Identification of Stakeholders

WNC has adopted the five factors specified by the AA1000 Stakeholder Engagement Standard 2015. According to these: dependence, responsibility, tension, influence, and multiple perspectives of stakeholders of WNC, we have identified six significant stakeholder categories including customers, employees, investors/shareholders, suppliers, government/authorities and the media. To collect feedback from stakeholders, we post an online stakeholder questionnaire (an external survey) in the Stakeholder Section on WNC's website for our stakeholders to provide their feedback. We received 248 surveys in 2019 and approximately 65% of them were filled out by stakeholders in the six identified significant stakeholder categories.

On-line Stakeholder Survey

- 54, 22%
- 47, 19%
- 40, 16%
- 33, 13%
- 25, 10%
- 15, 6%
- 8, 3%
- 8, 3%
- 2, 1%
- 1, 1%
- 1, 0%
- 14, 6%

- ■ Employees/Job Seekers
- ■ Shareholders/Investors
- ■ Research Institutes
- ■ Customers
- ■ Suppliers/Contractors/Partners
- ■ Community Residents
- ■ Bisomess Peers
- ■ NPOs/NGOs
- ■ The Media
- ■ Association/alliance
- ■ Government Authorities
- ■ Others

Identification diagram

- Customers
- Employees
- Investors/Shareholders
- Suppliers/Contractors
- Government Authorities
- The Media

Dependency
Responsibility
Tension
Influence
Diverse perspectives

Identification of Material Topics

We interact with stakeholders throughout our day-to-day operations. We compile reports on international trends related to corporate social responsibility, issues raised by customers, and subjects that are the focus of the industry and third-party evaluation organizations. We collect the issues that concern stakeholders through the following internal and external inputs, and with reference to the definitions and classifications in the GRI Standards published by the Global Reporting Initiative (GRI). We have collected a total of 38 sustainability issues which are categorized into overall, economic-, environmental-, social-, and product-responsibility categories.

Internal: Corporate culture, business philosophy, job function and plans of each unit, corporate social responsibility best-practice principles, communication channels for employees, and the results of external and internal surveys.

External: International trends and regulations, customer requirements, practices of our business peers, Responsible Business Alliance (RBA), third-party evaluation organization (EcoVadis), the Telecommunications Industry Association, evaluation items of the TCSA (Taiwan Corporate Sustainability Awards)/, Excellence in Corporate Social Responsibility Award from CommonWealth Magazine, the Sustainability Topics for Sectors published by the GRI, and the The Global Risks Report 2019 published by the World Economic Forum.

Stakeholder Inclusivity

Identify	Sort	Confirm	Review
Sustainability	Materiality	Completeness	Sustainability
Identification of Issues of Concern to Stakeholders	Determine Aspects with Relative Reporting Priority	Confirm the Identified Material Topics	Evaluate Report Content and Check Reporting Process
■ Customer requests ■ Business strategies ■ International trends ■ The GRI Standards aspects list	■ Questionnaire survey ■ Principles of materiality ■ Decision of the material topics	■ Assess material topics list for scope, topic boundaries and time sensitivity ■ Prepare systems and processes to gather information	■ Stakeholder engagement ■ Review and reflection by the work group

Identified

6 significant stakeholder categories

38 sustainability issues

Sorted

248 external surveys

32 internal surveys

Confirmed and Reviewed

5 external and internal entities of the organization

21 material topics

Based on a substantive analysis process, the assigned employees rated "level of concern of stakeholders to the particular aspect" and "level of impact of the aspect on WNC's operations" using a scale of one to five ("1" being the lowest and "5" being the highest). The level of impact takes into account six operational impact factors including revenue, cost, customer satisfaction, employee recognition, reputation, and compliance/risk. As for the level of concern, the results of the internal survey are integrated with those of external stakeholders, then we weight the score of the question "first to fifth, sixth to tenth and eleventh to fifteenth issues that concern stakeholders the most" by 10%, 8% and 5% respectively. The score for this question is calculated based on statistical results from the external survey. The average scores are plotted on a Cartesian plane to enable the identification of aspects that are both of higher interest to stakeholders and have a

higher impact on WNC's operations. Aspects with an average score of 3.7 or higher on "level of concern of stakeholders to the particular aspect" and "level of impact of the aspect on WNC's operations" are considered major aspects of interest; there are a total of 28 such material issues. Four of the issues have been consolidated in accordance with the GRI standards. These issues cover five items of general disclosures and 21 issues relating to material topics.
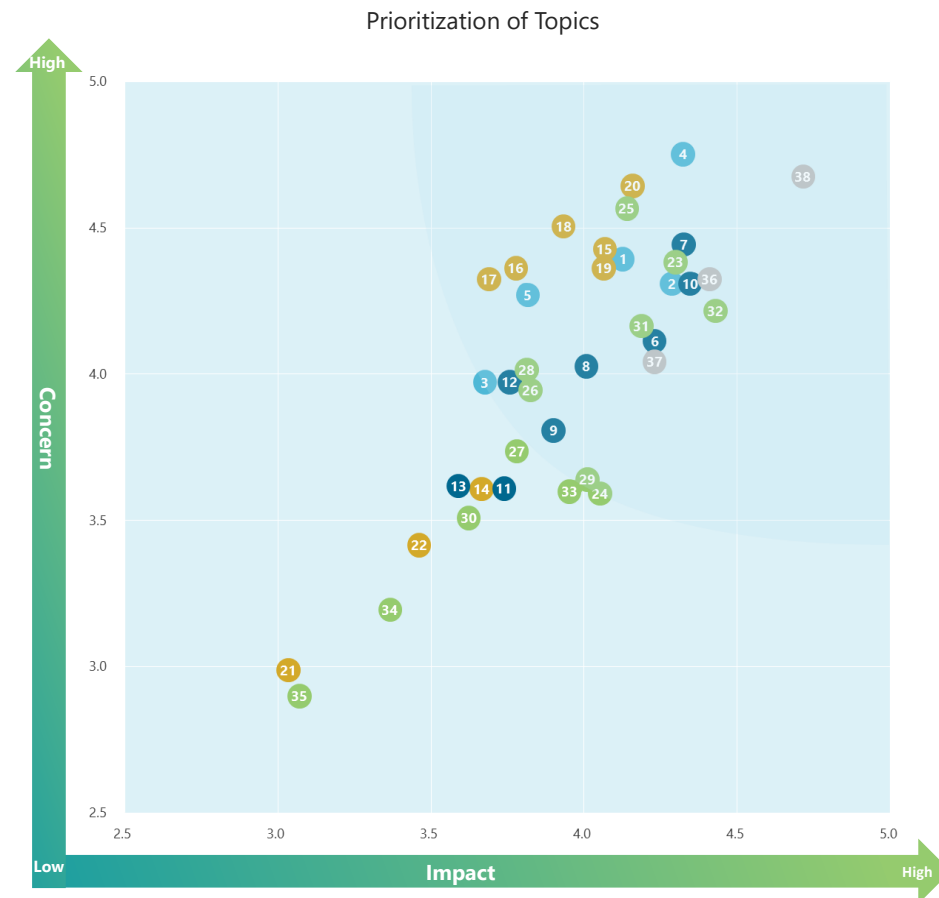
Prioritization of Topics

Overall
1. Sustainable Management
2. Risk Management
3. Grievance Mechanisms
4. Compliance with Regulations
5. Supplier Management

Economic
6. Corporate Governance
7. Technology R&D/Quality Service
8. Anti-corruption
9. Anti-competitive Behavior
10. Economic Performance
11. Local Employment
12. Economic Impact
13. Local Procurement

Environmental
14. Materials
15. Energy Management/Conservation
16. Green Product Management
17. Water Resource Management
18. Carbon Emission Management
19. Emissions and Air Pollution

Environmental
20. Effluent and Waste
21. Biodiversity
22. Use of Packaging Materials

Social
23. Employment
24. Labor/Management Relations
25. Occupational Safety & Health
26. Training & Education
27. Diversity & Equal Opportunity
28. Human Rights Assessment
29. Anti-discrimination
30. Freedom of Association & Collective Bargaining
31. Child Labor
32. Forced or Compulsory Labor
33. Conflict Minerals
34. Local Communities
35. Public Policy Participation

Product Responsibility
36. Customer Health & Safety
37. Marketing and Labeling
38. Customer Privacy

GRI Material Issues for WNC in 2019

Aspect	Material Issues	Operational Impact						GRI Standards	
		Revenue	Cost	Customer Satisfaction	Employee Recognition	Reputation	Compliance/Risk	Title	Disclosure Number
Overall	Sustainable Management			●	●	●	●	General Disclosures	102-14
	Risk Management			●	●	●	●		102-15
	Grievance Mechanisms			●	●	●	●		103-2
	Compliance with Regulations			●		●	●	Environmental/Socio-economic Compliance	307-1, 419-1
	Supplier Management			●		●	●	Supplier Environmental/Social Assessment	308-1, 308-2, 414-1, 414-2
Economic	Corporate Governance	●		●	●	●	●	General Disclosures	102-18
	Technology R&D/Quality Service	●	●	●					102-2
	Anti-corruption			●	●	●	●	Anti-corruption	205-1, 205-2, 205-3
	Anti-competitive Behavior			●		●	●	Anti-competitive Behavior	206-1
	Economic Performance	●	●		●			Economic Performance	201-1, 201-2, 201-3, 201-4
	Economic Impact	●	●		●			Indirect Economic Impact	203-1
Environmental	Energy Management/Conservation		●	●			●	Energy	302-1, 302-3, 302-4, 302-5
	Green Product Management		●	●					
	Water Resource Management		●	●			●	Water and Effluent	303-1, 303-2, 303-3, 303-4, 303-5
	Carbon Emission Management		●	●			●	Emissions	305-1, 305-2, 305-3, 305-4, 305-5, 305-7
	Emissions and Air Pollution Management		●	●			●		
	Effluent and Waste			●		●	●	Effluent and Waste	306-1, 306-2, 306-3
Social	Employment		●		●		●	Employment	401-1, 401-2, 401-3
	Labor/Management Relations				●		●	Labor/Management Relations	402-1
	Occupational Safety & Health				●	●	●	Occupational Health and Safety	403-1 to 403-10
	Training & Education			●	●	●	●	Training & Education	404-1, 404-2, 404-3
	Human Rights Assessment			●	●	●	●	Human Rights Assessment	412-2
	Non-discrimination			●	●	●	●	Non-discrimination	406-1
	Child Labor			●		●	●	Child Labor	408-1
	Forced or Compulsory Labor			●		●	●	Forced or Compulsory Labor	409-1
Product Responsibility	Customer Health & Safety	●		●			●	Customer Health & Safety	416-1, 416-2
	Marketing and Labeling	●		●		●	●	Marketing and Labeling	417-1, 417-2, 417-3
	Customer Privacy	●		●		●	●	Customer Privacy	418-1

In view of the 21 material topics identified, we assembled the employees assigned by their respective unit supervisors, and through their actual day-to-day operations, we confirmed the issues related to each topic and determined the significance on operations and which branch of WNC might be impacted, such as WNC Taiwan (including headquarters, S1, and S2), the branches in Kunshan, China (including WNC (Kunshan),

Wistron NeWeb (Kunshan), and WebCom (Kunshan)), the branches in Vietnam (WNC Vietnam), as well as which customers, suppliers and contractors outside of WNC. Please refer to Chapter 6.2 GRI Standards Index for the actual disclosure and corresponding chapters. The aspects of major importance to WNC but not included in the GRI standards indexes are categorized as "others."

GRI Material Topics for WNC in 2019

● Material, disclosed in report ○ Material

Aspect	GRI Material Topics	Significance on Operation	Relevant Chapter	Within the Organization		Outside of the Organization		
				WNC	Branches in Kunshan	Customer	Supplier	WNC
Overall	Environmental/Socioeconomic Compliance	Ensure compliance of company operations to avoid the risk of fines and suspension of business.	4.1.2, 2.2.3, 1.3.1	●	●	●	●	●
	Supplier Environmental/Social Assessment	Establish strategic partnerships with suppliers to enhance the integration of the value chain.	5.2	●	●		●	
Economic	Anti-corruption	Integrity management is the foundation of corporate sustainability. Implementing risk management, fulfilling duty to investigate, and creating a culture of accountability are key for integrity management.	2.2	●	●	○	●	
	Anti-competitive Behavior	Maintain a healthy market mechanism to enhance company competitiveness.	2.2.2	●	●			
	Economic Performance	Use company profits to give back to shareholders, the government, and employees to create a virtuous circle.	1.2, 2.2.1, 2.3.4, 3.3	●	●			
	Indirect Economic Impact		5.4	●	●			
Environmental	Energy	Improve energy usage efficiency and develop green products to improve company operational efficiency.	4.4.1	●	●			
	Water and Effluent	Recycle and reuse water and implement effective water resource management to reduce the impact of water consumption on company operations.	4.4.1	●	●			
	Emissions	Implement carbon management to improve the company's capabilities in handling risks related to climate change.	4.3, 4.1.1	●	●			
	Effluent and Waste	Promote waste reduction in the company and increase recycling rate to avoid wasting resources and reduce environmental pollution.	4.1.2, 4.4.2	●	●			●
Social	Employment	Create a friendly work environment to raise employee morale and foster a sense of togetherness.	3.1.4, 3.2.2, 3.3	●	●			
	Labor/Management Relations	Provide employees with unimpeded communications channels and be open-minded toward various viewpoints to create a harmonious work environment.	3.1.5	●	●		●	
	Occupational Safety & Health	Protect the safety and health of employees to ensure good production efficiency and quality.	3.5.1	●	●		●	●
	Training & Education	Talented employees are important assets for a company. Foster the creative capabilities of employees to enhance the growth potential of the company.	3.4	●	●			
	Human Rights Assessment		3.1	●	●		●	●
	Non-discrimination	Protect basic human rights and provide good work environments and conditions to maintain the reputation of the company.	3.2	●	●		●	●
	Child Labor		3.1.1	●	●		●	●
	Forced or Compulsory Labor		3.1.3	●	●		●	●
Product Responsibility	Customer Health & Safety	Develop new green products to improve product competitiveness.	1.3.1, 4.2	●	●	○	●	
	Marketing and Labeling	Disclose information in a transparent and truthful manner to maintain the reputation of the company.	1.3.1, 1.3.3	●	●	○	●	
	Customer Privacy	Enhance customer satisfaction and cooperation to improve the company's competitive advantages.	5.1	●	●		●	

Response to Stakeholders

To address issues of stakeholder concern, responsible units or project teams are assigned. WNC hopes to understand stakeholder expectations through different public communication channels and to pass these expectations on to the relevant personnel or upper management to serve as an important reference in planning operation strategies and preparing CSR activities. Based on the information obtained, we may review the CSR report of the previous year to examine if the report fully presents WNC's achievements in corporate social responsibility and may serve as the reference standard for the CSR report of the following year.

The general communication channels we use are the WNC website, the Market Observation Post System, public e-mail (please log on to the WNC website (About WNC Contact Us), the WNC Annual Report, and the WNC CSR Report. Stakeholders are encouraged to obtain the latest news from the WNC website and the Market Observation Post System or e-mail related departments. Our Annual Report and CSR Report also cover details of WNC's financial and non-financial performance. Other issues and communication channels are listed in the following table. Please refer to each relevant chapter for the corresponding issue's detailed description. Stakeholders can send inquiries and suggestions related to corporate social responsibility to: public@wnc.com.tw. In 2019, there were no complaints regarding work environment, labor practices, human rights practices, or social impact.

Stakeholder	Significance	Issue	Responsible Unit	Relevant Chapter	Communication Mechanism	Communication Frequency	Communication Result in 2019
Customers	Customers are the key source of revenue and the most important growth engine for the company. A company must provide high-quality products and professional services that meet the needs of the market and customers to continue growing.	■ Products and services ■ Supplier management ■ Human rights ■ Energy resource & waste management ■ ESH management ■ Risk management	■ Business Group/Unit ■ QA Div. ■ HR Adm. Div. ■ Facility Center ■ Industrial Safety Dept. ■ RBA Committee	1.3 4.2 5.1 3.1 4.4 3.5	Customer satisfaction survey — Once a year Customer questionnaire or on-site audit — Upon request Project review meeting — Upon request Customer-complaint management — Upon request Global Service Center and after-sales service — Upon request		■ Received a total of 559 requests for green products from customers, and all requests were honored by Q1 2020. ■ We earned a score of 94 for customer satisfaction and exceeded our goal (90 points).
Employees	Employees are part of the company and a foundation for sustainable development. A company must provide a high-quality work environment and remuneration to cultivate employees that are willing to utilize their talents and are passionate about delivering performance and value for the company.	■ Human rights ■ Labor/Management relations ■ Remuneration ■ Training & education ■ ESH management	■ HR Adm. Div. ■ Industrial Safety Dept. ■ Employee Welfare Committee	3.1 3.2 3.3 3.4 3.5	Employee Representative Committee — Quarterly Occupational Safety and Health meeting — Quarterly Employee Welfare Committee — Quarterly Employee questionnaire — Upon request Company Portal — Updated upon request Freshman seminar — Monthly CEO seminar — At least once each quarter Performance interview and appraisal — Semi-annually		■ We responded to 100% of the questions submitted through the various communication channels. ■ The number of full-time employees at WNC increased by 12.7%, an addition of 1,452 new jobs. ■ The ratio of female and male WNC employees receiving career development reviews was 0.66:1, which is slightly higher than the ratio of female and male employees at WNC, which is 0.56:1 ■ WNC signed special agreements with 29 daycare centers in Hsinchu City, Hsinchu County, Taoyuan City, and Tainan City.
Investors/Shareholders	Investors and shareholders fund the company through investments. A company must provide transparent, accurate, and real-time operating information to win the trust of investors and demonstrate the company's market value.	■ Corporate governance ■ Economic performance ■ Stockholders' equity ■ Products and services	■ Board of Directors ■ Investor Relations Dept. ■ Business Group/Unit	2.1 1.2 1.3	Shareholders' meeting — Once a year Investor conference — Semi-annually Investor query — Approx. 180 meetings per year		■ WNC was rated in the top 20 % among all companies in the sixth Corporate Governance Evaluation. ■ Participated in 124 investor conferences, and held face-to-face meetings with 197 domestic and international legal entities.
Suppliers/Contractors	Suppliers and contractors are an important part in a company's delivery of professional products and services. A company must establish an effective and smooth supplier management and communication mechanism to create a win-win situation for each other.	■ Products and services ■ Supplier management ■ Contractor management	■ Business Group/Unit ■ QA Div. ■ Industrial Safety Dept. ■ Global Supply Chain Management Div.	1.3 5.2 5.3	SMS portal — Updated upon request Supplier performance evaluation — Quarterly Supplier audit/contractor evaluation — Once a year Supplier conference — Once a year		■ A total of 64 suppliers have undergone the on-site CSR audit. ■ A total of 97 WNC suppliers participated in the Wistron Group Vendor Conference.
Government Authorities	The government and the competent authorities are key to a company's development. As a responsible corporate citizen, a company must comply with government regulations and policies to win trust and support from the government and competent authorities.	■ Compliance with regulations ■ ESH management ■ Energy resource & waste management ■ Grievance mechanisms	■ Finance Div. ■ Legal & IP Center ■ HR Adm. Div. ■ Facility Center ■ Industrial Safety Dept.	2.2.3 3.5 4.4 2.2	Official documents/questionnaires — Aperiodic Awards — Aperiodic Regulatory seminars/ forums/ industry-association activity — Aperiodic		■ WNC (Taiwan) won a second prize in the Buying Power: Social Innovation Products and Services Procurement Reward Program from the Ministry of Economic Affairs. ■ WNC's S1 site won a Health and Fitness Award in the National Healthy Workplace Program
The Media	The media is an important bridge of communication between a company and all its stakeholders. Maintaining good relationship with the media enable stakeholders to quickly and accurately understand a company's operations and maintain the company's image.	■ Recruitment ■ CSR ■ Economic performance	■ HR Adm. Div. ■ Marketing and Corp. Communication Div.	3.2 1.3.3 1.2	Press releases/announcements — Aperiodic Questionnaires/interviews — Aperiodic Media contact — Aperiodic		■ Disclosed 17 news items in releases/announcements ■ Ranked among the top 50 in the "Large Enterprises" group for Excellence in CSR by the CommonWealth Magazine Group

01

About WNC

Company Overview

Operational Performance

Products and Services

Intellectual Property

1.1 Company Overview

WNC specializes in the design, R&D and manufacture of communication products. We provide complete technical support for RF antenna design, software and hardware design, mechanism design, system integration, interface development, product testing and certification. We offer technical services for short-, medium- and long-distance communications and provide consumer, enterprise-level, industrial-grade and vehicular products. We've been a market leader in network communications, digital home, satellite broadcasting and smart driving assistance for many years.

Company Name	Wistron NeWeb Corporation
Chairman	Haydn Hsieh
President & CEO	Jeffrey Gau
Headquarters	Hsinchu, Taiwan
Established	Dec. 7, 1996
Public Listing	Sept. 22, 2003 (stock code: 6285)
2019 Capital	NT$3.903 billion
2019 Revenue	NT$62.24 billion (consolidated)
2019 Employees	11,186 (global full-time employees)

Vision

WNC's vision is to become a global leader in wireless technology and network technology integration, providing customers with complete wireless communication solutions and professional communication technology.

Goal

Our goal is to achieve customer satisfaction with our service quality and shareholder satisfaction with our overall operating performance, assisted by a team that efficiently executes our high value-added business model.

Culture

Fundamentals Advocacy, Team Cohesion, Customer Trust, and Value Creation are the core corporate values that steer WNC's corporate culture.

WNC's Ten Beliefs and Ten Principles remind employees to embrace sincerity, decency, honesty, and law-abiding attitudes towards customers, vendors, colleagues, and society in order to facilitate team discipline, enhance organizational efficiency, and project a positive corporate image.

Fundamentals Advocacy
Continue to enhance professional knowledge and skills with integrity and accountability, and consider the company's long-term interests as the basis for conduct and decision-making.

Team Cohesion
Build rapport with WNC's internal and external partners with a humble, empathetic, and positive mindset in order to achieve the best synergy.

Customer Trust
Understand and fulfill customer requirements and actively maintain close relationships with our customers in all units and on all levels to win their trust.

Value Creation
Pursue self-advancement, strive for excellence, enhance performance, and create differentiated values in operations and processes, product development, business expansion, and customer service.

Ten Beliefs

1. Strive for the highest quality.
2. Execute tasks effectively.
3. Shoulder responsibilities and take the initiative.
4. Act with moral courage and integrity.
5. Promote teamwork.
6. Observe strict discipline. Distribute rewards and punishments fairly.
7. Be eager to learn and share.
8. Be customer focused.
9. Reinforce cost consciousness and create maximum profits.
10. Be an industry benchmark.

Ten Principles

1. Do not dispute customer perceptions.
2. Do not disclose confidential company matters without authorization.
3. Do not take credit for other people's efforts nor shirk responsibilities.
4. Do not give or receive bribes.
5. Do not use public resources for private interest.
6. Do not behave with departmental egotism or selfish manners.
7. Do not put the company's reputation at risk by making inappropriate statements in public.
8. Do not exaggerate or understate.
9. Do not be hypocritical or bureaucratic.
10. Do not be late for work or meetings and do not leave early.

1.1.1 Worldwide Locations

WNC's headquarters are located in the Hsinchu Science Park. They provide a combination of R&D, sales, logistics, and after-sales services. Operations of headquarters are responsible for coordinating customer needs and resource logistics for our global sites.

WNC's manufacturing sites comprise S1 (also located in Hsinchu Science Park), as well as WNC (Kunshan), Wistron NeWeb (Kunshan), and WebCom (Kunshan). In Q4 2018, we established the S2 site in the Tainan Science Park and WNC Vietnam Co., Ltd. (V1) in Vietnam. The latter will bring WNC's production to a third host region. The S2 and V1 sites commenced manufacturing operations in Q2 and Q3 of 2019 respectively.

We have also established subsidiaries for business promotion, technical support, and R&D in the U.S., the U.K., Japan, and the cities of Nanjing and Kunshan in China. These subsidiaries provide comprehensive solutions and local support for our customers worldwide. In addition, an R&D center was set up in Taipei's Neihu District in December, 2019.

Since our data for the V1 and Taipei R&D center during the construction phase and the initial stage of operations is incomplete, this report will only disclose data related to manpower at the V1 site. Related data from January 2020 is expected to be disclosed in next year's CSR report.

Please refer to WNC's website www.wnc.com.tw for detailed information on our worldwide locations.

UK	VN	CN	TW	JP	US
Berkshire	Bac Ninh	■ Nanjing ■ Kunshan	■ Hsinchu ■ Tainan	Shin-Yokohama	■ Branchburg ■ Tustin ■ El Segundo
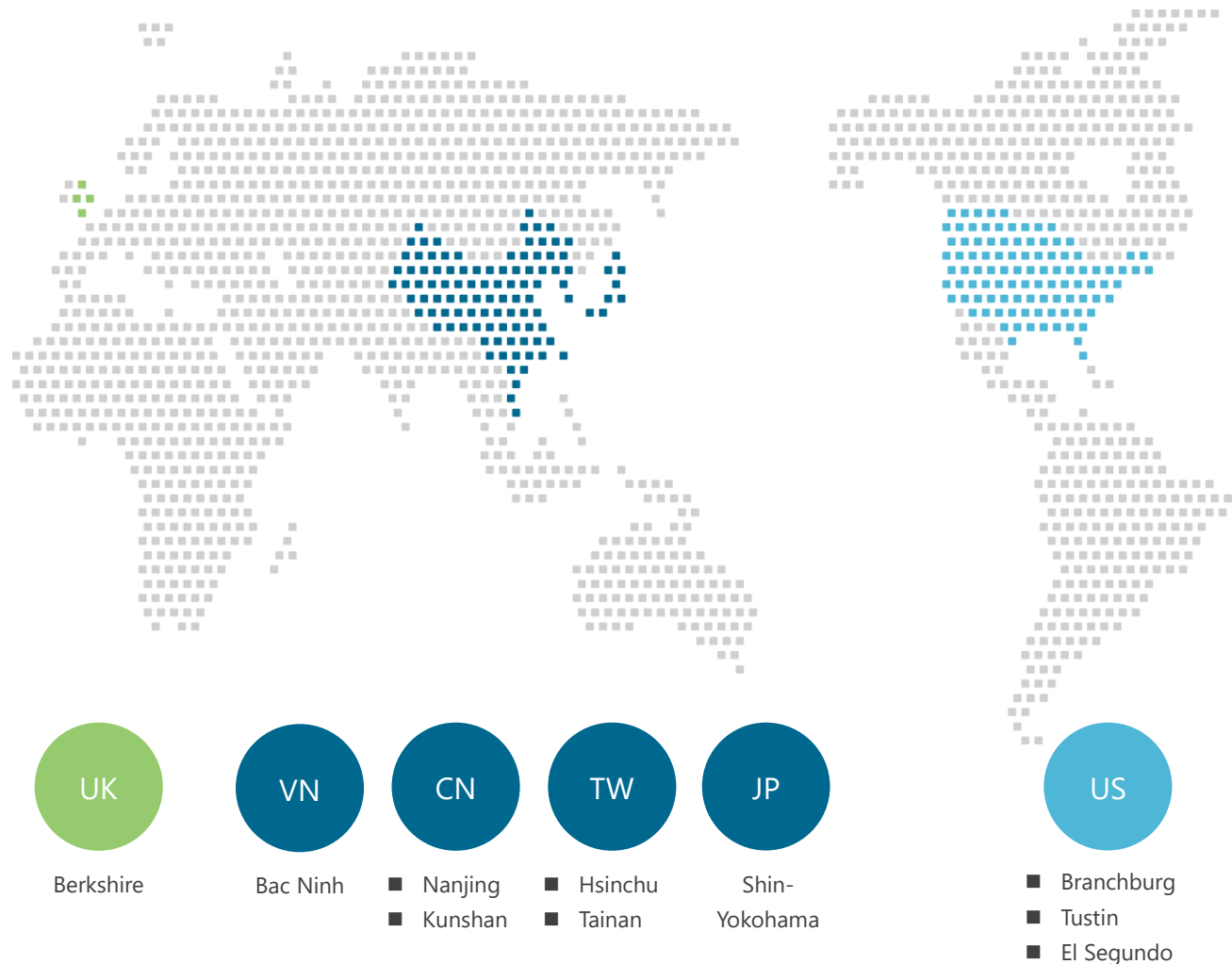
1.1.2 Management Systems

WNC has established management systems at all of its sites to control, according to international standards, quality, green production, information security, industry-specific operations, environmental impact, and health and safety. WNC has further set up a committee to be responsible for verification/certification policy, operational execution, and improvements. After each management system is certified by an independent third party, it is continuously updated to ensure performance according to target standards and regulations. Management system related certifications obtained by WNC sites are listed in the following table:

Management Systems of WNC (Taiwan) and Subsidiaries

Aspect	Management Systems	Taiwan			China				Vietnam
		HQ	S1	S2	WNC (Kunshan)	Wistron NeWeb (Kunshan)	WebCom (Kunshan)	NeWeb Service	WNC Vietnam
Economic	ISO 9001	●	●	●	●	●	●	●	●
	TL 9000	●	●	●	●				
	IATF 16949	●	●		●				
	ANSI/ESD S20.20	●	●	●	●	●	●		●
	ISO/IEC 17025	●							
Environmental	ISO 14001	●	●	●	●	●	●		●
	ISO 50001	●	●		●	●	●		
	ISO 14064-1	●	●		●	●	●		
	IECQ QC 080000	●	●		●	●	●		
	FSC™ Chain-of-Custody	●							
Social	OHSAS 18001	●	●	●	●	●	●		●
	CNS 15506: 2011	●	●	●					
	ISO/IEC 27001	●	●	●	●	●	●	●	●

1.1.3 Industry Association Memberships

WNC's technology and product scope is broad. Therefore we actively participate in related industry associations and their activities to acquire the most up-to-date industry and technology-related information and maintain good relations with corporations and organizations in related fields. The external organizations in which WNC participated in 2019 include:

- Taiwan Electrical and Electronic Manufacturers Association
- FBBLife under CIA
- Taipei Computer Association and Taiwan Internet of Things Alliance, and Taiwan 5G Verticals Alliance
- The Allied Association for Science Park Industries
- Taiwan Thermal Management Association

- Taiwan Association of Information and Communication Standards
- Taiwantrade
- Social Innovation and Innovation Entrepreneur CSR Sodality
- Digital Intelligence Service Alliance (DISA)
- Wi-Fi Alliance (WFA)
- Global Certification Forum (GCF)
- zigbee Alliance
- Global TD-LTE Initiative (GTI)
- Bluetooth SIG
- Frog by Wyplay
- Reference Design Kit (RDK)

- Broadband Forum
- 5G Automotive Association (5GAA)
- OPEN Alliance
- IoT Security Foundation
- HDMI Licensing
- ORAN Alliance
- Open Compute Project (OCP)
- prpl Foundation
- Intel® Network Builders
- AWS Partner Network (APN)
- The Linux Foundation China ITS Industry Alliance

1.2 Operational Performance

The following consolidated financial data charts present WNC's operating results for the previous four years. The IFRS system was adopted for these figures. Detailed financial figures can be found in Chapter 6 Financial Standing of WNC's 2019 Annual Report.

In April 2020, at book closure date, 16.70% of WNC's shareholders were foreign investors. We will continue to optimize WNC's overall operational performance. Please refer to Investor Relations section of WNC's website for related investor information.

Operating Revenue and Net Income
(NT$ million)

	2016	2017	2018	2019
Operating Revenue	52,779	56,890	56,050	62,240
Net Income	2,630	2,064	1,929	1,461
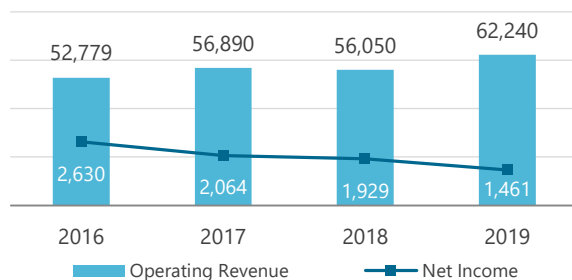
Gross Profit and Net Income Ratio
(%)

	2016	2017	2018	2019
Gross Profit	13.86	13.40	12.69	11.39
Net Income Ratio	3.87	3.63	3.44	2.35
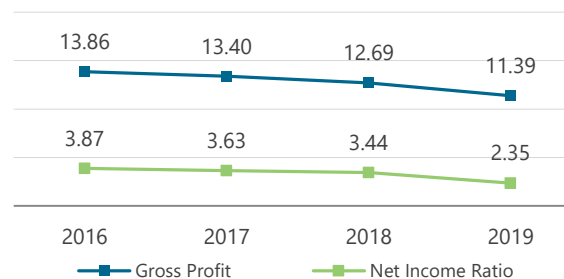
Return on Assets and Return on Equity
(%)

	2016	2017	2018	2019
Return on Equity	15.98	15.07	12.83	9.13
Return on Assets	7.23	7.13	6.32	4.56
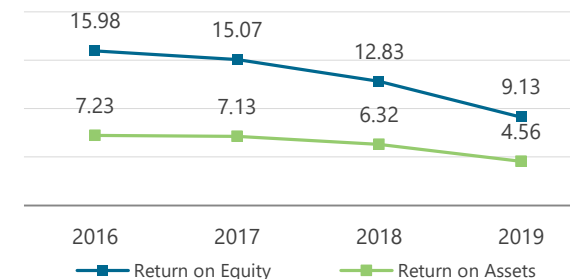
Cash/Stock dividends (NT$ million) and EPS (NT$)

	2016	2017	2018	2019
Cash Dividends	1,307	1,357	1,366	0
EPS	5.95	5.76	5.21	3.76
Stock Dividends			0	0
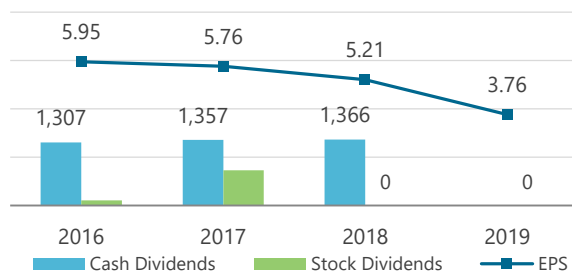
R&D Expenses and Income Tax Expenses
(NT$ million)

	2016	2017	2018	2019
R&D Expenses	2,004	2,116	2,197	2,528
Income Tax Expenses	587	627	296	423
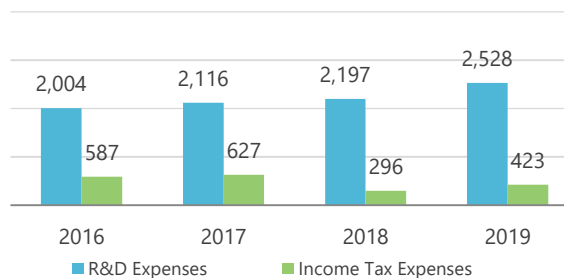
Shareholding Ratios by Foreign Investment
(%)

	2016	2017	2018	2019	2020
WNC's ratio of shareholding by foreign Investment	15.27	27.10	22.55	24.71	16.70
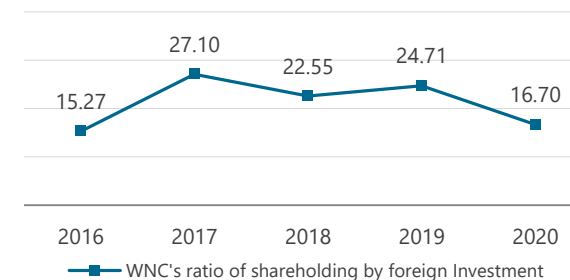
1.3 Products and Services

1.3.1 Product Scope

WNC is focused on developing wireless technologies in different frequency bands. WNC provides products and services that meet both customer needs and international environmental and safety-related regulations. To reduce health and safety concerns in the use of its products, WNC has formulated a set of Product Safety Assurance Measures. All products undergo testing and certification to safety standards based on customer requirements. These include the UL and FCC certifications of the United States, the CE certification of the EU, the GS certification of Germany, the PSE certification of Japan, the BSMI and NCC certifications of Taiwan, the CCC certification of China, and labeling of batteries and waste batteries according to regulations of different countries. The contents and the format of product labels fully comply with the requirements of each certification before they are affixed to the product.

We strive to lessen the environmental impact of our manufacturing operations. We work actively with customers and suppliers to promote green products and green production, reduce resource consumption, and minimize environmental pollution. We seek to create economic and social value through diverse products and outstanding services. WNC (Taiwan) and WNC's major manufacturing sites in China are certified under IECQ QC 080000 standards and have undergone third party internal auditing at fixed intervals with regards to hazardous substances management.

In 2019, there were no convictions under, or violations of, relevant laws and regulations concerning our products and services.

Production Categories

WNC integrates broadband, multimedia and wireless communication technologies. Our products are used in diverse applications and product types including antenna, modules, network access, smart home, industrial, and automotive solutions. We provide consumer, enterprise-level, industrial-grade and vehicular products.

Our many customers include satellite broadcasting service operators, telecommunication-system service operators, system integration vendors, IT brand-name companies, consumer-product branded companies, automotive manufacturers, and car-audio manufacturers. We sell our products worldwide, and our major region by sales in 2019 was the Americas (around 50% of sales).
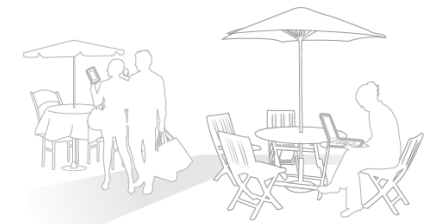
Antenna Solutions
- Generic antennae: 4G antenna, WWAN/WLAN/Bluetooth® antenna, Wi-Fi 2×2, 3×3, 4×4 antenna solutions and Near Field Communication (NFC) antenna

- Innovative antennae: 11 dBi high-gain patch array, smart antenna, laser direct structuring (LDS) antenna, mmWave antenna, 4G antenna, 4G LDS antenna, and outdoor high-gain directional antenna
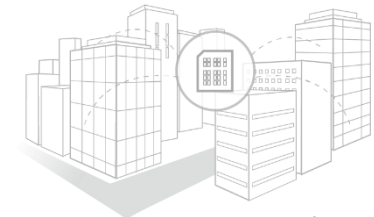
Module Solutions
- 4G modules

- WLAN modules: IoE modules

- Customized modules: XRBH Bluetooth® Low Energy module, XRBH-1 Bluetooth® Low Energy modules, Bluetooth® Low Energy SiP modules

- Near Field Communication (NFC) modules

- Bluetooth® modules: Bluetooth® SiP modules

- mmWave modules: WiGig RF modules, 4G + WiGig antenna combo modules, WiGig baseband modules

Network Access Solutions
- Satellite TV: direct broadcast satellites

- Fixed Wireless: 4G mobile hotspots, 4G gateway/IAD, 4G outdoor CPE, and Small Cells

- Enterprise Networking: Wi-Fi AP/Routers/Repeaters, and Gigabit Ethernet switches

- Infrastructure Network: NIC and data-center switches

Smart Home Solutions

- Home Control: Home safety gateways and security IP webcams

Industrial Solutions

- Smart Energy: Smart meter communication boards/hubs

- RFID: RFID Tunnel, smartPORTAL™, AluBox, wave®Antenna

- Smart Tracking: Sub G routers/gateways, Bluetooth® wristbands

Automotive Solutions

- Satellite Radio: Satellite radio modules, receivers, translator boxes, and UDLP

- Digital Radio: Digital Audio Broadcasting (DAB) modules, HD Radio™ modules

- Radar Sensors: 24GHz/77GHz/79GHz car radar sensor system products.

- Automotive Camera Modules: Ultra compact automotive FHD camera modules

- Automotive Cellular Devices: 4G communication modules and 3G LGA modules

- Automotive Connectivity: Automotive Wi-Fi Bluetooth® modules

- Infotainment: Qualcomm SiP solutions

- Tracker: Vehicle trackers for fleet management, OBDII trackers

- C-V2X modules
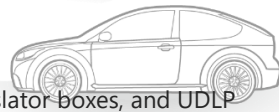
For more information on detailed product information and shipment, please refer to Chapter 5.1. Business Content in the WNC 2019 Annual Report.

1.3.2 Manufacturing and Quality Service

── WNC Quality Policy ──

On-time delivery of zero-defect competitive products & services to our customers

WNC has a "zero defects" long-term quality management objective. We expect to meet and exceed customer expectations in terms of design quality, production quality, and service quality and to become a reliable partner for all our customers.

During our day-to-day quality operations, we set or adjust quality goals which include product quality, service, and delivery based on the ISO 9001, IATF 16949, and TL 9000 quality management systems. Quality goals are top-down and owned by each responsible department. In the spirit of "Protection, Prevention, and Prediction (3P)", different quality approaches, tools, and systems are introduced for integration with the product development process and are realized in daily operations. All of WNC's production sites adopt the same manufacturing system and quality management standards, including SFCS (Shop-Floor Control System), e-JIT (Just-in-Time), and SMS (Supplier Management System). Each production site pursues improvement through continuous improvement plans such as BPI (Business Process Improvement), TCS (Total Customer Satisfaction), CIP (Continuous Improvement Program), Six Sigma, and DFSS (Design for Six Sigma). We then analyze and investigate to prevent the reoccurrence of issues, helping us further predict potential risk and formulate preventive mechanisms.

WNC (Taiwan) and WNC's sites in China and Vietnam have all obtained ANSI/ESD S20.20 Electronic Discharge Control Program certifications to ensure that complete electrostatic protection measures are in place throughout the entire manufacturing process. WNC headquarters has also obtained ISO/IEC 17025 (general requirements for the competence of testing and calibration laboratories) certification. This ensures that WNC's own laboratories adopt robust testing techniques and management capabilities to provide customers with high-quality product testing environments.

Production Automation

To develop production automation, automated production capability should be taken into account during the product design stage. After many years of experience operating production lines, WNC has divided automated production lines into multiple standardized modules that can be quickly assembled into different configurations to manufacture a range of products. This enables us to avoid investments in equipment that do not provide a good return. WNC's in-house automation center oversees WNC's internal automated production operations.

TCS Event

Lean Production

Prediction
EDSA to perform accurate quality forecasting

Protection
Product QA instead of process QA; HASA; e-ORT

Prevention
DBFMEA, TRIZ, LSS, standardization operations & inspections, CIP, PPAP

EDSA

CoPQ Improvement

DBFMEA

Six Sigma Plan

Quality goals are top-down & owned by each responsible department to ensure that customer and WNC quality targets are achieved.

Zero Defects

- CIP
- No Repeat Errors
- Prevention
- Reliability

1.3.3 Marketing Communications

WNC's product marketing is handled by our customers and product labeling is also based on customer requirements. Product labels and information are produced and affixed in compliance with local laws and regulations. WNC has established Management Measures on Information Disclosure and External Verbal Communications to govern the scope of verbal communications and manage the process for representing and reviewing disclosure of relevant information about WNC, the market, products and services, customers, and suppliers. These measures help ensure the accuracy, timeliness, and consistency of publicly disclosed information.

To provide domestic and foreign stakeholders with accurate information and convenient communication channels, the WNC website has both Chinese and English versions of WNC's contact information, annual reports, annual shareholders' meeting agendas, annual shareholders' meeting minutes, CSR reports, and designated sections such as Press Room, Investor Relations, and CSR to provide updates on WNC, material information, and information related to WNC's financial situation and CSR efforts.

1.4 Intellectual Property

WNC strives to enhance its competitiveness in the communication industry. We develop products based on evolving communications technologies and increasing market demand. To boost research and design efforts, the Legal unit and the Human Resources Administration unit hold patent courses semi-annually. The courses are required for new R&D employees and aim to introduce the patent system and raise awareness of patent infringement issues, as well as to encourage R&D personnel to submit patent application proposals. In 2019, two sessions were held with a total of 135 attendees. In addition, we also held a course on audiovisual technology authorization guidelines for Sales and PM personnel, which aimed to introduce the rights and obligations of patent licensing contracts and related guidelines; a total of 29 employees participated in the course.

To maintain corporate innovation, competitiveness, and protect stakeholders' interests, WNC highly values the protection and control of intellectual property and confidential business information. WNC has stipulated Management Measures on the Control of Information Equipment and Protection of Documents, WNC Intellectual Property Rights Management Measures, and WNC Group Product Development Documents, Projects and Patents Reward Measures to clearly state procedures and measures to safeguard corporate trade secrets and business-related confidential information. In addition, through our management and application policies for intellectual property, we encourage employees to engage in innovation, research and development, and thus continue to accumulate intellectual property in the form of patents, copyrights, trademarks, trade secrets, and other intellectual assets.

WNC has not only been listed among the Approved Patent Applicants of Top 100 Taiwanese Enterprises by Taiwan's Intellectual Property Office but has also received International Awards such as the CES Innovation Award and national awards such as the National Invention & Creation Awards, the Hsinchu Science Park R&D Accomplishment Award, and the Hsinchu Science Park Innovative Product Award numerous times. We hope to maintain steady growth in the number and quality of our patent applications. As of the end of 2019, we held 1,797 patents: 460 in the U.S., 750 in Taiwan, 536 in China, and 51 in other countries. Currently, we also have more than 320 patent applications being processed.

Numbers of Granted Patents and Patent Applications in the Last Three Years

	2019	2018	2017
Granted Patents	1,797	1,655	1,532
Patent Applications	320	314	327
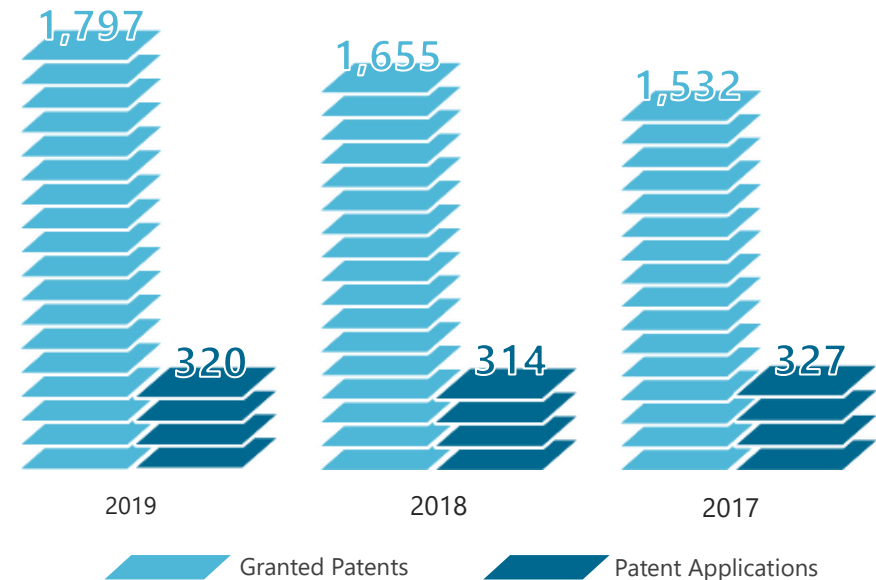
02 Perfecting Corporate Governance

Corporate Governance

Integrity Management

Risk Management

WNC values the legitimacy and transparency of its corporate operations. Therefore, we seek to perfect our corporate governance system so as to protect shareholders' interests and enhance stakeholder communications. In addition to complying with RBA regulations, we have also formulated Corporate Social Responsibility Best-Practice Principles, Corporate Governance Best-Practice Principles, Ethical Corporate Management Best-Practice Principles, and a Code of Ethical Conduct. Each functional unit in WNC has their own responsibilities in promoting and implementing corporate governance in accordance with WNC policy, and the implementation results are reviewed semi-annually. The Finance Division, the Legal & IP Center, the Human Resources Administration Division, the Quality Assurance Division, the Marketing and Corp. Communication Division, and the RBA Management Committee work together to closely monitor related international proposals and regulations to determine whether we need to update our management guidelines and operational procedures related to corporate governance. The foundation of WNC is a healthy and stable operations system, and we will continue to generate added value for our customers by implementing innovative ideas in our operations management, product development, market promotion, and internal operation procedures. In 2015, the Taiwan Stock Exchange (TWSE) and the Taipei Exchange (TPEx) began holding an annual Corporate Governance Evaluation, which evaluates corporate governance performance of all publicly listed companies in the previous year. Since the start of the evaluation, WNC has been rated in the top 20% among all publicly traded companies every year.

2.1 Corporate Governance

2.1.1 Organization Chart
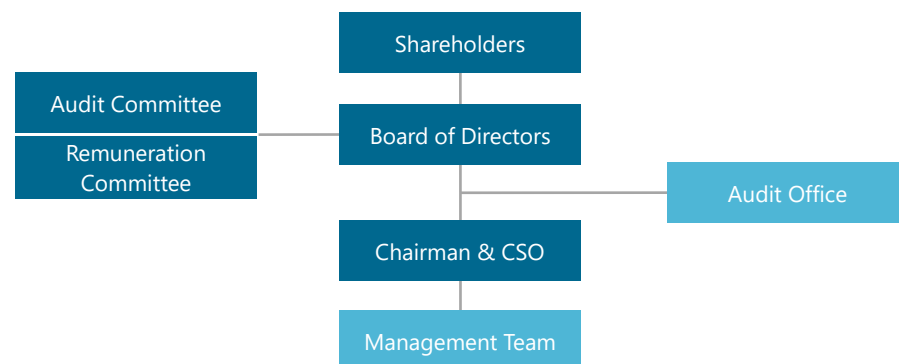
2.1.2 Board of Directors

In accordance with its Articles of Incorporation, WNC elects seven to nine directors for three-year renewable terms. A total of nine members of the ninth board of directors were elected at the 2017 Shareholders' Meeting; of the nine members one is female. All members are above the age of 50 and have the required business, legal, finance, accounting, significant work experience or professional qualifications. Three board members are independent directors that can give objective suggestions according to their professional fields to assist the Board to make the most beneficial decisions for WNC. To improve monitoring and strengthen management functions, an Audit Committee and a Remuneration Committee have been established under the Board of Directors.

The Board of Directors' responsibilities include overseeing the legitimacy of WNC's operations and ensuring financial transparency, approving the appointment, dismissal and remuneration of upper management, providing guidance to the management team on operational strategies, assessing the performance of the company as it pertains to issues such as the economy, the environmental, and corporate social issues, and approving CSR-related issues reported by the RBA Management Committee or related functional units. The management team also reports on the status of company

operations or other significant issues to the Board in order to provide information for reference in decision making.

Board of Directors Information

Name	Title	Gender	Areas of Proficiency		
			Industry/ Technology	Finance	Law
Haydn Hsieh	Chairman & CSO	Male	●		
Jeffrey Gau	Director, President & CEO	Male	●		
Frank F.C. Lin	Director, Wistron Co. Representative	Male	●	●	
Donald Hwang	Director, Wistron Co. Representative	Male	●		
Philip Peng	Director	Male	●	●	
Max Wu	Director	Male	●		
Robert Hung	Independent Director, Audit Committee Chairman, Remuneration Committee Member	Male	●	●	
Neng-Pai Lin	Independent Director, Audit Committee Member, Remuneration Committee Member	Male	●		
Karen Hsin	Independent Director, Audit Committee Member, Remuneration Committee Member	Female	●	●	●

Board Performance Evaluation

To implement corporate governance and enhance operational efficiency, the Board of Directors passed Regulations Governing the Board Performance Evaluation on March 14, 2018 to establish performance evaluations which are conducted at fixed annual intervals for the overall board of directors, functional committees and individual directors, with an evaluation period lasting from Jan. 1 to Dec. 31 of the same year. Evaluation results are reported to the Board of Directors in a Board of Directors meeting convened in the first quarter of the succeeding year and are disclosed in WNC's annual reports. The 2019 performance evaluation results for the board of directors and the functional committees were "exceeded the stated standard".

The directors' reasonable remunerations shall be determined based on WNC's overall operational performance, operational risks and development trends of the industry in the future, and the degree of their engagement and their contributions to corporate operations. The related performance evaluation and rationalization of the remunerations shall be audited by the Remuneration Committee and the Board of Directors and may at any time be reviewed based on practical operation conditions and the related laws and regulations in order to seek balance in continuous operations and risk control.

Overall Board of Directors ⬇	The administrative unit of the Board conducts performance evaluations of the Board (including the functional committees) based on assessment item scores: degree of involvement in corporate operations, quality of decisions, perception of responsibilities, governance structure of the Board (including functional committees), engagement in continuing advanced study, and internal controls.
Individual Board Members ⬇	Members of the Board of Directors conduct self-evaluations based on the overall evaluation, such as degree of mastery in advancing corporate goals and accomplishing tasks, perception of responsibilities, engagement in corporate operations, internal relationships management and communications, professional degrees and engagement in continuing advanced studies, and internal controls.
Report and disclosure	■ Evaluation results of the Board are reported to the Board in the first quarter. ■ The evaluation methods, their implementation, and the previous year's results for the Board (including functional committees) will be disclosed in WNC's annual reports.

2.1.3 Audit Committee

WNC has established an audit committee that meets prior to the Board of Directors meeting every quarter to monitor the execution of WNC's internal controls and important financial and sales behavior and to communicate and interact with CPAs in order to effectively supervise company operations and risk management. The audit committee's specialized division of duties and independent positions assists the Board of Directors in the execution of its supervisory capacity, raising WNC's financial standing and credibility. The audit committee is composed of all of the independent directors with at least one member having a specialization in accounting or finance. Terms of office are three years and are renewable. Currently, the committee has three members. Audit committee meetings are held at least once every quarter. In 2019, the committee met four times.

2.1.4 Remuneration Committee

WNC has established a remuneration committee, responsible for establishing and periodically reviewing the compensation policies, systems, standards, and structure of WNC's director's and management's compensation; as well as evaluating and deciding compensation terms. The compensation for WNC's directors is set according to the Articles of Incorporation (no more than 1% of the year's profits) and is paid in cash. The compensation package for each upper manager includes a fixed component of salary, bonuses, and benefits and a variable component of bonuses, dividends (cash/stock),

stock (restricted stock/treasury shares) and stock options. The fixed items aim to maintain the competitiveness of the company in the industry, and the variable terms are considered based on WNC's and the individual's performance. At the beginning of each year, the remuneration committee sets the assessment items, goals, and weightings, taking internal and external development into consideration. The compensation for managers is assessed based on personal performance and prevailing salary levels in the industry. The terms are evaluated by the remuneration committee and are reported to the Board of Directors for approval. Currently, the remuneration committee has three members; all are independent directors.

The remuneration committee meets at least twice a year. However, meetings can also be convened upon request. Committee members must invite the Board Chairman or CEO to attend the meetings. The members of the remuneration committee recuse themselves from meetings if issues to be discussed involve any personal interests of the members. The committee may also request directors, internal auditors, accountants, legal consultants, and other personnel to attend meetings and to provide them with pertinent and necessary information. In 2019, the committee met three times.

For more information concerning the Board of Directors, and the audit committee and remuneration committee, please refer to Chapter 3. Operational Highlights in the WNC 2019 Annual Report.

2.1.5 Audit Office

WNC has established, in accordance with the law, an Audit Office for internal controls, responsible for supervising internal control handling procedures, annual audits and review of improvement effectiveness. This independent unit reports directly to the Board of Directors and its authority extends to all operations of WNC and its subsidiaries.

The Audit Office coordinates the self-evaluation of internal controls based on the Regulations Governing the Establishment of Internal Control Systems by Public Companies. Furthermore, it regularly evaluates the applicability of self-assessment surveys, and ensures that self-assessment items cover all main operation procedures and can be adjusted in response to organizational restructuring. The Audit Office ensures that managers of different levels review and evaluate risks. In 2018, WNC adopted online self-assessment of internal controls.

Audits are conducted in accordance with a Board-approved audit plan based on identified risks; extraordinary audits may also be conducted when necessary. The supervisor of the audit office reports immediately existing deficiencies or potential risks to the relevant management, reports major issues to the Board of Directors regularly, or to the Chairman and audit committee at any time when necessary.

2.2 Integrity Management

2020 targets

Zero cases of regulatory violations and major lawsuits (referring to lawsuits exceeding NT$2,000,000 in amount or related to product trading)

2019 achievements

- Number of regulatory violations and major lawsuits is 0.
- Completion rate of courses requested in WNC ethics and anti-corruption code of conduct is 100%.
- Completion rate of self-evaluation questionnaire for compliance with the code of ethical conduct is 100%.

WNC adopts a "zero tolerance" attitude towards corruption. The company's Code of Ethical Conduct, Ethical Corporate Management Best-Practice Principles, and WNC Reporting and Handling Procedure clearly state WNC's policies for upholding integrity. All WNC subsidiaries and affiliates are required to uphold high ethical standards and follow the same corporate compliance guidelines, including anti-corruption legislation from around the world such as the Foreign Corrupt Practices Act (FCPA) and the UK Bribery Act of 2010. To create a fair competitive environment, the company and its subsidiaries meet their tax obligations and establish appropriate management systems; employees are required to avoid any behavior that creates unfair competition, and refuse to accept bribes. WNC has established an Integrity Office, charged by the Legal & IP Center to enhance integrity management operations ultimately determined by the Chairman. Starting in 2019, the top manager of the Legal & IP Center reports to the Board of Directors on a regular basis (at least once a year).

Due diligence

WNC also requires all new employees and major suppliers to sign the company's Code of Ethical Conduct committing to not offer or accept any bribes or illegal profits in any other form. We also annually require employees who directly deal with or exert substantial influence over customers, suppliers, and contractors (including high-level executives, sales personnel, PMs, and all employees of the purchasing unit, supplier quality management unit, general affairs unit and the facility unit, and department-level managers and above in the legal, MIS, and R&D units) to answer a self-evaluation questionnaire on compliance with the code of ethical conduct. In 2019, a total of 2,869 employees answered the questionnaire, for a completion rate of 100%. Each year the RBA Management Committee conducts risk assessment on labor and ethical risks across all major production sites. For 2019, the main risks and corresponding response measures are listed in the table below:

Country	Major Risks	Response Measures
Taiwan	Intellectual Property Rights	■ Employees must sign an agreement to protect the company's intellectual property rights ■ Customers and suppliers must sign NDAs
China	Improper profits	■ Employees and suppliers must sign WNC's Code of Ethical Conduct ■ Provision of a public email for reporting violations ■ Establish an Integrity Office to perform relevant investigations ■ Implement relevant measures in accordance with WNC's Procedures for Ethical Management and Guidelines for Conduct
Vietnam	Improper profits	■ Conduct self-evaluation questionnaire for compliance with the Code of Ethical Conduct and the WNC Ethics and Anti-Corruption Code of Conduct training course every year

Training and promotion

To boost employees' understanding and implementation of ethics and integrity issues, online and physical classroom courses are held from time to time, and updated promotional resources of our internal website are provided. In 2017, we began running the WNC Ethics and Anti-Corruption Code of Conduct online training course in Taiwan. This enables employees to understand how to make the right choices when company regulations conflict with social norms, enterprise interests, or personal interests, as well as what to do on discovering illegal activities. In 2019, we included employees at China and Vietnam sites in training and arranged compulsory training courses for new employees. By the end of 2019, a total of 7,421 employees had completed the WNC Ethics and Anti-Corruption Code of Conduct online course, a course completion rate of 100%.

WNC Ethics and Anti-Corruption Code of Conduct Online Course Outline

General Application			
■ Look up related laws and regulations	■ Ask managers for advice	■ Inform relevant departments	■ Follow your conscience
Act with Integrity	**Uphold Company Values**	**Respect Others**	**Care for Society**
■ Do not deceive others ■ Do not spread rumors or gossip about others ■ Do not steal intellectual property ■ Do not engage in corruption or bribery ■ Do not violate laws	■ Avoid conflicts of interest ■ Do not conceal opportunities ■ Do not make arbitrary statements ■ Do not divulge confidential information ■ Do not misuse company resources	■ No discrimination ■ No harassment ■ No abuse	■ Protect human rights ■ Promote fair trade ■ Maintain financial order ■ Cherish the Earth

Personnel, in a named or anonymous manner, report issues and provide relevant information.

The task force acts within seven days after receiving a report and completes a report of the investigation within one month. For serious cases, the report may be submitted within two months.

After completing the investigation, the task force proposes measures to address the issue to the CEO for a final decision. The task force will notify the reporting party of the conclusions following the decision of the CEO.

- WNC ensures that the identities of the reporting parties are kept secret and that they are not open to retaliation.
- WNC will not terminate or transfer any employee or cause any other unfavorable result due to their reporting an issue unless that employee has violated the law.
- Task force members and related members participating in the investigation ensure and maintain the confidentiality of the event throughout the entire investigation.
- The task force keeps a written record for the handling of the report, seals the record and keeps it in archive. It keeps the record together with a personnel profile for five years.

Grievance Mechanism

The public email for interaction on corporate social responsibility and reporting violations are provided for all stakeholders to raise issues or provide suggestions with regard to WNC's corporate social responsibility policies and practices and for employees and all pertinent parties to file complaints and report violations.

Email for interaction on corporate social responsibility public@wnc.com.tw	This email is provided for all stakeholders to raise issues or provide suggestions with regard to WNC's corporate social responsibility policies and practices.
E-mail for reporting violations wnc.integrity@wnc.com.tw	This email is provided for employees and all pertinent parties to file complaints and report violations in a named or anonymous manner.

In 2019, the mailbox for reporting violations received three appeal cases related to ethics and integrity, all of which were investigated, settled and closed by the Integrity Office. Other cases related to the management of each department were transferred to the respective departments for handling as none involved illegal matters.

The WNC Reporting and Handling Procedure stipulates handling procedures and operations to address violations. The Integrity Office and the Audit Office are tasked with establishing a task force to handle reports and perform investigations. The reporting procedures are described briefly as follows:

Number of Reported Cases in 2019

Appeal channel	Type	Reported	Confirmed[Note]	Closed	Under investigation
E-mail for reporting violations	Conflicts of interest	0	0	0	0
	Improper giftgiving, receiving, and bribery	3	3	3	0
	Improper use of company resources	0	0	0	0
Email for interaction on corporate social responsibility		0	0	0	0
WNC employee reported directly to management		0	0	0	0

Note: The reporting party provides relevant information regarding the reported case before the case is confirmed.

2.2.1 Financial Support

In 2019, Taiwan sites actively invested in R&D in adherence to government policies of "facilitation of industry innovation", "improvement of industry environment" and "increase in industry competitiveness." WNC estimates an investment tax credit of NT$40,000,000.

Financial Support Record for 2019

Country	Item	Unit of provision	Reason	Amount (Thousand NT$)
Taiwan	Investment tax credit	Industrial Development Bureau, Ministry of Economic Affairs	Statute for Industrial Innovation promoted [Note]	40,000
China	Grant	Kunshan City Financial Bureau	Grant for high-quality development advanced enterprises	4,309
	Grant		Jiangsu Province smart factory	8,618
	Grant	Kunshan City Human Resources and Social Security Bureau	Bonus for skilled-talent cultivation advanced units	90
	Incentive		Grant for electronic equipment assembly workers skill recognition program	246
	Incentive	Kunshan Municipal Commission of Economy and Informatization	Grant for automation equipment	1,505
	Incentive		Industrial technology transformation comprehensive fund	1,965
	Incentive	Kunshan City Employment Promotion Center	Grant for stable employment	471
	Taxable allowance	Kunshan City Tax Bureau	Return of corporate income tax and withholding tax	162
		State Taxation Administration	Exported goods' tax exemption, expenditure, and refund	147,404
			Total	**204,770**

Note: The amount of the investment tax credit under the Statute for Industrial Innovation is an estimated value; the actual amount is the amount approved by the National Taxation Bureau according to the application of the tax-credit plan submitted by WNC.

2.2.2 Respecting Market Mechanisms

We believe healthy market competition will enhance the quality and efficiency of the corporation as well as ensure consumer rights. It also facilitates the stability and prosperity of the overall economy. Therefore, we strictly abide by related government and industry laws. To help maintain a healthy market mechanism and structure, we will never adopt unfair, anti-competitive behaviors. In 2019, there were no lawsuits against WNC related to anti-competitive or anti-trust behavior.

WNC remains politically neutral. Employees are encouraged to fulfill their civic duty, but refrain from doing the following in the name of WNC: participate in political electioneering or make any political contributions. No political contributions were made by WNC in 2019.

2.2.3 Regulatory Compliance

Since WNC's founding, it has implemented internal regulations in accordance with applicable national laws of each operational location in order to guide its employees, managers, and the Board of Directors. WNC is also mindful of the relevant authorities, relevant international or domestic laws, and trends in investment and business scope and modifies its policies concerning environmental protection, occupational safety and health, anti-bribery/corruption, anti-harassment/discrimination, fair competition, import and export, internal control, information security, intellectual property, and welfare assistance accordingly.

To enhance service quality of value chains and execute social responsibilities, WNC also requires that suppliers hire employees in accordance with international and local regulations, follow the ISO 14001 Environmental Management System and the OHSAS 18001 Occupational Safety and Health Management System, and actively build a healthy work environment to minimize hazards to safety and health in production, operations, and disposal processes.

In 2019, WNC did not violate any local regulations, and did not have any major recorded lawsuits (referring to lawsuits exceeding NT$2,000,000 in amount or related to product trading).

2.3 Risk Management

WNC controls risks related to business operations through its existing administrative organization and internal control mechanisms. Business groups and function teams perform risk assessment in the execution of their duties and develop management strategies and reaction plans to prevent, lower, or transfer risks. Managers from each team meet weekly to review potential internal and external operational-related variables and analyze the threats and opportunities they present. These variables include the overall economy, industry and technology, customers and markets, supply chains and internal personnel, and issues related to operational procedure. Furthermore, after careful evaluation of all aspects, if the item is a potential threat to WNC's operations, it will be designated as a significant risk. Adjustments will be made for items with significant risks throughout any period of change in the internal and external environment. In addition to implementing risk control measures proposed by different function team managers and department heads, strengthening internal risk control mechanisms continuously, and improving emergency response and recovery capabilities, we also seek to learn and cooperate with our suppliers to assist each other in enhancing our resilience to various types of risks and respond to the ever-changing business environment.

Looking back at 2019, political confrontation between countries and regional economic integration intensified. Extreme weather and natural disasters caused by global warming are becoming more frequent. They also undermine the long-term health and survival of humans as well as natural ecosystems. The COVID-19 outbreak that began at the end of 2019 has since swept the globe, exacting a high toll on the global economy as well as social stability. Risk in many aspects have been and will continue to exist in unprecedented and unpredictable ways. We've identified the following operational risks based on the items listed in the 2019 Global Risk Report published by the World Economic Forum as more relevant to business operations, including extreme weather events, actions taken in response to climate change, major natural catastrophes, water crisis, and large-scale cyber attacks. WNC's response measures to the aforementioned risks are described as follows:

2.3.1 Financial Risk Management

WNC's business focuses on R&D, manufacturing, and product sales. The company does not engage in high-risk or highly leveraged investment activities. WNC invests funds after considerable evaluation of the risks involved while closely watching changes in bank lending rates on a regular basis. Approximately 96.75% of WNC's revenue in 2019 was from export sales, and most of the export-sales amounts are quoted in U.S. dollars. Most of the material-purchasing amounts are also quoted in U.S. dollars. Therefore, the majority of our foreign currency operating exposure can be offset. In addition, WNC adopts regular hedging activities to manage foreign exchange risk under proper risk-management guidelines. For remaining situations involving foreign currency operating exposure, the foreign currency is converted to NT dollars depending on funding needs and market conditions. WNC's action plans to cope with the impact of changes in interest rates, exchange rates, and inflation are:

Further mutual offset of foreign assets and liabilities to avert risk;

■ Making plans and arrangements in advance for fund yields and borrowing costs in light of WNC's anticipated business and funds requirements; and

■ Using auxiliary tools (such as derivative financial products) to reduce risk under proper risk guidelines.

Please refer to Chapter 1.2 Operational Performance for financial performance.

2.3.2 Business Risk Management

WNC complies with government decrees and regulations and adjusts its internal policies to cope with changes to laws to ensure the lawful operations of WNC. Shareholder meetings, financial reports, and CSR reports are held or published regularly to disclose WNC's operational status and information. As a corporate citizen, WNC has long devoted resources to developing green products and taking part in activities to improve social welfare. To better secure customer and shareholders' rights and react in a timely manner to the rapidly-changing communications industry, WNC performs overall risk and efficiency assessments when introducing new materials, new technologies, and new equipment and aims for sustainable development to enhance total value of products through competitive quality, development speed, and cost. With strict control of expenses, operational costs and risks can also be well managed.

Market Trends

In response to changes in the politico-economic climate in Europe and the United States, as well as changes in the industry's value chains and fluctuations in corresponding markets, WNC continues to observe and respond to market trends. The Marketing and Corporate Communication Division observes and analyzes global politico-economic changes as well as industry trends. The Legal & IP Center is responsible for tracking changes in related laws and regulations at fixed intervals and arranging response

measures accordingly. Business units get a clear understanding from upstream and downstream suppliers, and carry out real time analysis and formulate countermeasures based on their understanding of changes in industry value chains. They respond to changes in time and alleviate the impact of sharp changes in the role WNC plays in the market.

Disaster Risks

Taiwan's location in the subtropical zone and at the junction of the Eurasian Plate and the Philippine Plate makes it prone to natural disasters. WNC seeks to ensure quick recovery of operations through rapid response to accidents or disasters (including fires, earthquakes, typhoons, power failures, explosions, leaking of chemical solvents, food poisoning, and other events that may cause damage and loss of lives and property, or any emergency that prevents instant recovery of production). This is essential to ensure employee safety and to reduce the impact and loss that these incidents may cause to the environment, to WNC, or to our customers. WNC has therefore established a Significant Environmental Aspect Identification Management Procedure and a Hazard Identification and Risk Assessment Management Procedure to assess and manage all manner of incidents that may occur in WNC due to natural or man-made disasters. In addition, the contingency teams' structure, member responsibilities, and related procedures are defined based on a Contingency Plan Control Procedure. Our top priority is to ensure the safety of employees, prevent and control the occurrence of incidents that may interrupt operations as much as we can, and strive to minimize the overall time and cost spent on emergency response and post-disaster recovery. In 2019, WNC did not suffer any injuries or property damage caused by natural or man-made disasters, including terrorist attacks or labor disputes.

Supply Chain Disruption

To avoid supply chain failures or production interruptions all of our BUs/BGs, in conjunction with the Global Supply Chain Management Division, each production site, the Quality Assurance Division, the Human Resources Administration Division, and the Department of Industrial Safety, formulate a Business Continuity Plan based on customer requirements. The Plan includes appropriate purchasing, production, and logistics preventive measures and solutions for potential risks and hazards that could cause interruptions to normal business operations and is adjusted based on the external environment, actual production and raw-material requirements.

The Global Supply Chain Management Division prepares policy-related materials under WNC's internal management stipulated Procurement Management Procedure. Apart from emergency procurement from secondary sources, WNC adopts a dual source

strategy to cope with changes in material markets and to reduce the risk of production interruptions while waiting for materials. In 2019, WNC's Taiwan and China sites did not experience any interruptions to the supply of raw materials or production interruptions.

WNC (Taiwan) has obtained Authorized Economic Operator (AEO) certifications. This not only enhances import and export efficiency, but also, through cooperation with customs personnel and mutual admissions between countries, we help contribute to global trade security and to prevent terrorism and criminality that endangers the security of international supply chains.

Information Security

To ensure security of company and customer confidential information (including trade secrets and intellectual property rights) WNC has instituted an Information Security Policy and SOP, and has obtained ISO/ IEC 27001 certifications for WNC headquarters, S1 in Hsinchu, S2 in Tainan, V1 in Vietnam, and WNC's sites in China, the U.S., and the U.K. In addition, related units conduct ISO/IEC 27001 (Information Security Management System, ISMS) annual internal and external audits, risk assessment, and business impact analysis, IT system recovery drills based on the Business Continuity Plan, introduce and formulate control mechanisms and preventive measures, plan for and execute IT security policies, awareness programs, and training courses. These approaches aim to enhance employees' security awareness and strengthen WNC's overall information security management system to build an effective IT security safety net and an integrated structure to boost our core IT system utilization rate.

To meet WNC's business requirements, the Digital Management Information Systems Division has also developed an R&D Cloud for centralized storage and control of WNC's R&D data, providing employees with a safe and secure space for information access and exchange. WNC treats suppliers as important partners. We require suppliers to sign a confidentiality agreement and carry out an information security check. We share experiences with suppliers and formulate review and improvement plans. We hope to help suppliers adapt to and observe regulations on information security management.

Please refer to Chapters 5.2 Supplier Management and 5.1.1 Confidential Information Protection for the major work items and content of supply chain management and information security.

2.3.3 Human Resources Risk

Trends such as an ageing population and declining birth rate have resulted in a falling global labor force. The rapid development of new technology and applications have also put a strain on the supply of manpower as well as creating employment gaps across industries. To address the labor shortage that WNC faces, we have implemented industry-academia partnership programs with universities and colleges to develop talent. For employees, we provide on-the-job training and incentives to encourage employees in pursuing further studies so as to retain talent. Please refer to Chapter 3 Developing Human Capital for our human resources management focus and tasks.

2.3.4 Climate Change Risk Management

Unusual climate trends, including rising global temperatures, are caused by climate change. They bring a range of challenges to the sustainability of corporations by affecting normal business operations and production activities, causing property losses and threatening the health and safety of employees. Global corporations as well as their entire supply chains will need to confront these challenges and improve their ability to respond quickly to climate change and resolve related issues. WNC discloses the risks and opportunities brought on by climate change based on the Task Force on Climate-Related Financial Disclosures (TCFD) guidelines and evaluates possible impact for WNC and financial effect so as to implement related countermeasures thus enhancing WNC's adaptive capacity.

WNC has implemented a climate change response through greenhouse gas inventories and a number of energy conservation and carbon reduction measures. (For details, please refer to Chapter 4 Cherishing Natural Resources of this Report.). Management methods and costs in 2019 are listed in the table below:

Climate Change Adaptation

Project	Management Methods		Management Costs in 2019 (NT$)
Environmentally-friendly products	■ Introduction of hazardous substance management standards ■ Development of energy-efficient and low-pollution products ■ Use of forest-friendly packaging materials	IECQ QC080000 certification fee	457,800
		Green product testing fee	1,492,890
		FSC™ CoC certification fee	60,672
Analysis of energy efficiency	■ Introduction of energy management system ■ Introduction of energy supervision system ■ Promotion of energy-efficient programs	ISO 50001 certification fee	244,736
		Energy supervision system establishment and maintenance fee	388,481
		Energy conservation project	2,162,250
		Purchase of products with green marks	46,344,740
Greenhouse gas emissions reduction	■ Introduction of greenhouse gas inventory management system ■ Adoption of renewable energy	ISO 14064-1 certification fee	328,686
		Solar energy system construction and maintenance fee	0
Implementation of waste reduction	■ Recycle and re-use of waste	Waste disposal fee	4,159,153

Climate Change Risks

Risk Type	Aspect	Potential Impact	Potential Financial Effect
Transition Risk	Regulations	Enterprises are required to adopt national GHG emission control goals and take responsibility for carbon reduction.	Cost of compliance increases and has a direct impact on financial costs.
	Technology	WNC actively develops green technology and low-carbon products to take the lead in the market and maintain a competitive advantage.	Supply chains adjusted, and production method equipment, and processes modified leading to increased operating costs.
	Market	■ Governments foster the development of green industry, seek a business model for coexistence of economic development and environmental protection, and stipulate the product specifications of material and energy consumption, which have become stricter. ■ Market demand is unclear.	■ The production costs including the material/part costs, and design/certification costs increased. ■ The existing need for some products and services decreased due to shifting customer demands.
	Goodwill	Enterprises fail to respond to the expectations and requirements of stakeholders on climate change issues.	Investors are less likely to participate in public investment. Enterprises will lose customers or orders will be withdrawn.
Physical Risk	Immediate	Typhoons, droughts, floods, tsunamis and occurring due to extreme climate change as well as collateral infectious diseases reduces or interrupts productivity.	Physical disasters leading to loss of life and property.
	Long-term	Global warming, sea level rises and unstable rainfalls cause food crises and interruption of ecological balance.	Imbalance of supply and demand for energy and resources causes increase in production costs.

Climate Change Opportunities

Opportunity Type	Potential Opportunity	Potential Financial Effect
Resource efficiency	Carbon and waste reduction measures can be implemented, such as process optimization and energy conservation, and enhancement of waste reclamation and wastewater recycling.	Energy conservation and carbon reductions are implemented continuously. Efficiency of energy and resource use is increased.
Energy source	Innovative processes and superior technologies can be invested in. Highly efficient and low pollution equipment can be adopted to build green factories.	Automation and AI are implemented in production. Product yield and production efficiency is enhanced. Operating costs are reduced.
Product and service	Eco-friendly products have become the market trend. Green design can be implemented to reinforce product advantages. Innovative products or applications can be extended.	Customer trust is gained. Green or low-carbon products are developed. Long-term strategic partnerships are built.
Market	The Executive Yuan, R.O.C. has implemented a Green Finance Action Plan to promote the financial markets to support enterprises adopting low-carbon and sustainability policies.	Investors among the public are more willing to invest in enterprises nominated for the CSR Index. Therefore, capital acquisition costs are decreased for these enterprises.
Durability	■ Enterprises should use renewable energy and seek alternative energy solutions. ■ Enterprises should reinforce disaster recovery, including remote backup and emergency response measures, to enhance their durability to climate change.	■ The use of energy and resources is diversified to enhance the operational continuity of the enterprise. ■ The stability of the supply chain and operating ability under different conditions are enhanced.

2.3.5 Infectious Disease Risk Management

In recent years, a number of novel viruses have emerged, spreading rapidly around the world along with increasing flows of people and goods. In addition to severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS), the Ebola virus, and African swine fever, in 2020, a novel coronavirus that would lead to the current COVID-19 pandemic posed an unprecedented threat to the global economy and mankind as a whole. WNC was able to identify unpredictable and uncontrollable risks during the COVID-19 epidemic. As a corporate citizen, our priority has always been to protect the health and safety of our employees. As a result, we established an epidemic prevention command team over Chinese New Year to coordinate response efforts and comply with government policies. The command team also formulated relevant management and contingency plans for different alert levels, and implemented them successively in all WNC sites.

To minimize the impact of COVID-19 on our operations and production, we set up our sites in Taiwan and Vietnam as production backups for China sites and initiated a backup plan for material supply chains, including looking into and analyzing the resumption rate of the China supply chain and following up on the supply status of key materials. During the manufacturing order expansion period, we examined supply shortage situations, actively introduced second-source materials, sought non-Chinese suppliers and adjusted global material logistics measures, and we also introduced the following epidemic prevention control procedures and measures.

Epidemic Prevention Control Process

Establish an organizational structure for implementing control measures

Formulate control measures at each organizational level

Implement control measures in accordance with the situation at each site

Resume normal controls

Epidemic Prevention Command Team
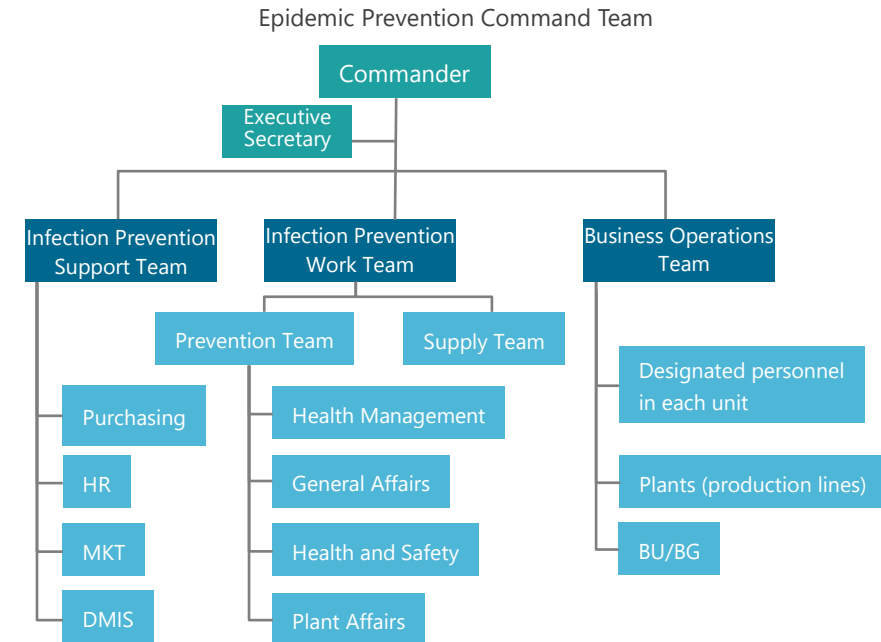
Epidemic Prevention Management Principles and Key Measures in WNC's Taiwan Sites

| Core Policy | Our epidemic prevention and control measures are continually updated based on the information provided by the Taiwan government's Central Epidemic Command Center. |

1 Personnel entry/exit controls

2 Strengthen personnel health and safety

3 Improve cleaning and disinfection of company facilities

4 Reduce number of group activities

5 Closely monitor health of employees

6 Business Continuity Plan
- Prepare a plan for distributed operations and remote work
- Prepare a response plan to handle suspected or confirmed infection cases

03 Developing Human Capital

Respect for Human Rights

Recruitment and Employment

Overall Remuneration

Training and Development

Employee Care

WNC promises to: comply with international human rights standards such as the UN Universal Declaration of Human Rights, the Ten Principles of The UN Global Compact, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, and the RBA Code of Conduct; abide by labor laws and national Acts such as the Act of Gender Equality in Employment; and adhere to principles of respect for human rights to employ appropriate talent for corresponding positions. We will not consider an individual's gender, age, ethnic background, nationality, religion, marital status or political affiliation as an advantage or disadvantage during evaluation. We check, adjust, and formulate a reward distribution system that is competitive across the industry, and commit to establishing a credible, healthy, and safe working environment by performing internal OHSAS 18001 audits and verification by a third party annually to ensure workplace safety and health conditions meet international standards. In addition to promoting human rights and related regulations in new and current employee training courses, we also investigate actual working conditions to ascertain any issues relating to child labor, underage labor, forced labor, sexual harassment, labor relations, and prohibitions on expressions of free will according to our customers' requests. WNC did not receive any complaints regarding violations of human rights or discrimination in 2019.

Achievements in 2019

Happy Workplace

- 19 arts-and-crafts DIY classes were held, and 1,057 employees participated in the classes.
- Four courses each of aerobics, muscle strength training, yoga, and other exercise courses were held at WNC in 2019, with each course containing ten classes. A total of 711 people participated in these courses.

Salary and Benefits

- The ratio of minimum WNC employee salary to minimum legal salary ranges from 1 to 1.26.
- The rates of male and female employees reinstated from parental leave in 2019 were 100% and 69%, respectively.

Healthy Workplace

- In 2019, 1,536 WNC employees and personnel stationed at WNC sites received free quadrivalent influenza vaccinations for an inoculation rate of 33.1%. Expenses related to vaccination work amounted to NT$930,000.
- 279 employees called the free Employee Assistance Program hotline for consultation, and 33 used the face-to-face professional consultation service.

Employee Communi-cation

- WNC received a total of 1,314 proposals and discussion items from employees in 2019, all of which were resolved and reported to the proposing parties.
- A total of 83 employee forums were held, and 2,107 employees attended the forums.

Employ-ment Promotion

- As of the end of December 2019, there were 11,186 full-time employees at WNC, which is a 12.7% increase from 2018.
- 2,435 new employees were hired at WNC's Taiwan sites, and 18,802 new employees were hired at subsidiaries in China.

Talent Cultivation

- In 2019, WNC employees underwent an average of 24.7 hours of training, and expenses related to employee training amounted to NT$ 10.74 million.
- WNC worked with National Tsing Hua University, National Taipei University of Technology, Minghsin University of Science and Technology, and Chung Hua University to organize industry-academia collaboration programs. A total of 109 students participated in these programs in 2019.

3.1 Respect for Human Rights

3.1.1 Abolition of Child Labor

In accordance with regulations, WNC does not hire workers below the legal working age, and WNC (Taiwan) and WNC's sites in China do not hire workers below the age of 16. The WNC RBA Code of Conduct Manual prohibits the hiring of child workers, and WNC's Management Measures on Hiring New Employees and Operational Guidelines for the Recruitment of Underage Workers stipulate that when new employees report to work, they should submit identification documents to WNC for review to ensure that they are at least 16 years of age. No child workers were employed at WNC (Taiwan) and WNC's sites in China in 2019.

3.1.2 Protection of Juvenile Workers

WNC supports the effort of the vocational education system in bridging the gap between theoretical and practical needs of job operations. Since 2002, WNC (Taiwan) has cooperated with the Department of Computer Science and Data Processing of Dong Wu Senior Industrial Home Economics Vocational High School in a long-term cooperative education program, which provide students with the chance to experience working on production lines so as to learn related skills. In accordance with The Act of Cooperative Education Implementation in Senior High Schools and the Protection of Student Participants' Rights, workers 16 to 18 years of age may be placed if they are technical students receiving vocational training. However, they are not allowed to engage in heavy work or in any work of a dangerous nature. These interns may not work at night and on holidays, and working hours must comply with relevant regulations. In addition, WNC also strengthens some aspects of workplace discipline for the underage participants of the cooperative education program to guarantee their physical and mental development and labor rights. In 2019, a total of 112 students from Dong Wu Vocational High School participated in co-operative education programs on WNC production lines, all were aged between 16 and 18 years old. Additionally, WNC cooperated with Dong Wu Vocational High School in a Vocational High School Employment-Orientation Program and arranged internships at WNC factories for 12th grade students. A total of 22 students participated in the internships, including seven students aged 16–18.

3.1.3 Elimination of Forced Labor

All WNC sites comply with international standards and local acts, including the California Transparency in Supply Chains Act of 2010 and the UK Modern Slavery Act 2015. WNC provides good working conditions and establishes reasonable working hours. WNC has no right to request employees hand over their ID cards, passports, or work permits to WNC. All duties are set with respect to employees. All employees are employed out of their own free will and have the right to leave. The WNC Supplier Code of Conduct forbids forced labor, and we will continue to apply this code of conduct to all suppliers. In 2019, WNC issued a WNC Modern Slavery Statement to represent that WNC and its suppliers do not have policies, management practices or related measures that involve slavery or human trafficking.

WNC has been working on improvements by strongly advocating on-time daily work cessation, and keeping working hours under control. The "working-hour alarm system" and "seven straight working days notification system" automatically notifies employees and their supervisors if they work overtime or work for seven days straight. We also provide a monthly report on unusual working hours to the supervisor at the beginning of the month to convey overtime issues and to remind supervisors to pay attention to the working conditions of subordinates. In 2019, regulations regarding overtime hours were communicated at the quarterly meetings with shift leaders and as well as at labor-management meetings.

3.1.4 Gender Equality

According to the Labor Standards Act and the Gender Equality in Employment Act, in order to promote gender equality, and to avoid gender and pregnancy discrimination, WNC Taiwan's female employees can apply for menstrual leave, pregnancy checkup leave, maternity leave, miscarriage leave, and additional breastfeeding breaks. Male employees may apply for paternity leave according to personal needs. All employees who need to care for infants can apply for unpaid paternal or maternal leave (parental leave). WNC will inquire as to the employee's intention to return to work one month before the end of parental leave and assist in their return.

Number of WNC employees in WNC (Taiwan) applying for parental leave

Item	Male	Female
Number of employees entitled to unpaid parental leave in 2019[Note] (A)	101	52
Number of unpaid parental leave applicants in 2019 (B)	1	25
Rate of unpaid parental leave applicants in 2019 (B/A)	1%	48%
Expected number of employees reinstated from parental leave in 2019 (C)	1	29
Actual number of employees reinstated from parental leave in 2019 (D)	1	20
Rate of employees reinstated from parental leave in 2019 (D/C)	100%	69%
Actual number of employees reinstated from parental leave in 2018 (E)	4	15
Number of employees working for one year since returning from parental leave in 2018 (F)	2	13
Retention rate in 2019 (F/E)	50%	87%

Note: Number of employees applying for maternity leave or paternity leave during 2017–2019

In 2019, 45 employees in Taiwan applied for unpaid parental leave, 44 of whom were female and one of whom is male. Currently, parental leave is not regulated in China. All plants in China comply with the Special Rules on the Labor Protection of Female Employees in providing paid pregnancy checkup leave, maternity leave, miscarriage leave, and additional breastfeeding breaks to help female employees maintain a balance between work and family. If Women's Day (March 8) falls on a weekday, female employees may have a 4-hour compensatory leave, or may apply for a 4-hour overtime pay if it falls on a holiday.

At WNC's sites in Taiwan and China, in addition to complying with regulatory requirements, we also have the following measures in place to cater to the needs of pregnant and breastfeeding employees as well as those who need daycare services.

WNC's measures for pregnancy and breastfeeding employees as well as those who need daycare service

Taiwan	China
■ Maternity Care project: Facility nurses care for pregnant and breastfeeding employees and work with on-site physicians, nurses, industrial safety personnel and female employees' managers to assess their work situation during pregnancy and after giving birth to ensure that the physical and mental state of employees concerned are not affected. ■ Goodie Bag for WNC Moms project: An employee during their pregnancy or an employee with a pregnant wife is eligible to apply for a pregnancy guidebook, a free diaper bag, and a gift box of goods for the newborn. WNC gave out 129 Goodie Bags in 2019. ■ The breastfeeding room at WNC headquarters won the Excellent Breastfeeding Room Certification Campaign organized by the Hsinchu County Government in August 2016. The breastfeeding room at S1 obtained Distinguished Breastfeeding Room accreditation from the Hsinchu City Government in August 2017. ■ In 2019, WNC signed special agreements with 29 daycare centers in Hsinchu City, Hsinchu County, Taoyuan City, and Tainan City to provide discounts to WNC employees.	■ In accordance with the population planning and fertility policy of Jiangsu Province, female employees who place or remove IUD may apply for two days of rest leave; those who undergo tubectomy or tubal reversal surgery may apply for 21 days of rest leave. Male employees who undergo vasectomy and recanalization surgery may apply for seven days and 14 days of rest leave respectively. ■ Comfortable and spacious breastfeeding rooms are provided in WNC's sites in Kunshan. In 2018, the breastfeeding room received certification for breastfeeding rooms from the Kunshan City Government.

3.1.5 Communication Mechanisms

Two-Way Internal Communications

WNC not only provides a variety of open and transparent communication channels but also continually strengthens bi-directional, real-time communication with employees. To devote more attention to employee working conditions and strengthen employee relations, WNC (Taiwan) has established an Employee Representative Committee. The members of this committee, which are elected regularly from all employees, function as a feedback channel for colleagues to raise workplace-related issues. They deliver opinions to the management team and reply to employees' concerns and suggestions after thorough consideration. Committee meetings are held quarterly. Senior employee representatives are appointed (with their consent) to concurrently serve as labor representatives and participate in labor-management meetings to discuss and vote on related issues. In 2019, four committee meetings were held at both WNC headquarters and at S1, and three committee meetings were held at S2. 186 proposals were discussed, including 24 employee meal service items, 41 employee welfare items, 107 working environment items, and 14 PC/IT issues, and all these proposals were subsequently closed by Q1 2020. In 2019, the Employee Representative Committee of WNC (Taiwan) received a rating of 4.4 (out of 5) in a satisfaction survey.

Given their different working hours and duties, production line employees of Taiwan sites send representatives to participate in the Employee Representative Committee Meeting each quarter and convene the quarterly Plant Manager's Forum and Supervisor's Forum to address the different requirements of DL employees and supervisors. The meetings were chaired by the Plant Manager in Hsinchu and Tainan for promoting company policies, facilitating communications, and the sharing of successful project improvements. Comments and issues for discussion are solicited in an open manner prior to the meetings. If there are no issues to be discussed for a given meeting, it will be postponed. In 2019, a total of five plant manager forums were convened and no issues were received. A total of 18 supervisor forums were held in 2019, one item was proposed, and was subsequently closed. In addition, suggestion boxes are installed in the production-line lounge for production line employees to directly report issues or suggestions to the plant manager related to work and quality of life. The plant manager will perform investigations and/or make improvements in response to the reported issues and announce the handling status and results on the production-line bulletin board. The identities of the reporting parties and any party being investigated are kept secret. In 2019, we received and addressed 35 issues reported using the suggestion box.

The suggestion boxes provided in the production line areas, office areas, and the dormitories in WNC's sites in China are the major communication channels providing employees with consultation services to assist employees in resolving issues. The plant manager's email address and an 8585 hotline are also available. WNC (Kunshan) has also established a communication mechanism on the WeChat messaging platform which enables automatic announcement of activities related to WNC and on-line consulting. This provides both internal and external stakeholders in China with a fast and convenient communication channel. In 2019, there were 1,092 proposals received in WNC's sites in China regarding company policy, adapting to work, and life issues, all of which were resolved and reported to the proposing parties.

Cases Received through Various Communication Channels in WNC in 2019

	Communication Channel	No. of cases	No. of Cases Handled	No. of Cases Closed
Taiwan	Employee Representative Committee	186	186	186
	Plant manager's forum	0	0	0
	DL Supervisor's Forum	1	1	1
	Suggestion Box	35	35	35
	Subtotal	**222**	**222**	**222**
China	Trade Union Committee	0	0	0
	Employee Representative Forum	128	128	128
	8585 Employee Care Hotline	507	507	507
	Suggestion Box	10	10	10
	Letter to the Plant Manager	0	0	0
	WeChat platform	447	447	447
	Subtotal	**1,092**	**1,092**	**1,092**
	Total	**1,314**	**1,314**	**1,314**

Forums Held in 2019 at Various WNC Sites

Country	Item	Audience	No. of Events Held	Attendance
Taiwan	New recruit afternoon tea	New employees	27	393
	New recruit seminar	New employees	9	319
	A Talk with the CEO forum	WNC employees	11	187
	Plant Manager's forum	IDL employees	5	354
	DL Supervisor's Forum	Production line supervisor	18	324
China	Trade Union	Union representatives	3	240
	Employee Representative Forum	Employee representatives	10	290
	Total		**83**	**2,107**

Employee Seminar

A new recruit afternoon tea is held once a month in WNC (Taiwan) to answer questions from new employees who have been employed for one month and to assist them to acclimatize to the workplace environment and build mutual communication with their colleagues. In addition, the Organization & Talent Development unit hold a new recruits seminar at the end of employees' first three months of service. We guide new employees to experience our corporate culture through group contests. New employees take part in team-building exercises so as to build trust and develop a group learning model. WNC's CEO responds in person to any concerns of new employees. This seminar helps new employees quickly become familiar with company policies and strategic direction. Since 2018, the Organization & Talent Development unit has hosted a quarterly "Talk with the CEO" forum, in which employees who have performed outstandingly are invited to meet with the President & CEO to ask questions or raise proposals.

WNC's sites in China and serve a 3-year term. They convene meetings and participate in conferences, training, and activities held by the government depending on actual needs. In addition to the union representatives, each department also has employee representatives that are selected by department managers. The employee representatives meet at least once a year during the Employee Representatives Forum, where employee representatives from each department engage in face-to-face communications with WNC's high-level management, enabling employee representatives to reflect upon issues or provide suggestions about wages and life's basic necessities.

Employee Complaint Channel

A Mailbox for Reporting Violations is established on WNC's website. Employees may report any violation of the company's or employee's rights through this mailbox. A task force handles and investigates reports based on the WNC Reporting and Handling Procedure. Refer to Chapter Grievance Mechanisms or the Integrity Management on WNC's Website for reporting and handling procedures in detail. Production line employees can report issues through the Suggestion Box. In 2019, one complaint regarding potential workplace bullying was received in the suggestion box. After investigation and mediation by the Human Resources Administration Division, the employee who filed the complaint was transferred to another department. No similar incidents have occurred since then.

To prevent workplace sexual harassment and ensure a friendly workplace for both male and female employees, the Human Resources Administration Division in Taiwan has established Measures for the Prevention and Punishment of Sexual Harassment in the Workplace. These measures address the prevention, correction, complaint handling, and punishment of sexual harassment in the workplace. The Human Resources Administration Division has established a complaints channel for sexual harassment. In 2019, we did not receive any complaints of sexual harassment.

In view of the differing cultural and administrative requirements, WNC's sites in China implemented Regulations on Filing and Handling of Internal Complaints. The Kunshan Human Resources Center is responsible for receiving, investigating, handling, reporting, and offering feedback on all complaints from all employees and pertinent parties, and responsible for the management of the daily operations of the reporting mechanisms. Employees at Kunshan may file complaints and reports regarding various issues, such as sexual harassment, with the Human Resources Center. Employee representatives and the employee union are responsible for monitoring the methods that WNC use to handle such complaints and reports. In 2019, no complaints were received at the Human Resources Centers in the Kunshan sites.

New recruits afternoon tea

New recruits seminar

A Talk with the CEO forum

3.2 Recruitment and Employment

WNC follows the recruitment principles of "respect for human rights" and "employing people according to their abilities." WNC's entire recruitment process conforms to the Labor Standards Act, Employment Service Act and the Gender Equality in Employment Act. Professional ability is the key factor in our recruitment processes. All participants have an equal opportunity to display their capabilities in an open and transparent recruitment process. Personnel from the recruitment affairs unit also regularly participate in diverse training programs on interview skills and the use of specialized evaluation tools for fair and effective recruitment.

3.2.1 Human Resource Structure

As of the end of December 2019, the total number of employees worldwide was 11,414, including 11,186 full-time employees (9,715 permanent employees and 1,471 contract employees), 6 part-time employees, and 222 dispatch employees. Due to the establishment and operation of the Tainan and Vietnam sites in 2019, the number of full-time employees hired in 2019 rose by 12.7% compared to 2018.

WNC Employee Totals in 2019

Category		Taiwan			China			Vietnam			Other Areas[Note 1]			Total		
		Male	Female	Subtotal	Male	Female	Subtotal	Male	Female	Subtotal	Male	Female	Subtotal	Male	Female	Subtotal
Full-Time	Permanent Employees	2,222	1,567	3,789	3,992	1,887	5,879	0	0	0	30	17	47	6,244	3,471	9,715
	Contract Employees[Note2]	46	841	887	0	0	0	317	264	581	3	0	3	366	1,105	1,471
	Subtotal	**2,268**	**2,408**	**4,676**	**3,992**	**1,887**	**5,879**	**317**	**264**	**581**	**33**	**17**	**50**	**6,610**	**4,576**	**11,186**
Part-Time[Note 3]	Student internships	4	2	6	0	0	0	0	0	0	0	0	0	4	2	6
Dispatch Employees		34	25	59	0	0	0	99	64	163	0	0	0	133	89	222
	Total	**2,306**	**2,435**	**4,741**	**3,992**	**1,887**	**5,879**	**416**	**328**	**744**	**33**	**17**	**50**	**6,747**	**4,667**	**11,414**

Note 1: "Other Areas" includes branches in the United States, the United Kingdom, and Japan.
Note 2: Contract employees at WNC's sites in Taiwan include foreign migrant workers, cooperative-education students, interns, and general contract employees; the Vietnam site was built in 2019, when all personnel were hired on a contract basis. They will become full-time employees based on their job duties.
Note 3: WNC's Taiwan sites work with high schools and universities in Taiwan and abroad to provide students with part-time job opportunities. A total of 6 part-time student interns were hired.

Categories of Full-Time Employees at WNC
- Taiwan 41.1%
- China 51.7%
- Vietnam 6.8%
- Others 0.4%
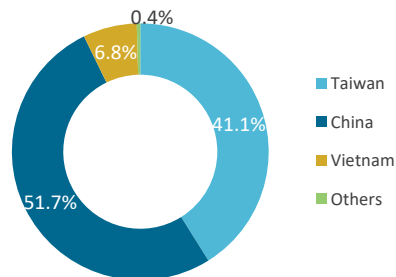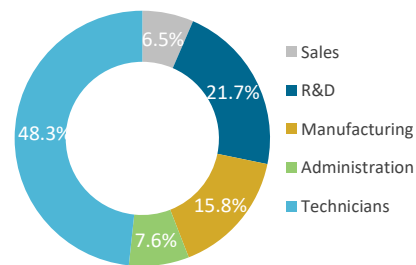
Categories of Full-Time Employees in Taiwan
- Sales 6.5%
- R&D 21.7%
- Manufacturing 15.8%
- Administration 7.6%
- Technicians 48.3%

Categories of Full-Time Employees in China
- Sales 1.1%
- R&D 3.0%
- Manufacturing 17.7%
- Administration 4.6%
- Technicians 73.5%

Categories of Full-Time Employees in Vietnam
- Sales 0.7%
- R&D 0.0%
- Manufacturing 17.2%
- Administration 7.2%
- Technicians 74.9%
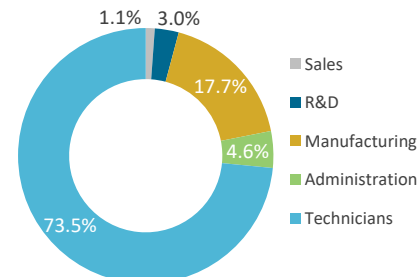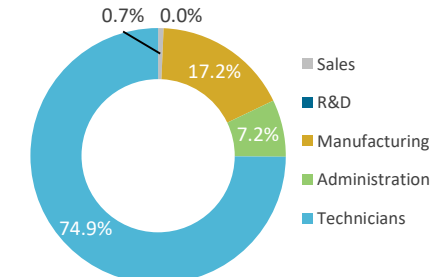
There were 4,676 full-time employees in Taiwan, an increase of 43.7% compared to 2018. 2,451 of these were indirect labor (IDL) employees, and 2,225 were direct labor (DL) employees. The percentage of male employees and female employees was 49% and 51%, respectively. 62% of our colleagues were between the ages of 31 and 49, and 41% of all employees had worked for WNC for three years or more. There were 5,879 full-time employees in China, a decrease of 11.3% compared to 2018. These consisted of 1,556 IDL employees and 4,323 DL employees, with 68% being male and 32% being female, and 32.8% were between 31 years and 49 years of age. There were 581 full-time employees in Vietnam. These consisted of 146 IDL employees and 435 DL employees, with 55% being male and 45% being female, and 22.0% were between 31 years and 49 years of age.

Human Resources Structure for Full-Time Employees of WNC in 2019[Note 1]

Category	Group		Taiwan			China			Vietnam			Other Areas		
			Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Work Category	DL Employees	Regular employees	593	799	1,392	2,983	1,340	4,323	221	214	435	0	0	0
		Foreign migrant workers	0	801	801	0	0	0	0	0	0	0	0	0
		Vocational students/interns	37	29	66	0	0	0	0	0	0	0	0	0
	IDL Employees	Managers	429	104	533	320	135	455	15	2	17	6	2	8
		Specialist staff[Note2]	1,209	675	1,884	689	412	1,101	81	48	129	27	15	42
Age	DL Employees	30 y/o and below	303	816	1,119	2,456	923	3,379	185	173	358	0	0	0
		31–49 y/o	322	758	1,080	516	415	931	36	41	77	0	0	0
		50 y/o and above	5	55	60	11	2	13	0	0	0	0	0	0
	IDL Employees	30 y/o and below	263	162	425	369	178	547	60	30	90	0	3	3
		31–49 y/o	1,219	585	1,804	637	361	998	35	16	51	18	8	26
		50 y/o and above	156	32	188	3	8	11	1	4	5	5	6	11
		Total	2,266	2,410	4,676	3,992	1,887	5,879	317	264	581	33	17	50

Note 1: The Human Resources Structure is calculated based on the number of full-time employees. Dispatch workers are excluded.
Note 2: Managerial positions are defined as employees with management responsibilities. Specialist staff refer to non-managerial positions.

Number of WNC's full-time employees in the last three years (Unit: Person)

	2017	2018	2019
Total	9,499	9,925	11,186
IDL Employees	2,448	2,737	4,169
DL Employees	7,051	7,188	7,017

■ DL Employees ■ IDL Employees ▬ Total
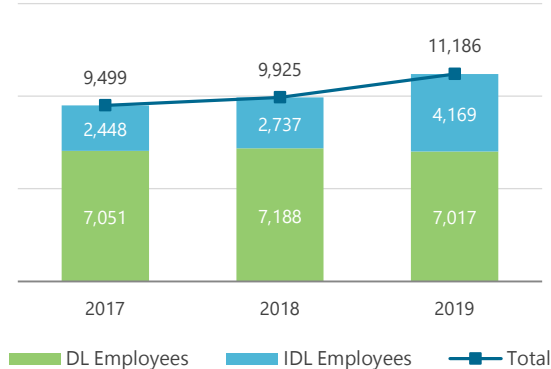
Full-Time Employees Gender Ratio in Taiwan

49%   51%

Full-Time Employees Gender Ratio in China

68%   32%

Full-Time Employees Gender Ratio in Vietnam

55%   45%

3.2.2 Recruitment and Retention

The Human Resources Administration Divisions across all WNC sites work closely with hiring business units to locate outstanding talent. For colleagues with different qualifications at different levels of the organization, we offer orientation, bonuses for long service and outstanding performance, internal transfers, promotions, salary-structure adjustments, and other incentive measures, in order to create a sound work environment. In 2019, 2,435 new employees were hired at WNC's Taiwan sites. The new hire rate for IDL employees and DL employees was 23.8% and 134.0%, respectively. 18,802 new employees were hired at subsidiaries in China. The new hire rate for IDL employees and DL employees was 18.4% and 409.8%, respectively.

The economy of China has transformed from a manufacturing-centric economy to one that focuses on the service industry. The increase in the number of people employed in the service industry as a result of this transformation has led to a shortage of line personnel in manufacturing industries. This shortage, along with young adults' preference for short term benefits, has led to high turnover rates for DL personnel.

2019 New Hires[Note 1] and Turnover[Note 2] Rates at Taiwan Sites

Category	Total	IDL (Totals: 2,397)						DL[Note 3] (Totals: 1,392)					
		Subtotal	Gender		Age			Subtotal	Gender		Age		
			Male	Female	<=30	31–49	>=50		Male	Female	<=30	31–49	>=50
Number of New Hires	2,435	570	388	182	262	296	12	1,865	783	1,082	1,134	727	4
New Hire Rate (%)	64.3	23.8	23.8	23.7	61.7	16.4	6.4	134.0	132.0	135.4	249.2	82.9	6.7
Turnover quantity	1,031	273	186	87	77	177	19	758	385	373	410	345	3
Turnover rate (%)	27.2	11.4	11.4	11.3	18.1	9.8	10.1	54.5	64.9	46.7	90.1	39.3	5.0

2019 New Hires[Note 1] and Turnover[Note 2] Rates at China Sites

Category	Total	IDL (Totals: 1,556)						DL (Totals: 4,323)					
		Subtotal	Gender		Age			Subtotal	Gender		Age		
			Male	Female	<=30	31–49	>=50		Male	Female	<=30	31–49	>=50
Number of New Hires	18,002	287	221	66	153	134	0	17,715	13,295	4,420	13,924	3,791	0
New Hire Rate (%)	306.2	18.4	21.9	12.1	28.0	13.4	0.0	409.8	445.7	329.9	412.1	407.2	0.0
Turnover quantity	18,827	323	227	96	128	189	6	18,504	13,509	4,995	14,324	4,180	0
Turnover rate (%)	320.2	20.8	22.5	17.6	23.4	18.9	54.6	428.0	452.9	372.8	423.9	449.0	0.0

Note 1: New Hire Rate = Number of DL (IDL) New Hires in the Category Concerned/Total Number of DL (IDL) Employees at the End of the Year
Note 2: Turnover Rate = Turnover Quantity of DL (IDL) Employees in the Category Concerned/Total Number of DL (IDL) Employees at the End of the Year
Note 3: Refers to DL employees at the WNC's Taiwan sites excluding foreign migrant workers and cooperative-education students

Recruitment of Local Management Talent

The percentage of managerial positions taken by Taiwanese employees is 99%. As for subsidiaries in China and Vietnam, we have actively trained local employees to help them attain management-level positions. The percentage of managers in China and Vietnam promoted from locals is 91% and 28%, respectively.

Talent from Diverse Backgrounds

In response to the rapid development of technology and life applications, our aim is to offer products and services that make life more convenient. This is achieved through a professional team from diverse backgrounds that provide different perspectives. In addition to hiring talent according to functional requirements, the adoption rate of different nationalities and different ethnic groups has gradually increased. In 2019, WNC recruited many foreign employees from all over the world including from the United States, China, Nepal, Vietnam, the Philippines, Malaysia, Australia, New Zealand, Brazil, Indonesia and Paraguay to promote internationalization and facilitate contact with our international customers and suppliers.

WNC actively encourages the hiring of persons with disabilities. In 2019, there were 43 employees with disabilities (assessed using a weighted scale) working at WNC Taiwan sites, comprising 0.92% of Taiwan employees, which is slightly higher than in 2018. Thirteen have mild or moderate disabilities and 15 have severe disabilities. Their positions include masseurs, production-line operators, engineers, and personnel on overseas assignment. After arranging a suitable working environment, colleagues with disabilities are able to enjoy roles in which they can develop their skill sets. With regard to the current shortfall in the ratio of employees with disabilities with respect to government regulations, WNC intends to evaluate further suitable positions and continues to place an emphasis on this. An accessible restroom was built at WNC headquarters and S2 for employees and visitors with physical disabilities. Our recruitment rate for indigenous persons and new immigrants combined is 0.88%.

Recruitment of Local Management Talent in 2019

Country	Locals as Managers[Note] (Persons)	Percentage of Locals as Managers
Taiwan	533	99%
China	455	91%
Vietnam	17	28%

Note: Locals as managers include personnel on overseas assignment at each of WNC's sites.

Recruitment of Talent from Diverse Backgrounds at Taiwan sites in 2019

Category	2019		2018	
	Ratio to total employees	Number hired	Ratio to total employees	Number hired
Indigenous persons	0.88%	18	1.04%	10
New immigrants		23		24
Employees with disabilities	0.92%	43	0.77%	25

Campus Recruitment

Besides using internal and external channels to recruit talent, WNC collaborates closely with academia through campus development programs, provides internships during summer vacation, and offers R&D substitute national service. We help students learn industry requirements in advance of graduation and employ new graduates that have different specialties and show promise. A total of 1,018 students were added to the talent database from the on-campus job fairs WNC attended in 2019.

3.2.3 Industry-academia Collaboration

Youth Talent Cultivation Programs

WNC has worked with many universities, including National Taiwan University, National Chiao Tung University, National Tsing Hua University, National Cheng Kung University, Chung Hua University, National Taiwan University of Science and Technology, National Taipei University of Technology, and Minghsin University of Science and Technology in organizing on-campus job fairs, teacher-student tours, enterprise mentorships, technical seminars, and other activities. WNC also actively participates in various industry-academia partnership programs implemented by the government, including the Youth Employment Voyage Program, the Industry-Academia Cooperative Training Program organized by the Ministry of Labor, and the Core Systems Talent Cultivation Program organized by the Ministry of Education.

2019 Leadership Talent Development Program

Ten elite candidates were chosen from a pool of 46 NTHU students to participate in a seven-month training program at WNC.

National Tsing Hua University

Organize career development seminars and provide internship opportunities

Enhance employability of students

Put research theories into practice

National Taipei University of Technology

Minghsin University of Science and Technology

2018–2019: International Industry-Academia Alliance of NTUT

Graduate students from NTUT were provided with internship opportunities at WNC. Supervising professors and WNC managers worked together to instruct the students and implement theories on production lines. In 2019, three students from the M.S. program of the Department of Industrial Engineering participated in internships at WNC.

2019–2022: Overseas Manufacturing Engineering Talent Cultivation Program

WNC has organized a four-year industry-academia cooperation program for overseas students, providing guidance to these students to help them implement the theories from their theses into actual projects as well as conduct advanced verification and continuous optimization of said theories. In 2019, a total of six Vietnamese master's students participated in this program.

In 2019, in response to the Industry-Academia Cooperative Training Program organized by the Ministry of Labor, WNC worked with the Department of Mechatronic Engineering and Department of Electronic Engineering at the National Taipei University of Technology to organize a two-year internship program for nine sophomore and junior students. During the internship, WNC provided courses integrating the skills and knowledge needed by the industry with the aim of cultivating engineering talent that fits WNC's needs. In the future, WNC will continue to organize industry-academia cooperation programs to integrate theory and practice and establish a key technology-related talent pool in Taiwan and abroad.

WNC Participation in Industry-Academia Collaboration Programs Organized by the Government

Government program	WNC program	Subjects	Program content	Duration of implementation	Number of participants in 2019	
					No. of candidates	No. of selected candidates
Youth Employment Voyage Program (Ministry of Labor)	WNC Industry-Academia Collaboration Program	Undergraduate students from the Department of Industrial Management of Chung Hua University	The aim of the program is to cultivate professional engineering and technology talent, bridge the shortage of skilled workers in WNC, and provide students with opportunities that help with both school studies and future job prospects.	Jun. 2018 to Jun. 2022 (application period is in April)	165	53
Core Systems Talent Cultivation Program (Ministry of Education)	WNC Summer Internship Program	Undergraduate / graduate students from colleges and universities in Taiwan and abroad	Students can work at various units during summer vacation, providing them with work experience. During the internship, cross-unit experience sharing, learning result report sessions, and career development seminars are held to integrate theory and practice and allow the students to meet and network with peers.	Summer vacation of each year	70	28
Industry-Academia Cooperative Training Program (Ministry of Labor)	WNC Industry-Academia Collaboration Program	Undergraduate students from the Department of Mechatronic Engineering and Department of Electronic Engineering of National Taipei University of Technology	To cultivate talent in manufacturing engineering, WNC is working with the National Taipei University of Technology to organize a two-year training program.	Sept. 2019 to Jun. 2021	17	9

Supporting Design Competitions

In 2019, WNC donated NT$400,000 to the Mobileheroes Connectivity Design Awards, which is organized by the Industrial Development Bureau, Ministry of Economic Affairs. The money was used to provide cash prizes for the Future IoT Competition and the Innovative 5G Multi-Antenna System Design Competition, which are part of the Mobileheroes Awards. WNC also invited professional judges and instructors to guide and encourage the students and startups that participated in the competitions to work in the network communications industry and facilitate the creation of next-generation antenna designs.

3.3 Overall Remuneration

3.3.1 Remuneration Structure

WNC regularly adjusts employees' salaries to ensure reasonable compensation for colleagues as well as to attract and retain talent. Taking into consideration other factors including stockholder rights and interests, employee quality of life, and sustainable development of WNC, employee wages are also regularly adjusted according to current price levels, market supply/demand, average salary levels in the industry, and local laws/regulations. With annual salary adjustment and promotion systems in place, permanent employees and departments with good performance are eligible for various bonuses and rewards regardless of gender, age, ethnic background, religion, or political affiliation. The rewards and bonuses include performance bonuses, employees' profit-sharing bonuses, project bonuses, and restricted stock awards, as well as a senior employee award, excellent team award, and patent award.

Refer to the 2019 WNC Annual Report for detailed information on remuneration and benefits.

Ratio of WNC Employees' Average Remuneration[Note 1]

Country	Category		Male[Note 2]	Female
Taiwan	DL Employees		1	0.95
	IDL Employees	Managers	1	0.83
		Specialist staff	1	0.83
China	DL Employees		1	1.00
	IDL Employees	Managers	1	0.89
		Specialist staff	1	0.89

Note 1: Average Remuneration = Average remuneration of all permanent employees as of the end of 2019, which includes allowances and bonuses.
Note 2: Given that the majority of R&D employees are male, their share of total company employee salaries is slightly higher than that of female employees.

Salary Statistics for Full-time, Non-managerial Employees at WNC's Taiwan Sites

Item		Amount of change from 2018 to 2019	2019	2018
Full-time, non-managerial employees	Number of employees	41.47%	3,862	2,730
	Total combined salary (unit: thousand NT$)	27.27%	3,712,560	2,917,161
	Average salary (unit: thousand NT$)	-10.10%	961	1,069
	Median salary (unit: thousand NT$)	NA	713	NA

Ratio of Minimum WNC Employee Salary to Minimum Legal Salary

Country	Category	Male	Female
Taiwan	DL Employees	1.00	1.00
	IDL Employees	1.26	1.26
China	DL Employees	1.14	1.14
	IDL Employees	1.20	1.20

3.3.2 Performance Management

Competence Development	Key Employees Development	Career Development
Perform competence analysis twice a year and collate supervisors' successful cases as a benchmark for evaluating employees' development.	Uncover employees showing potential through the performance management process, provide them with training plans, and track results on a regular basis。	WNC provides training plans for both professional specialization and management skills. Plans are provided according to employee potential and their desired career path.

Performance Appraisal

At WNC, organizational talent review is performed annually to gauge the expertise and developmental progress of its employees. WNC's performance appraisal system was developed by considering both operational efficiency and the development of individual competencies. Performance is evaluated according to two parameters: Management by Behavior (MBB) and Management by Objective (MBO). Periodically, performance in terms of both quality and quantity is simultaneously examined, and the results are compiled semi-annually to evaluate the performance of employees and serve as a basis for giving appropriate rewards or promotions to employees. During the performance evaluation period, permanent WNC employees, excluding the Chairman and the CEO, who pass probation and who have been in service for four months or longer must participate in WNC's performance appraisal system.

Career Development

In accordance with management guidelines for employee promotion and depending on the development needs of the organization, IDL employees who have been in their positions for a requisite number of years, and who are regarded as capable of taking on greater responsibilities, are eligible for promotions in job position or level based on their performance, professional skills demonstrated and competency, as recognized by their supervisors.

- Promotion Management Planning: Adopt a dual-track system of both specialized and management positions to provide appropriate planning for WNC's employees.

- Assessment of candidates for promotion: Refer to candidates' past experience and performance in their position, in order to assess their readiness for post-promotion responsibilities. The Personnel Review Committee performs assessment after the unit supervisor's nomination.

Regarding promotions for DL employees, after production line supervisors have considered work performance and taken organizational needs into consideration, DL employees may be promoted to production line leaders (such as supervisors, line leaders, and team leaders) and be given a raise after they pass evaluation. Alternatively, they may be transferred to positions with specialized work duties (such as soldering personnel, material retrieval personnel, and material preparation personnel) and be given work allowances. In addition, in accordance with hiring procedures for IDL employees, DL employees with distinguished performance may become IDL employees and serve as assistant engineers, engineers, or function team directors.

In 2019, the ratio of female and male WNC employees receiving career development reviews was 0.66:1, which is slightly higher than the ratio of female and male employees at WNC, which is 0.56:1.

Percentage of WNC Employees Receiving Career Development Review[Note 1]

Country	Position		Male (persons)	Female (persons)	F / M ratio	F / M ratio (All WNC employees)
Taiwan	DL Employees		208	269	1.29	1.35
	IDL Employees	Managers	63	24	0.38	0.24
		Specialist staff	165	80	0.48	0.55
	Subtotal		436	373	0.86	0.71
China	DL Employees		862	482	0.56	0.45
	IDL Employees	Managers	56	32	0.57	0.42
		Specialist staff	79	61	0.77	0.60
	Subtotal		997	575	0.58	0.47
Total			1,433	948	0.66	0.56

Note 1: Does not include the Chairman and the President & CEO.

3.3.3 Employee Insurance

WNC participates in Taiwan's Labor Insurance (which covers injury and sickness benefits, disability benefits, maternity benefits, and death benefits) and National Health Insurance and contributes to pension accounts according to Articles 55 and 56 of the Labor Standards Act. The company contributes labor pension to a designated statutory account every month. Based on the original or newly-enacted regulations, employers are required to deposit 2% or 6% (respectively) of their employees' monthly salary into pension accounts. All permanent employees, except for vocational students and foreign employees, in compliance with the regulations of the Labor Pension Act, participate in this retirement scheme, with only eight employees following the old labor pension fund scheme. All permanent employees and contract employees are enrolled in a group insurance plan (which includes life insurance, accident insurance, hospitalization insurance, and cancer insurance) on the first day they report to work. Employees may also purchase insurance for family members. The detailed description and implementation of the retirement scheme can be found in Chapter 6 Financial Standing of the 2019 WNC annual report.

Permanent employees in China are enrolled in social insurance and a housing providence fund as required by the Labor Law of the People's Republic of China (five types of insurance and a mutual housing fund). The social insurance includes: endowment insurance, medical insurance, employment injury insurance, unemployment insurance and maternity insurance. Employers are required to deposit 16% of an employee's monthly salary based on individual payment baselines as an endowment insurance pension. All permanent employees participate in this insurance scheme.

Monthly Contributions to Employee Pensions for Employees at WNC's Taiwan Sites in 2019

Category	Source	Ratio
Old scheme (based on the Labor Standards Act)	Contributed by employers	2%
New scheme (based on the Labor Pension Act)	Contributed by employers	6%
	Contributed by employees	Maximum of 6%

2019 Allocation of the Five Types of Insurance and Mutual Housing Fund for Employees at WNC's China Sites

Item		Contribution Source / Ratio	
		Employer	Employee
Social Insurance (Regulation on the Collection and Payment of Social Insurance Premiums in Jiangsu Province)	Endowment Insurance	16.00%	8.00%
	Medical Insurance	8.00%	2.00%
	Employment Injury insurance	0.55%	NA
	Unemployment Insurance	0.50%	0.50%
	Maternity Insurance	0.80%	NA
Housing Provident Fund (Management Regulations for the Suzhou Housing Provident Fund)		8.00%	8.00%

3.3.4 Employee Leave

All WNC sites provide leave for permanent and contract employees in accordance with local laws. WNC in Taiwan stipulates a leave system that surpasses the statutory leave provisions: Five annual leave days for new employees starting the day they report to work; paid personal and sick leave days for employees above a certain job level; and additional types of leave including parental leave, family leave, menstrual leave, and paternity leave.

WNC's China sites provide its employees with 15 days of paternity leave, 13 days of marriage leave and 128 days of maternity leave. In cases of dystocia (difficult delivery), maternity leave will be extended by 15 days.

3.4 Training and Development

WNC Employee Career Development Plans
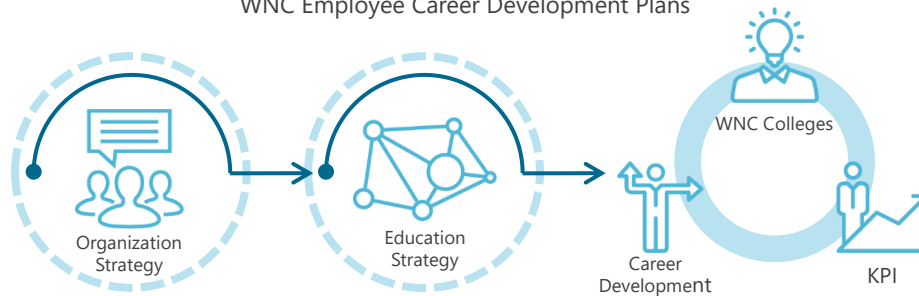
WNC Employee Training
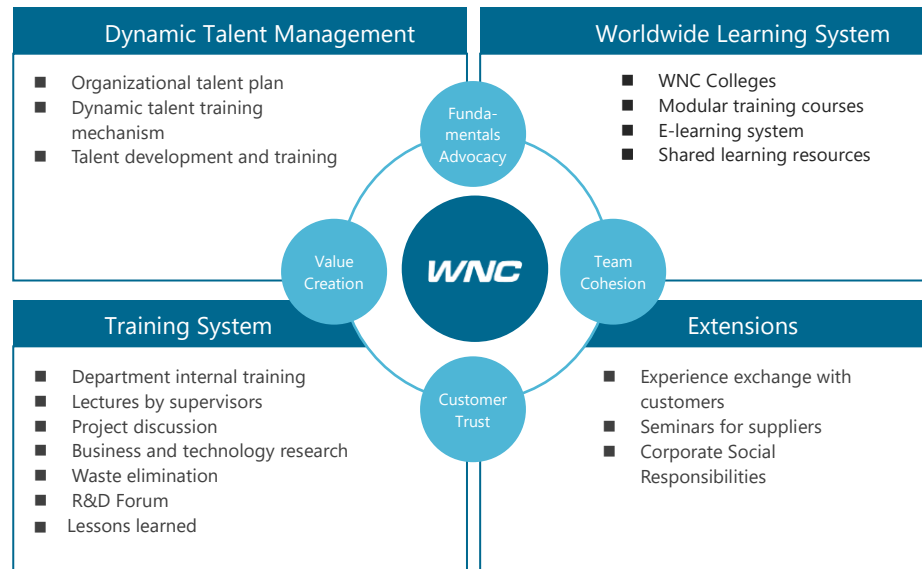
3.4.1 Dynamic Talent Management

WNC attaches great importance to recruiting talented people and improving their skills and general knowledge. Based on this concept and the principles of growth, innovation, and cooperation, employees are provided with job function enhancement training programs, key competencies enhancement programs, and supervisory and leadership training. Recruitment activities in compliance with local laws and regulations are held. WNC employees are provided with healthy and safe working conditions and complete occupational training.

Cultivation of Outstanding Employees

WNC offers performance evaluation and personal development plans for outstanding employees who demonstrate high growth prospects. The development plan incorporates organizational development objectives and features diverse contents and learning approaches, including course training, on-the-job learning, job rotation, project assignments, challenging task execution, and one-on-one coaching in order to stimulate and strengthen the employees' abilities in different aspects, enrich practical experience, and afford more opportunities for career development. WNC performs organizational talent review annually to select outstanding employees who have demonstrated high potential, pinpoint gaps in organizational talent development, and plan for organizational learning development.

Cultivation of Management Capability

The Human Resources Administration Division plans progressive talent cultivation courses according to the different levels and positions of employees. The courses feature a systematic training and development structure to promote learning and development through multiple learning channels and talent-development plans to assist employees in enhancing their capabilities in all aspects, including professional skills, communication skills, and management practices.

3.4.2 Training System

Encouraging Participation in Internal and External Training

Apart from the six Colleges, WNC also encourages employees to participate in both internal and external training including seminars, lectures, specialized training, and on-the-job refresher courses. With the approval of the employee's department manager, WNC provides full subsidies for the external courses taken. For English courses, each WNC employee may receive up to NT$10,000 in subsidies per year to take these courses. In addition, departments

are encouraged to host reading clubs to share insights gained through books. In order to ensure the quality of course content, participants are surveyed after courses conclude to determine the participants' retention, the teaching skills of the instructors, and recommendations for course improvement.

Developing a Learning Organization

Supervisors of all levels are required to teach at least one two-hour class to share their management practices, professional knowledge/skill, lessons learned, new trends/technologies, and project experience each year. At the same time, WNC has instituted an internal instructor certification system to train instructors according to the training and development objectives of the year. Top-tier managers from different units in WNC's sites in Taiwan and China recommend candidates for the instructors. The candidates must attend the instructor-training courses organized by the Human Resources Administration Division, conduct demonstration lectures, and be assessed based on their performance in the demonstration. Qualified employees can then become certified internal instructors. All instructors will be recognized on Teacher's Day every year. Also, activities are organized during the Teacher's Day celebration for employees to show appreciation for their instructors. As of the end of 2019, there were 79 and 200 instructors trained in Taiwan and China respectively, and the training of internal instructors will continue.

Project Discussion

Regular project meetings enable employees to check progress and discuss product-related issues with other team members. Through asking questions, engaging in discussions, sharing practical examples and lessons learned, as well as preparing material and response measures in advance, employees can avoid potential issues in project management. In addition, through participating in the quarterly business review and technical exchange meetings, different units may learn skills related to organizational management, product development, and business expansion from one another, putting the tangible and intangible assets and resources of WNC to effective use.

3.4.3 Worldwide Learning System

E-learning System

WNC's LMS system is an on-line learning and performance-management resource sharing platform. It has the following features: providing on-line government regulations and corporate policy promotion, management system promotion, new-employee courses, and general knowledge

courses related to employees' job functions. Employees may also manage their personal or organizational training records through the system and perform functions such as applying to host internal training courses or applying for internal or external training. The system will send notification reminders and allow employees to submit their after-course reports and post-class satisfaction surveys.

Modular Training Courses

WNC also formulates modular courses to meet the needs of employees of different competencies and management levels. Corresponding training courses are provided in accordance with promotions and the resulting requirements of competency for the promoted position. This includes the new recruits course series, Six Sigma courses, targeted selection course series, new management training course series, basic management courses for general managerial positions, and advanced management courses such as performance management, strategic planning, and organizational development courses for middle-and upper-level supervisors.

WNC Colleges

In 2010, the WNC Colleges were established, composed of a Management College, Marketing College, R&D College, Manufacturing Quality College, General Knowledge College, and AI & Digital College. Respective colleges are led by top managers of related units, with organizational topics, future vision, and strategy adopted as points of departure for the construction of a successful template for a talent development system.

To respond to the rapid development of AI and the requirements of digital transformation, WNC established the AI & Digital College in December 2019. In 2019, WNC colleges held a total of 298 courses, and there were a total of 22,837 participants.

Number of Courses Organized by WNC Colleges

China: Management 15, Marketing 17, R&D 20, Mfg. Quality 37, General knowledge 13

Taiwan: Management 58, Marketing 9, R&D 18, Mfg. Quality 35, General knowledge 73, AI & Digital 3

Legend: ■ Management ■ Marketing ■ R&D ■ Mfg. Quality ■ General knowledge ■ AI & Digital
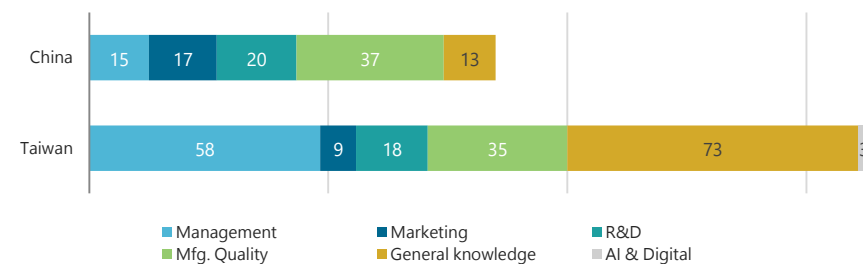
		Principal	Participant	Purpose	Description
	Management College	CEO	Top-tier managers/ external consultants	Focused on developing the management skills of supervisors, courses are designed according to the requirements of each management level, including management-skills training in leadership, motivation, and the self-growth of newly appointed supervisors and strategic-planning development for middle- and upper-level supervisors.	In addition to organizing courses based on different levels of management ability, we also conducted a human-resources inventory to develop training courses for handpicked personnel.
	Marketing College	President	Product managers/ sales supervisors	In addition to implementation of project management and the application of individual skills and specialized knowledge, topics covered include new industry knowledge, presentation skills, conference planning, international trade, and customer management and service capabilities.	We will continue to arrange for senior supervisors to share experiences of successful customer interactions through case study exchange opinions with participants.
	R&D College	CTO	Product R&D center/WNC RD Forum (WRDF) Chairman	We established the WNC Research & Development Forums (WRDF) to promote R&D innovation and enrich the basic skills of R&D personnel. The WRDF enables participating employees to learn cross-field techniques and develop more holistic perspectives.	The chairman of each forum participates in course planning, and through industry-academia cooperation, outside experts are invited to serve as instructors and to help continuously build employees' technological knowledge and expertise.
	Manufacturing Quality College	Head Plant Manager	CQO, Manufacturing/QA center manager	The aim of this curriculum is to implement WNC's quality strategy of zero defects in competitive goods and services. Courses offered include: Six Sigma, manufacturing, green-product design, quality systems, equipment, and failure analysis as well as IATF 16949 and IECQ QC080000 quality-awareness training and application.	Regular training for internal auditors of various quality certification systems are held each year.
	General Knowledge College	CHO	Functional unit supervisors	New hires, from their reporting date until the end of their probationary period, are also required to complete 25 e-learning courses on company culture, the workplace environment, and system operations. Competency and skill-related courses are planned to raise employees' effectiveness and self-management ability and to follow government regulations and company policies.	These cover on-board training, fire drills, emergency response drills, responsibility classes, management courses, presentation design courses, and internal instructor training courses. Courses are also provided to mentors of new employees to enable the mentors to better understand how to help new employees adapt to a new environment and become a part of the WNC family.
	AI & Digital College	Head of DMIS Div.	Automation unit/ Information unit/R&D unit supervisors	The AI & Digital College provides courses on project review/recommendation as well as related professional knowledge and skills to facilitate WNC's digital transformation and product development projects. The College integrates and shares information from internal and external resources to facilitate the incorporation of AI and digital learning into everyday work.	Established in December 2019, the AI & Digital College has organized one master's lecture on theory and future trends of machine learning as well as two online courses, which helped improve employees' understanding of and interest in AI-related topics.

3.4.4 Training Participation

In 2019, WNC employees underwent an average of 24.7 hours of training, with expenses related to employee training amounting to NT$ 10.74 million. The training courses received an average satisfaction score of 4.5 (out of 5) from employees. The training hours for WNC employees in Taiwan and China are listed in the table below:

Training Hours in 2019 by Job Level and Gender

Country	Category		Male			Female			Total		
			Hours (A)	Number of employees[Note 1] (B)	Hours per employee[Note 2] (A/B)	Hours (C)	Number of employees[Note 1] (D)	Hours per employee[Note 2] (C/D)	Hours (E)	Number of employees[Note 1] (F)	Hours per employee[Note 2] (E/F)
Taiwan	DL		3,837	630	6.1	9,709	1,629	6.0	13,546	2,259	6.0
	IDL	Managers	17,710	429	41.3	4,037	104	38.8	21,747	533	40.8
		Specialist staff	23,780	1,209	19.7	13,070	675	19.4	36,850	1,884	19.6
		Subtotal	41,490	1,638	25.3	17,107	779	22.0	58,597	2,417	24.2
China	Dispatch workers from WNC's sites in Taiwan		2,814	48	58.6	149	3	49.7	2,963	51	58.1
	DL		78,613	2,983	26.4	38,173	1,340	28.5	116,787	4,323	27.0
	IDL	Managers	12,624	320	39.4	5,152	135	38.2	17,775	455	39.1
		Specialist staff	36,127	689	52.4	18,301	412	44.4	54,428	1,101	49.4
		Subtotal	48,751	1,009	48.3	23,452	547	42.9	72,203	1,556	46.4
Total			**172,692**	**6,258**	**27.6**	**88,442**	**4,297**	**20.6**	**261,133**	**10,555**	**24.7**

Note 1: Numbers of full-time employees were calculated as at the end of the year.
Note 2: Hours Per Employee = Hours/Number of Employees

Hours per IDL Employee Categorized by Job Level in 2019
(Unit: Hours)

Taiwan

40.8 Managers

19.6 Specialist Staff

China

39.1 Managers

49.4 Specialist Staff

3.5 Employee Care

3.5.1 Occupational Safety and Health Management

Goal | Zero Major Occupational Accidents in 2020

WNC established its occupational safety and health management system in accordance with the OHSAS 18001 standard and has worked to establish a safe and healthy working environment. In addition to establishing ESH regulations and promoting related operations, we also regularly review the operations of the occupational safety and health system to prevent occupational disease and injury and protect the physical and mental health of our staff.

In Taiwan, to fully understand the process by which near misses, injuries, and major accidents occur and to prevent their reoccurrence, the company performs accident investigation and analysis in accordance with the Accident Investigation Management Procedure and has formulated prevention/improvement measures. In 2019, WNC achieved the goal of zero major occupational accidents.

Accident/Near Miss Investigation Process at WNC sites in Taiwan

1 Reporting
- Report the time and location of occurrence and the unit involved
- Conduct preliminary assessment of the cause(s) of the accident / near miss

2 Investigation
- Investigate the cause(s) of the accident/near miss
- Formulate prevention/improvement measures

3 Improvement
- Implementation of Prevention / Improvement Measures
- Implement improvement measures at each site in parallel

Occupational Injury Statistics

In 2019, there were 11 incidents of personal injury in Taiwan. These injuries were primarily due to non-routine work and accidents in public areas. Cuts and falls accounted for the largest number of injuries. Two service staff suffered disabling injuries including a janitor who had a fall while working and a kitchen worker who suffered burns. Accident investigations and cause analysis have been conducted, and the responsible units have

been asked to plan appropriate corrective measures in connection with the recruitment of new in-plant workers and environmental changes, thereby decreasing the operational risks to in-plant staff and workers. In China, there were 22 incidents of personal injury. These injuries included traffic accidents and hand contusion. WNC has investigated and analyzed the causes of these injuries and requested the responsible units to formulate improvement measures to lower the operation risks for employees in the factory. No service personnel in WNC's sites in China were affected by disabling injuries. In 2019, no employees or personnel working at WNC's sites in Taiwan or China suffered permanent disabilities from occupational injuries.

2019 WNC Occupational Injury Statistics for Employees

Item	Taiwan[Note1]		China	
	Male	Female	Male	Female
Number of Disabling Injuries	6	5	13	9
Working Days Lost Due to Injury	111	135	207	83
Injury Rate (I.R.)[Note 2]	0.27	0.21	0.33	0.48
Lost Day Rate (L.D.R.)[Note 3]	4.98	5.67	5.19	4.38
Occupational Diseases Rate (O.D.R.)[Note 4]	0	0	0	0
Absentee Rate (A.R.)[Note 5]	0.82%	1.32%	4.04%	4.78%

Note 1: Occupational injury records only include injuries sustained while carrying out work duties at WNC's sites in Taiwan; traffic accidents that occur during commutes are not included.
Note 2: Injury Rate (I.R.) = Number of Disabling Injuries / Total Working Hours × 200,000
Note 3: Lost Day Rate (L.D.R.) = Working Days Lost Due to Injury / Total Working Hours × 200,000
Note 4: Occupational Diseases Rate (O.D.R.) = Number of Occupational Diseases Cases / Total Working Hours × 200,000
Note 5: Absentee Rate (A.R.) = Total Absentee Hours (sick leave, personal leave, occupation injury leave, menstrual leave) / Total Working Hours × 100%

2019 WNC Occupational Injury Statistics for Personnel Working at WNC Sites

Subject	Item	Taiwan		China	
		Male	Female	Male	Female
Contractors (construction)	Number of Disabling Injuries	0	0	0	0
	Injury Rate (I.R.)[Note 2]	0	0	0	0
Contractors (security, cleaning, catering)	Number of Disabling Injuries	1	1	0	0
	Injury Rate (I.R.)[Note 2]	1.32	1.32	0	0
Dispatch employees	Number of Disabling Injuries	0	0	0	0
	Injury Rate (I.R.)[Note 2]	0	0	0	0

Occupational Hazards Assessment

In order to continuously address the impact on WNC due to safety and health risks, departments of different functions perform risk identification and assessment, and adopt corresponding control measures according to risk assessment results, to prevent accidents from occurring.
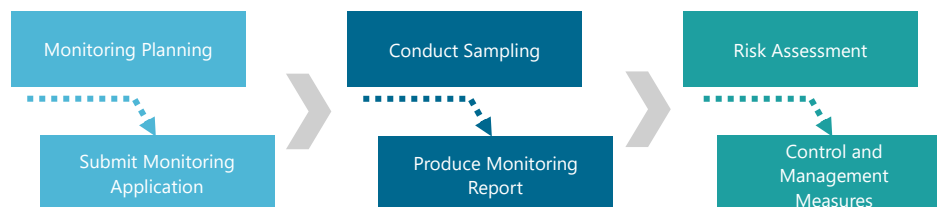
Communication Channels

An Occupational Safety and Health Committee has also been established for Taiwan sites and committee meetings are held quarterly in accordance with the Occupational Safety and Health Act to review the implementation results with worker representatives. The committee members serve a two-year term. Fifteen of the members are drawn from worker representatives, representing over 1/3 of the committee members. These members work as a safety and health communication platform between WNC and employees to maintain and improve the organization's safety and health management. WNC holds an annual organization consultation meeting to communicate and promote occupational accident prevention to construction contractors. In 2019, a total of 132 construction contractors attended the meeting.

Production safety committees established for China sites hold quarterly production safety management meeting. Department-level managers from various units attend the meetings to discuss occupational safety and health management issues. In addition, each unit assigns an employee to serve as its security officer, and these employees participate in externally approved security officer training courses and acquire security officer certification. This ensures that security officers have the required skills and knowledge in occupational safety and health.

Site Management

Operating Environment Monitoring

Monitoring Planning → Submit Monitoring Application

Conduct Sampling → Produce Monitoring Report

Risk Assessment → Control and Management Measures

In Taiwan, the company evaluates workplace conditions semi-annually in accordance with the Labor Operational Environment Measurement Regulations. If a non-conforming item is found, WNC executes corrective measures accordingly. In addition, a carbon dioxide monitoring system is installed extensively throughout office areas, in order to ensure that

the work environment maintains good air quality.

Worker safety at WNC sites in China comply with the Law of the People's Republic of China on Prevention and Control of Occupational Diseases and the Law of the People's Republic of China on Air Pollution Prevention and Control. Environmental and hazardous-substance monitoring is carried out in the workplace once a year.

Chemical Substances Management

To prevent the misuse of regulated or prohibited chemical substances, and to effectively use and manage chemical substances, WNC adopts a three stage management process, from purchase to after use:

Before use
- Validate requirement for use of the chemical substance and review the safety information table
- Audit for regulated or prohibited substances
- Prepare personal protective equipment (PPE)

During use
- Create the relevant files for the safety information table
- The industrial safety unit audits the use of the chemical substance from time to time

After use
- Collect and dispose of the waste

Safety of Machinery and Equipment

Safety Management Measures for Machinery and Equipment

Item	Content
Establishment of safety inspection procedures for the introduction of machinery and equipment to plants	To ensure the safety of equipment and personnel, WNC has established a safety inspection procedure for the transfer of machinery between plants, including sharp angle/sharp edge protection, the installation of safety equipment, and education and training. Every machine must pass inspection before it can be used in the plant.
Uniform labeling of in-plant hazards / Promotion of intuitive labeling	After inspecting the current status of hazard labeling for in-plant machinery and equipment and examining the hazards of high-risk work, WNC now has global production sites adopt consistent, intuitively designed labeling that corresponds to Corporate Identity System (CIS) guidelines as well as the internationally-accepted SEMI Safety Guidelines, thereby strengthening workers' understanding of hazards at sites, and strengthening the effectiveness of communication, improving staff and executives' ability to anticipate risk, thus preventing disasters from occurring.
Improvement solutions for automated warehouse safety	To enhance the safety of automatic warehouse equipment, experts were tasked with providing safety guidance, and the safety designs of automated equipment were adjusted according to professional advice. These included adopting safety components, brake releases, inching functions, Emergency Off (EMO) double-loop designs, and safety access inspections, etc.

Emergency Response Drills

To improve employees' ability to respond to emergencies, emergency response teams have been established and a plant-wide evacuation drill is held every year in Taiwan and China. In 2019, WNC headquarters, S1 and S2 each held a plant-wide evacuation drill, making for a total of five plant-wide evacuation drills for day and night shift employees. A self-defense fire control team has also been put together in the Taiwan plant based on the in-plant fire and PV system fire emergency response drill for disasters. All WNC plants in Kunshan have established firefighting teams which conduct monthly firefighting drills and disaster prevention exercises. In 2019, Wistron NeWeb (Kunshan), WNC (Kunshan), and WebCom (Kunshan) each held three plant-wide firefighting and evacuation drills, making for a total of eighteen firefighting and evacuation drills for both day and night shift employees. Dormitory areas hold an evacuation drill once every half-year. WebCom (Nanjing) held a plant-wide firefighting and evacuation drill in 2019.

Occupational Safety and Health Training

Pursuant to various occupational safety and health measures, WNC holds various educational and training courses to enhance employees' awareness and skills related to occupational safety and health to strengthen disaster prevention. The courses held in 2019 included the following:

Firefighting

WNC reviews and modifies related emergency response plans every year, and organizes advanced courses for its firefighting, evacuation guidance, and first-aid personnel. In 2019, WNC implemented Solar Power System Fire Response measures, and helped front-line emergency response personnel to familiarize themselves with accident handling procedures.

Construction Supervisor Safety and Health Education and Training

Experts were invited to share examples of contractor accidents, accountability, high-risk work control and the audit of main points, etc. at other plants, to enhance construction supervisors' awareness and sense of responsibility towards work safety control of contractors.

Defensive Driver Education and Training

Teaching materials primarily based on traffic scenarios and actual traffic accidents involving WNC employees are used for training, and posters regarding safe driving skills and hazardous sections of the road are posted at parking lot entrances and exits, as well as in the elevator hall. A board was set up to show the number of accident-free days in-plant and off-site, to remind staff that zero accidents should be the collective goal of all

WNC colleagues. Furthermore, for high-risk populations (individuals who have been in accidents or near-misses), safe driving instructors are invited to provide practical training, thereby increasing staff's road safety and driving skills.

3.5.2 Food Safety

WNC implements the following measures to provide safe, healthy, and nutritious drinking water and meals for all employees in Taiwan and China:

Goal	Provide employees with a safe, hygienic, and comfortable dining environment.
Management	■ Establishment of an employee meal service committee for reviewing caterer performance and monitoring food safety related matters ■ Formulation of kitchen safety and health management measures to specify management responsibilities and measures for comprehensive control of food ingredients, food processing, tableware safety, food service vendor management, and environment cleanliness and equipment maintenance. ■ Rigorous selection of certified meal service vendors and daily inspection to ensure that vendors follow all government regulations and food safety laws. ■ All meal service personnel are required to take periodic health examinations, and those with specified infectious diseases including tuberculosis, hepatitis, sexually transmitted diseases, suppurativa skin disease or typhoid carriers are not allowed to provide meal services or work in kitchens. ■ Ingredients of the meals provided in the staff canteen are adjusted to reduce the proportion of fried foods and use organic vegetables and olive oil. On-site food-service vendors are advised to use healthier cooking techniques.
Monitoring	■ The Industrial Safety Dept. conducts a safety and hygiene examination of the company kitchen and announces the results each month. ■ Compilation of an ingredients vendor list. On-site food service vendors are prohibited from using food from unknown sources. Food must be verified to conform to safety and health rules. WNC performs inspections from time to time. ■ WNC performed inspection of the food ingredients in the plant according to the list of unqualified food items published by the MOHW and pulled suspicious products from shelves in response to Taiwan's country-wide food safety incidents in recent years. Food items may be re-shelved only after they pass relevant safety inspections. ■ Bi-monthly water quality tests of water dispensers and results announcements

3.5.3 A Healthy and Friendly Workplace

To create a healthy and friendly workplace, WNC's sites in Taiwan promote a series of health care measures and health promotion activities. In 2019, WNC's HQ and S1 obtained the Badge of Accredited Healthy Workplace awarded by the MoHW's Health Promotion Administration, and S1 was recognized by the awarding of an Outstanding Healthy Workplace Vitality Award

Professional health-care services

WNC's sites in Taiwan employ five full-time facility nurses, with past clinical experience in internal medicine, surgery, obstetrics and gynecology, pediatrics, and intensive care medicine, etc. They are specifically responsible for the planning and execution of all types of health care and health promotion activities.

Health Promotion Activities

A total of 6,023 people participated in health promotion activities in 2019, with a satisfaction level of 4.6 (out of 5).

Medical examinations for all employees

WNC's sites in Taiwan collaborate with the Hsinchu branches of Mackay Memorial

Hospital and National Taiwan University Hospital, Hsinchu Science Park Clinic, Sin-Lau Christian Hospital in Tainan's Madou District, and Tainan Science Park Clinic, to process new employee pre-employment medical examinations, in-service periodic medical examinations and medical specialist on-site health services. The average examination participation rate has reached 99%. Based on the results of the medical examinations, facility nurses compile analyses of the top ten in-plant health issues and personal health hierarchical management, and plan annual health promotion activities accordingly, such as walking, weight loss, doctor lectures, bone density tests, etc., to assist staff in enhancing their health awareness, and fully implement healthy living.

Health promotion project

WNC's sites in Taiwan implement one health promotion project every year. The 4D Club was well-received in 2018, so in 2019 WNC promoted the God of Cookery: Nutritional Recipe Activity, in which goals such as Right Choice, Healthy Diet, Exercise, and Control were established to help staff maintain a healthy physique, avoid high blood pressure, high blood lipids, and high blood sugar, and collectively prevent metabolic syndrome. In 2019, WNC collaborated with the nutrition class at Mackay Memorial Hospital and the Hsinchu Science Park Group Meal Team, to invite teams of professional chefs to cook healthy foods according to a low-calorie menu planned by a dietician. Combined with other themed activities a total of 2,663 healthy meals were produced in three months. Staff satisfaction reached 4.2 (out of 5), and 99.3% of staff were willing to continue to participate in further activities.

Management of Health Abnormalities

WNC's sites in Taiwan have established healthy hierarchical management, divided into five levels from Level A to Level E according to the results of examination items. A higher level means a higher health risk. Different management measures are provided for each level, including regular follow-ups, facility nurse health education, facility doctor consultations, and outpatient clinic and emergency follow-up consultations. In 2019, there were 417 facility doctor consultations, and the follow-up rate of the highest health risk level—Level E—was 100%. Furthermore, a Health Management System was purchased and implemented, to facilitate the recording and management of staff's health data.

Physical / Mental Health Resources
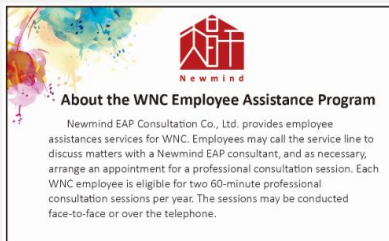
Physical health resources

Staff are provided with required health education, care, and report mechanisms for injuries or sicknesses resulting from official duties or personal issues, including injury and illness follow-ups, recommendations for a reasonable number of rest days, evaluations for resumption of work or suitable work, and assistance for the resumption of work.

Mental health resources

Activities such as a stress relief market were held, and the Employee Assistance Program (EAP) was introduced, with included EAP campaign meetings. Not only does WNC take care of employees' physical health, the company also pays attention to mental health and social adaptation, such as interpersonal relationships and parent-child relationships. WNC's Taiwan sites employ 12 visually impaired massage therapists as full-time employees, to provide stress-relief massage services.

In 2017, WNC's Taiwan sites launched a WNC Employee Assistance Program with an external consultation company which provides WNC employees with consultation services for vocational, familial, interpersonal, physical and emotional financial, legal, and managerial issues. Employees may call a free hotline during the business hours of the consultation company for consultation. If employees require individual face-to-face consultation, a psychiatrist will refer employees to a professional consultant. Each employee is eligible for two free face-to-face professional consultations each year.

About the WNC Employee Assistance Program

Newmind EAP Consultation Co., Ltd. provides employee assistances services for WNC. Employees may call the service line to discuss matters with a Newmind EAP consultant, and as necessary, arrange an appointment for a professional consultation session. Each WNC employee is eligible for two 60-minute professional consultation sessions per year. The sessions may be conducted face-to-face or over the telephone.

To help employees understand the WNC Employee Assistance Program, WNC gave each employee an EAP leaflet. As of the end of 2019, 279 employees have called the free hotline for consultation (stage one consultation), and 33 have used the face-to-face professional consultation service (stage two consultation). Out of the 33 cases that the stage two consultation service handled, 14 were for legal issues, five were for familial issues, five were for interpersonal/ vocational relationship issues, four were for career issues, three emotional issues, and two financial issues. The EAP received an average satisfaction score of 4.7 (out of 5) from employees.

Preventive Care Services

Maternity protection

WNC has established Maternity Health Protection Guidelines, and works together with industrial safety organizations to implement work environment inspections and facility doctor consultations for pregnant or postpartum staff. WNC also provides related health education regarding the early, mid, and late stages of pregnancy.

Infectious disease prevention

Every year, employees can receive free influenza vaccinations. Dependents of staff can also enjoy a special discount and guaranteed vaccine availability. In 2019 a total of 1,536 vaccinations were administered, the total inoculation rate was 33.1%, and the related epidemic prevention work cost a total of NT$930,000. WNC also holds promotions regarding related health news and provides information on preventing the spread of novel infectious diseases.

Occupational disease prevention

Activities on eye care and musculoskeletal disorder prevention lectures are held from time to time, and hearing protection courses are periodically held in collaboration with industrial safety units. WNC also coordinates with industrial safety units, facility doctors, and unit executives to inspect work environments.

Emergency Care System

WNC established a 24-hour facility nurse on duty hotline, periodically reviews emergency care personnel deployment and training, implements evacuation drills and training for sites, and audits and supplements the medical supplies at each unit. WNC headquarters has signed an emergency ambulance contract with the employee clinic, so that emergency services can be provided immediately when necessary.

All colleagues of WNC's sites in China are required to undergo general health examinations on joining the company. In addition, based on the Law of the People's Republic of China on Prevention and Control of Occupational Diseases, employees in China performing special tasks with potential risk of occupational disease are required to undergo extra related examinations when undertaking those tasks.

3.5.4 Employee Activities and Welfare

Company-wide Events	Health-related Activities	Welfare
■ Year-end party ■ Dragon Boat festival event ■ Convenience services for employees ■ Family day and sports day ■ Christmas decorations in the office area	■ Health consultation sessions ■ Health promotion activities ■ Exercise courses ■ Massage services	■ WNC recommended stores ■ Organic canteen meals ■ Art events ■ Employee Assistance Program (EAP)

In 2019, WNC develops the employee activity plans while centering on two themes: health care and quality-of-life improvement. The content of the activities are listed below:

Company-wide events

Includes the year-end party, Dragon Boat festival activities, winter clothes cleaning service event, hair cutting activity, and home cleaning service for employees event.

Art events

Organized the WNC Book Festival and lectures on wealth management and parent-child joint reading, 192 employees participated in the lectures. Nineteen arts-and-crafts DIY classes were held, and 1,057 employees participated in the classes.

Exercise courses

We offered aerobics, muscle strength training, body sculpting, Tai Chi, Yoga courses, and rhythmic balance; in 2019, four sessions were held at the WNC headquarters with each session containing ten classes. A total of 556 people participated in these activities. At S1, four sessions (10 classes each session) of Yoga, body sculpting, muscle strength circuit training, and other fitness courses were held, with a total of 155 participants.

Employee Welfare Committee

In Taiwan, the company has established an Employee Welfare Committee in compliance with the Employee Welfare Fund Act to assist all employees. The annual employee welfare budget is derived from company revenue and employee welfare funds. Employee representatives elected by the employees themselves and the management team coordinate to allocate employee welfare funds to further improve management/employee relations.

In response to environmental protection, WNC started providing electronic gift certificates to employees in 2019. In addition, due to site expansion and a rise in the number of employees, starting Q2 2019, gifts given to employees for Chinese New Year, Labor Day, and Mid-Autumn Festival were selected via employee popular vote.

WNC encourages all of its employees to take advantage of the subsidies and incentives available and participate in its activity clubs. There are 14 major clubs at WNC's sites in Taiwan, including a mountaineering club, golf club, basketball club, softball club, badminton club, tennis club, table tennis club, music club, cycling club, road runners club, bowling club, volunteers club, fitness club and creative model building club. At WNC's sites in China, there are 13 major clubs, including a Meihua Quan club, basketball club, cycling club, performing arts club, swimming club, Mercy club, table tennis club, English speech club, badminton club, fishing club, e-Sport club, roller skating club, and snooker club. Each club has a fixed meeting or practice schedule and occasionally hosts activities.

2019 Employee Welfare Fund Expenses
(NT$ million)

	Employee networking events	Gifts / Gift certificates
2019	2.16	2.24
2018	1.65	1.72
2017	1.62	1.98

■ Employee networking events
■ Gifts / Gift certificates
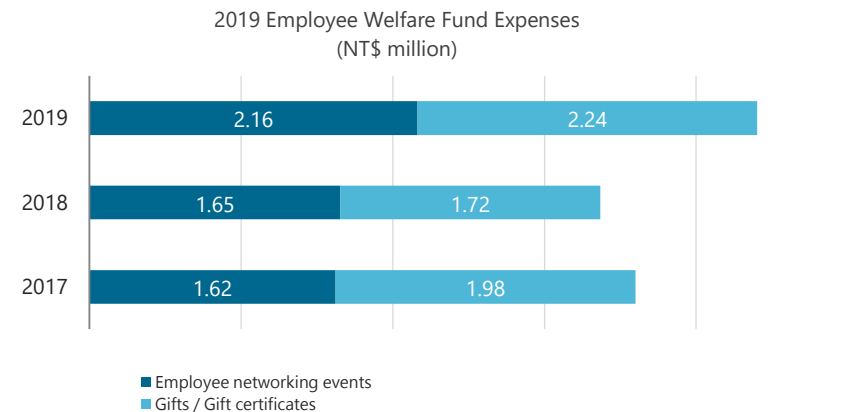
3.5.5 Recreational and Sports Equipment

Both WNC headquarters and S1 offer employees gymnasiums with a range of exercise facilities, an aerobics room, and a reading room. The gymnasiums have a variety of exercise and fitness equipment. Employees are encouraged to use the gyms during their lunch breaks and after work-hours. Showers and changing rooms are available for employees to freshen up in. Pictures of company activities are posted on the walls of the Sunshine Corridor at WNC headquarters and the Arts and Cultural Center at S1. A complete and multi-functional living center Qi Yuan is provided at the employee dormitory in China. In addition to catering services and a supermarket, there are an electronic library and other recreational facilities. These facilities encourage employees to safeguard their health during their spare time. A spacious badminton court, basketball court, table tennis room, and snooker room are also offered onsite in China. To provide employees with more options for after-work activities and encourage interaction, a new entertainment venue was built in Qi Yuan in January 2019. The venue accommodates up to 150 people and is furnished with sofas, TVs, projectors, a stage, and KTV equipment.
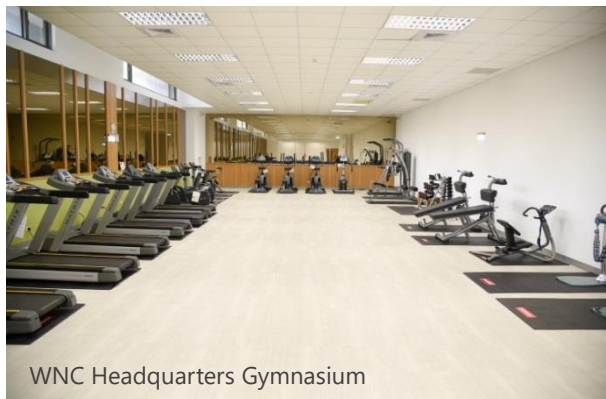
WNC Headquarters Gymnasium

WNC Headquarters Lounge

Supermarket at one of WNC's sites in China

S1 Gymnasium

WNC Headquarters Aerobics Room

Badminton Courts beside the Employee Dormitories at one of WNC's sites in China

04

Cherishing Natural Resources

Environmental Management

Green Products

Carbon Emissions Management

Energy and Resources Management

WNC's Global Manufacturing Headquarters works in coordination with the Industrial Safety Dept., Facility Center, and Digital Management Information Systems Division to implement energy conservation/carbon reduction measures in factories, production lines, equipment, and product manufacturing processes. Actions taken include the construction of solar power stations and Supervisory Control and Data Acquisition (SCADA) systems, and the establishment of an Energy Management System Committee to implement the ISO 50001 energy management system. These efforts, along with a better understanding of environmental protection by WNC employees, will effectively reduce carbon emissions and mark a step in the right direction toward our goal of becoming a green manufacturer.

WNC's Environmental Goals

Renewable Energy

Generate **5.0 GWh** of solar power from 2019 to 2022.

GHG Emissions

Reduce Scope 2 GHG emission intensity by **5.0%** in 2022 (base year: 2019).

Waste

Goals for waste recycling rates in 2020:

- Taiwan: **81%**
- China: **84%**
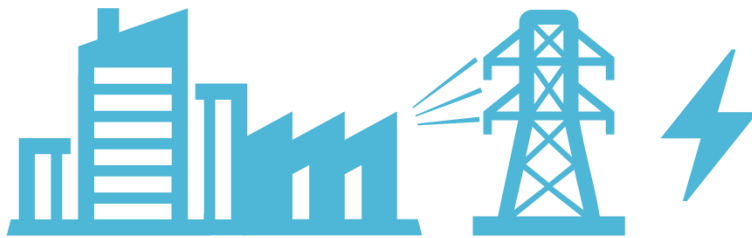
Electricity

Sites in Taiwan: Reduce electricity consumption per million NT of business revenue (unit: GJ / million NT$) by **2%** in 2020 (base year: 2019).

Sites in China: Reduce electricity consumption by **2%** in 2020 (base year: 2019).

Water

- Sites in Taiwan: Reduce water withdrawal per million NT of business revenue (unit: cubic meters / million NT$) by **5%** in 2021 (base year: 2019).

- Sites in China: Reduce water withdrawal by **2%** in 2020 (base year: 2019).

Environmental Protection Achievements in 2019

Green Living

- WNC sites in Taiwan purchase office supplies, such as computers, printer cartridges, and paper towels that have green product labeling. Supplies purchased in 2019 amounted to NT$ 46.34 million.
- WNC sites in Taiwan held three environmental protection activities in 2019, including a beach cleanup activity, bring your own shopping bag activity, and a stair climbing activity. A total of 400 employees participated in these activities.

Renewable Energy

- A total of 1.8 GWh of electricity was generated from solar power in 2019. The annual power generation equates to a carbon absorption capacity of approximately 2.8 times that of Daan Forest Park.

Green Products

- In 2019, we received a total of 559 requests for green products from customers, and we had fulfilled all these requests by Q1 2020.
- Implemented Pulse Width Modulation (PWM) in a 5G home router to control electrical current powering the router's LEDs so as to reduce energy consumption of the product when in use. Tests reveal that this design reduces energy consumption by about 48.37%.

Water Resources

- In 2019, saved and recycled water made up approximately 14.8% of the total water withdrawn in WNC, which saved about NT$5.18 million in water withdrawal costs.

Waste

- Waste recycling rate exceeded 80% in 2019.
- Five recycling projects were implemented at WNC sites in Taiwan in 2019, including recycling of solder waste, used pallets, and used plastic barrels, resulting in savings of NT$16.38 million.

Greenhouse Gases

- Total Scope 2 GHG emission intensity decreased by 14% in 2019 (base year: 2016).
- Implemented the ISO 50001 energy management system, reducing emissions by 599 tonnes CO_2e, leading to energy savings of around NT$2.77 million.

4.1 Environmental Management

WNC ESH & Energy Management Policy

- In compliance with government policy and in coordination with ESH & Energy management system directives, promote environmental protection and the prevention of occupational diseases so as to provide employees with a safe and healthy work environment.

- All employees must work together to design and manufacture green products of superior quality and minimize the impact and damage these products cause to the environment so as to fulfill stakeholder demands, help protect the environment and use energy effectively.

- Continue to strengthen mechanisms for the prevention of environmental pollution, increase energy usage efficiency, implement appropriate control and reduction measures, and support purchases of products that improve energy performance to lessen impact on the environment.

- Continue to implement the workplace health management system and educate employees on how to prevent occupation-related injuries and illness. Adopt a "zero tolerance" principle toward unlawful conduct in the workplace to maintain the physical and mental health of employees.

- Reinforce all employees' ESH & Energy performance awareness and accountability, and provide appropriate communication and consultation channels and participation mechanisms to ensure the effective operation of the ESH & Energy Management system.

WNC pays close attention to global environmental protection issues and trends. Apart from observing local regulations at our operation sites and establishing environmental and green-product management systems with suppliers based on customer requirements, we have also implemented measures in our work environments to conserve energy and reduce our carbon footprint in order to ensure the effective use and management of limited resources. In addition, we have also formulated the Environmental Safety, Health & Energy Management Policy described below to implement measures and carry out internal and third-party audits at fixed intervals to ensure that we comply with ISO 14001, ISO 14064, ISO 50001, IECO QC 080000, FSC^{TM} Chain-of-Custody (FSC^{TM} CoC) and other related regulations.

4.1.1 Pollutant Management

WNC belongs to a technology-intensive, R&D focused industry. Since our manufacturing processes only comprise SMT (Surface Mount Technology), precision assembly, and testing, pollutants from operations such as waste gases, wastewater, undesirable noise, or toxic substances are rarely generated. In addition, besides CO_2 exhaust due to electricity consumption, there are no other air pollutants generated (such as NO_X and SO_X).

Pollutant Management Methods

Waste gases	Wastewater	Waste	Carbon emissions

Qualified inspection agencies

| Collected and disposed of via WNC's specialized pipelines | Managed by the sewage treatment plant | Handled by qualified specialist operators commissioned by WNC | Performs inventory and reduces carbon emissions |
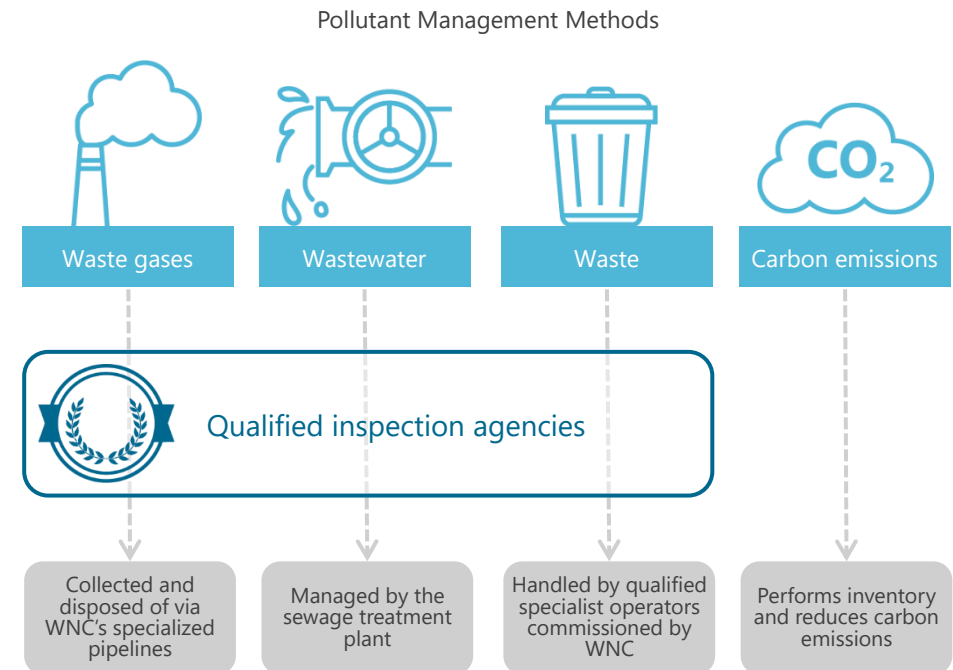
4.1.2 Waste Management

Due to changes in capacity demand in Taiwan, the amount of non-recyclable industrial waste has increased. As a result, in 2019, the total weight of waste produced by WNC (Taiwan) significantly increased compared to 2018. In order to continuously improve our waste recycling rate, waste recycling and reuse programs have been implemented.

Target — Our new target waste recycling rate for 2020 in Taiwan and China has been adjusted to 81% and 84% respectively.

WNC Waste Reduction Targets and Achievements

Results (Targets)		2019	2018	2017
Taiwan	Annual waste recycling rate	83% (78%)	77% (75%)	79% (70%)
China	Waste generation density (YoY) (tonnes / million NT$)	-12.6% (-5%)	-4.3% (-5%)	NA

WNC Waste Recycling Results in 2019

Type	Measures	Recycled (tonnes)	Recycling Benefits (ten thousand NT$)
Solder waste	Recycle solder waste generated during production processes for recycling vendors to turn into electroplated plates	18.09	1,434
PCB trim scraps	Recycle PCB trim scraps generated during production processes for recycling vendors to recycle heavy metal (such as cooper and gold)	72.67	184
Used pallets	Provide unusable pallets to recycling companies to remanufacture into fuel balls. These are used by cogeneration plants as combustion aids.	57.39	5
Used plastic barrels	Provide empty plastic barrels to recycling companies for washing and processing. The barrels are then broken up into plastic pellets which can be remanufactured into other plastic items.	1.01	8
Used plastic bags	Some scrap plastic bags used on assembly lines can also be reused in waste sorting bins for SMT production lines, enabling us to reduce the number of single-use plastic garbage bags used each year by about 5,000.	NA	7
Total		**149.16**	**1,638**

Program to raise waste recycling rate

Since October 2017, WNC has participated in the Dandelion Project promoted by Zhenglong Co., Ltd. In 2019, 5.26 tonnes of internal documents were shredded by WNC and supplied to Zhenglong for recycling into Dandelion Eco-friendly paper which is manufactured from 100% recycled pulp and does not use forest resources.

Waste from WNC mainly comes from production processes. In 2019, WNC started implementing factory waste sorting optimization projects, which led to an increase in the number of waste sorting categories. In addition reference photos are being placed beside waste sorting bins to improve the accuracy of waste sorting and in turn raise the recycling rate. WNC has also requested suppliers to recycle and reuse packaging materials, including trays used in manufacturing processes and cardboard boxes, to reduce the amount of waste from single-use items.

Management of waste-cleanup vendors

When cleaning up waste, WNC conducts waste sorting and reduction operations and has established qualified waste-storage areas. Waste is also handled by authorized waste-cleanup vendors. In accordance with regulations WNC files reports online on the waste it generates to ensure that no environmental pollution issues occur. WNC has begun conducting annual on-site audits on the vendors that handle its hazardous industrial waste. The inspection items of the audits include the vehicles used for transporting waste, storage facilities, and waste handling methods as well as document verification. This is to ensure that these vendors conduct waste inspection, cleanup, and handling in accordance with the law. Vendors are ranked based on the results and WNC communicates with the vendors based on the results and requires that the vendors propose improvement measures accordingly.

In 2019, WNC (Taiwan) and WNC's sites in China handled waste and recycling according to local regulations. No significant pollution incidents occurred, and no WNC sites received any penalties or fines for violations of environmental protection regulations.

The declared weights for 2019 of various types of waste at WNC are listed in the table below.

Waste Generated by WNC in the Last Three Years (Unit: tonnes)

Year	General Waste	Hazardous Waste	Recyclable Waste	Waste Material Total Weight
2017	3,263	260	198	3,721
2018	3,197	290	319	3,806
2019	2,888	333	782	4,003

- Recyclable Waste
- Hazardous Waste
- General Waste
- Waste Material Total Weight

Waste Generated by WNC in the Last Three Years (Unit: tonnes)

Waste Category[Note 1]	Taiwan				China				Total			
	Total	Re-use/ Re-cycled	Incinera-tion	Chemical processing	Total	Re-use/ Re-cycled	Incinera-tion	Chemical processing	Total	Re-use/ Re-cycled	Incinera-tion	Chemical processing
General Waste	531	317	214	0	2,357	2,017	340	0	2,888	2,334	554	0
Hazardous Waste	117	90	24	3	216	175	41	0	333	265	65	3
Recyclable Waste[Note 2]	782	782	0	0	0	0	0	0	782	782	0	0
Total Waste	1,430	1,189	238	3	2,573	2,192	381	0	4,003	3,381	619	3

Note 1: Waste is categorized based on the processing modes of the particular waste.

Note 2: WNC (Taiwan) disposes of recyclable waste according to regulations specified by the Recycling Fund Management Board.

4.1.3 Packaging Materials Management

WNC makes every effort to develop and manufacture green products that comply with environmentally-friendly requirements of low toxicity, low pollution, energy efficiency, low resource consumption, and easy recyclability. Packaging materials used during the packaging and delivery stage, including corrugated fiberboard, EPE foam, plastic bags, labels, brochures, paper pulp boxes, and bubble wrap, are all made from recyclable materials and comply with the control measures for certain hazardous substances (Pb, Cd, Hg, and Cr(VI)) listed in the EU's Directive on Packaging and Packaging Waste (Directive 94/62/EC). In addition, WNC strives to reduce packaging volumes to improve space utilization, increase the amount of containers that can be loaded in a shipment, reduce the energy consumption and pollution produced during transportation, and reduce unnecessary transportation costs and carbon emissions.

To respond to customer requirements and promote sustainable forest management, in 2014, WNC began using paper products with the FSC[TM] Chain-of-Custody certification issued by the Forest Stewardship Council (FSC). After obtaining FSC[TM] CoC certification in 2015, WNC has regularly conducted internal audits and undergone third-party verification. WNC hopes to utilize systematic forest management and supply chain monitoring to help ensure that the paper products that it uses to make package boxes, paper bags, labels, and other printing materials are all made from wood from certified planted forests, which in turn will ensure that more forests are properly protected and managed. In February 2020, WNC completed third-party verification and audit processes for FSC[TM] CoC Accreditation.

4.1.4 Green Life

Environmental Protection Activities

WNC is continually looking to implement energy and water conservation measures. In 2019, it organized the following environmental protection activities, inviting colleagues to work together to protect the environment.

WNC Environmental Protection Activities in 2019

Month	Activities	Description	Results
Sept.	Mid-Autumn Sales Event	Employees who bring their own shopping bags get a discount	No. of participants: 106
Oct.	Beach Cleanup Activity	Employees and their family members cleaned up the beach at Nanliao in Hsinchu	No. of participants: 105 Amount of waste collected: 282 kg
Nov.	S2 Stair Walking Activity	Employees at S2 were encouraged to take the stairs instead of using elevators	No. of participants: 189

In 2020, WNC will continue to organize green activities using the themes of energy conservation, carbon reduction, and waste reduction/reuse so as to encourage employees to take action to protect the Earth by doing things such as turning off unused lights and having a better understanding of waste and pollution and recycling.

Reuse resources via handmade crafts

Test your green knowledge

**Energy Conservation
Carbon Reduction
Waste Reduction
Recycle**

Conserve energy and reduce carbon emissions to protect the Earth

Take action to protect the ocean
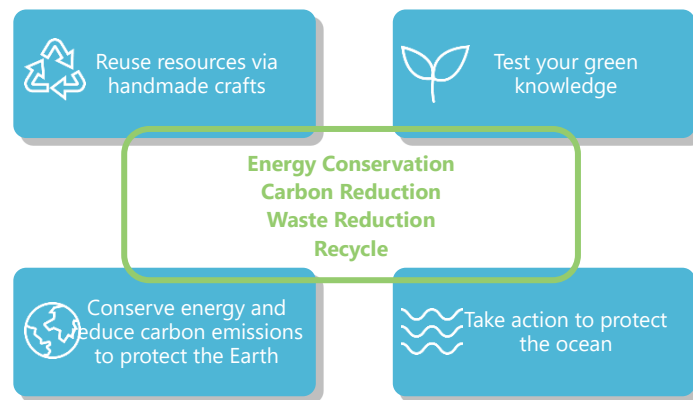
Environmental Expenditure

Besides obtaining environmental management system certifications, WNC has also implemented many environmental protection measures. In 2019, WNC spent a total of NT$63.43 million on this, of which 2.1% was spent on management system certification, 2.9% was spent on environment and green product testing, 6.6% was spent on waste handling, 12.1% was spent on prevention of air/soil/water pollution, and 76.3% percent was spent on energy conservation investments.

WNC Environmental Expenditures in 2019 (Unit: ten thousand NT$)

Item			Taiwan	China	Total
Certification fee		ISO 14001, ISO 14064-1, ISO 50001, IECQ QC080000, FSC™ CoC	82	51	133
Environment and product testing		Waste gas/water/ noise level verification/ measurement cost	22	14	185
		Green product testing fee[Note 1]	149	0	
Waste handling		Fees for cleanup and inspection of solid/liquid waste	358	58	416
Pollution prevention	Air	Replacement of activated carbon	9	50	767
		Scrubber maintenance cost	5	37	
		Air pollution fees	23	24	
	Soil	Soil pollution fees	0.1	0	
	Water	Refurbishment of rainwater and sewage drainage pipes	36	0	
		Sewage treatment fee	425	158	
Energy conservation investments		Solar panel installation and maintenance fee	0	0	4,842
		SCADA installation and maintenance fee	24	15	
		Investment in energy conservation projects	150	19	
		Purchase of products with green product labels[Note 2]	4,634	0	
Total			**5,917**	**426**	**6,343**

Note 1: Green product testing fees for WNC sites in Taiwan include fees from other sites.

Note 2: WNC purchases office supplies, such as computers, printer cartridges, and paper towels that have green product labeling.

4.2 Green Products

4.2.1 Green Product Management

WNC's Green Products Section is tasked with coordinating all internal and external matters relating to green products and to work with operations, purchasing, R&D, and manufacturing units to effectively monitor the management process for environmental product development during the product design, production, and shipment stages. The section's responsibilities include evaluation and execution of compliance with international laws, regulations, and customer environmental protection directives, evaluation of green label compliance, promotion of green product continual improvement initiatives, control of hazardous substances, auditing of green products, and management of suppliers to ensure the effectiveness of WNC's green policy implementation. In 2019, we received a total of 559 requests for green products from customers, and we had fulfilled all the requests by Q1 2020.

4.2.2 Hazardous Substances Management

WNC has implemented lead-free processes and enforced halogen-free standards in production processes to reduce the environmental impact of said processes. WNC also utilizes XRF equipment to perform reliable and rigorous measurement and monitoring of prohibited and restricted substances in raw materials and products that are hazardous to the environment.
Suppliers use WNC's Green Product Management System to upload their product ingredient analysis reports, inspection results, warranty cards, and related documents. This enables WNC's purchasing units and quality management units to check in a timely manner if materials comply with a customer's requirements regarding prohibited and restricted substances. Project managers can also acquire the product material information from this management system and ensure the performance of the green supply chain.

WNC Green Product Management Organization

Green Product Management Process Flow

We are also using green purchasing and communications to work with our suppliers on meeting international environmental standards. Every effort is made to provide customers with design and manufacturing services that are energy-saving, toxin-free (or of low-toxicity), low-polluting, and that use recyclable materials, as well as provide green products that have lower impact on the environment.

WNC Green Product Directives Development

WNC has established a set of Green Product Restricted Substances Management Procedures and a Standard for Restricted Usage of Environmentally Hazardous Substances, and has used the aforementioned standards to create a control list of hazardous substances that all of its suppliers must comply with. The suppliers are also required to sign the Supplier Statement on Non-Use of Environmentally Hazardous Substances to ensure that products and parts supplied (including bundled accessories, packaging, and other materials) to WNC comply with relevant international directives such as RoHS 2.0, WEEE, REACH, ErP, and the European Battery Directive, international regulations related to the non-use of conflict minerals, and WNC's prohibition of substances harmful to the environment.

WNC complies with the above-mentioned Green Product Restricted Substances Management Procedures in the product development phase to ensure that they meet the EU RoHS (2011/65/EU) regulation, the REACH SVHC (Substances of Very High Concern) regulation, the EU Battery Directive (2006/66/EC), the EU Directive of Packaging and Packaging Waste (94/62/EC), the EU PFOS Directive (2006/122/EC) and the restrictions and limitations on the use of hazardous substances as required by customers. In 2019, WNC's products did not violate any green product directives.

IECQ QC 080000 Certification

WNC (Taiwan) and WNC's sites in China have earned IECQ QC 080000 certification, which is developed according to the electronic component evaluation system of the International Electrotechnical Commission (IEC). It is established based on ISO 9001, TL 9000, and IATF 16949 management systems, and incorporates a process-orientated method to reduce or eliminate hazardous substances in products and to further systemize hazardous substances management. It is capable of meeting RoHS, WEEE, and special customer requirements.

SONY's Green Partner Certification

WNC (Taiwan), Wistron NeWeb (Kunshan), and WebCom (Kunshan) have been honored with Sony's Green Partner certification starting from 2007 and have, to date, passed all subsequent annual inspections. This validates WNC's efforts on hazardous substances management.

4.2.3 Eco-Design

The EU Energy-related Products directive (ErP, 2009/125/EC) is an eco-design regulatory framework for all energy-related products entering the EU market. Its scope encompasses a product's complete lifetime, including design, production, packaging, transportation, use, and disposal. Its purpose is to raise the energy and resource efficiency of products as well as reduce pollution. Utilizing product LCA (life-cycle assessment) principles, WNC analyzes a product's chemical composition, energy efficiency, and recyclability to evaluate its potential impact on the environment. WNC also implements eco-management processes in accordance with customer requirements, making the pursuit of eco-design a fundamental concern during the early stages of product design. This enables WNC to incorporate factors such as hazardous-substance restrictions, energy efficiency, recycling and reuse, environmental information disclosure, and other eco-design parameters into product design. At the same time, WNC raises supplier-side requirements to ensure that design components meet the eco-design requirements of energy-using products as specified by WNC.

Product Energy-Saving Plan

To better meet connectivity requirements of the 5G age, WNC has worked with customers to jointly develop a 5G home router. During the design stage, pulse width modulation (PWM) was implemented to control the electrical current powering the router's LEDs so as to reduce energy consumption of the product when in use. Our tests reveal that this design reduces energy consumption by about 48.37%.

Access points (AP) and routers are two major categories in WNC's product portfolio. In 2019, WNC optimized the production process for its new outdoor wireless AP to reduce product testing time as well as the energy consumption and carbon emissions of the production process. Our tests show that after the production process was optimized, energy consumption was lowered by around 10%.

4.3 Carbon Emissions Management

Greenhouse Gas Emissions Inventory Boundary

Since 2012, WNC (Taiwan) has defined organizational boundaries in accordance with the operational control approach and by referencing ISO 14064-1 and the GHG Protocol standards, and in turn calculated its Scope 1 and Scope 2 GHG emissions with 2016 set as the base year. The major greenhouse gases emitted include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbons (HFCs). The 2019 GHG inventory in Taiwan and China was completed during the first quarter of 2020, and obtained ISO 14064-1 verification in May 2020. The GHG inventory results in the last three years are presented in the table below.

CDP

In 2019, WNC participated in surveys concerning climate change and water security as part of the CDP supply chain program. The results of the surveys were graded a C. The results of the survey for supplier engagement were graded a B-. WNC has reviewed the results and formulated a list of work items requiring improvement based on CDP feedback.

WNC GHG Inventory Results in the Last Three Years (Unit: tonnes CO_2e)[Note1]

Site		2017				2018				2019			
		Scope 1	Scope 2	Scope 3	Total Emissions	Scope 1	Scope 2	Scope 3	Total Emissions	Scope 1	Scope 2	Scope 3	Total Emissions
Taiwan	HQ	160	4,376	--	**4,536**	811	4,155	--	**4,966**	355	4,137	--	**4,492**
	S1	50	13,077	--	**13,127**	94	12,643	--	**12,737**	240	15,849	--	**16,089**
	S2[Note2]	--	--	--	**--**	--	--	--	**--**	4	4,325	--	**4,329**
	Subtotal	**210**	**17,453**	**--**	**17,663**	**905**	**16,798**	**--**	**17,703**	**599**	**24,311**	**--**	**24,910**
China	WNC (Kunshan)	816	13,524	--	**14,340**	813	13,377	--	**14,190**	753	13,274	--	**14,027**
	Wistron NeWeb (Kunshan)	577	23,179	--	**23,756**	900	22,452	--	**23,352**	867	18,632	--	**19,499**
	WebCom (Kunshan)	690	5,774	--	**6,464**	1,625	5,077	--	**6,702**	1,610	3,459	--	**5,069**
	Subtotal	**2,083**	**42,477**	**--**	**44,560**	**3,338**	**40,906**	**--**	**44,244**	**3,230**	**35,365**	**--**	**38,595**
Total		**2,293**	**59,930**	**--**	**62,223**	**4,243**	**57,704**	**--**	**61,947**	**3,829**	**59,676**	**--**	**63,505**

Note 1: The emission factor of WNC's sites in Taiwan are calculated based on the GHG emission factor management table 6.0.3 issued by the EPA; the year of the GWP is IPCC 2007 AR4; the emission factor of WNC sites in China are calculated based on the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and the China Energy Statistical Yearbook 2008; the year of the GWP is IPCC 2006.

Note 2: The S2 site began operations in June 2019, thus data for a whole year is not available, hence the lack of ISO 14064-1 verification.

Reduction of GHG Emissions

Goal in 2019	Reduce Scope 2 GHG emission intensity by 10% at sites in Taiwan and China (base year: 2016).

WNC has been gradually expanding its business development and production lines, and thus electricity consumption has gradually increased each year. The main source of greenhouse gas emissions is externally purchased electricity, and Scope 2 greenhouse gas emissions account for more than 90% of the total greenhouse gases. To truthfully reflect the impact of changing production capacity on GHG emissions and reduction targets, emission intensity will also be presented to illustrate the relationship between production capacity and emissions. Due to the implementation of various energy-saving programs, total Scope 2 GHG emission intensity for 2019 decreased by 14.3% compared to 2016, which is an achievement rate of 143%.

Given the establishment of the S2 and V1 sites, the base year for the GHG emission reduction target has been adjusted. A new GHG emission target has been set: reducing the total Scope 2 greenhouse gas emission intensity (tonnes of CO_2e / revenues in millions of NT$) by 5% in 2022 (using 2019 as the base year).

WNC Scope 2 GHG Emissions Intensity

(Total emission unit: tonne CO_2e;
Emission intensity unit: tonnes CO_2e / million NT$)

	2016	2017	2018	2019
Scope 2 GHG Emission Intensity	1.12	1.05	1.03	0.96
Achieving Rate		63%	80%	143%
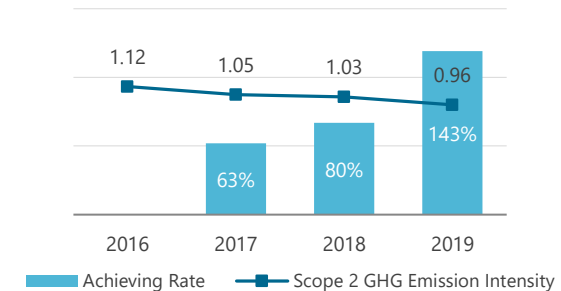
Types of GHG Emission Sources and Corresponding Activities at WNC in 2019

Scope	Type of Emission Sources	Corresponding Activities/Equipment	Percentage (%)	
			Taiwan	China
Scope 1: Direct Emissions	Stationary combustion	Diesel fuel used in emergency generators (CO_2, CH_4, and N_2O)	2.42	8.37
	Mobile combustion	Gasoline used by company vehicles (CO_2, CH_4, and N_2O)		
	Fugitive emissions	■ Emissions from septic tanks (CH_4) ■ Emissions from the refrigerant used in air conditioners/refrigerators, SMT cooling devices, and company vehicles (HFCs) ■ Emissions from carbon dioxide fire extinguishers (CO_2)		
Scope 2: Indirect Emissions	GHG emissions from the generation of purchased electricity, heat, steam, or other fossil fuels consumed by WNC	Electricity purchased from utilities companies (CO_2) ■ Taiwan: Taipower ■ China: Huazhi Sell Electricity	97.58	91.63

4.4 Energy and Resources Management

4.4.1 Energy Use

The primary source of energy for WNC's sites in Taiwan and China is electricity. At sites in Taiwan, a small amount of diesel fuel is used to power emergency generators during the Taiwan Power Company's annual maintenance operations or during power outages. At sites in China, due to low winter temperatures, diesel fuel is used for heating. In 2019, due to the establishment of the S2 site and production capacity expansion, WNC's total electricity consumption increased by approximately 10.9% compared to 2018. The energy consumption at WNC (Taiwan) and WNC sites in China in the last three years are shown in the following table.

Energy Consumption Statistics at WNC in the Last Three Years[Note 1]   (Unit: GJ)

Site		Electricity			Diesel[Note 2]			Total		
		2017	2018	2019	2017	2018	2019	2017	2018	2019
Taiwan	HQ[Note 3]	30,142	27,000	27,941	29	20	39	30,171	27,020	27,980
	S1	88,992	82,158	107,047	81	137	97	89,073	82,295	107,144
	S2	0	0	29,214	0	0	23	0	0	40,974
	Subtotal	**119,134**	**109,158**	**164,202**	**11**	**157**	**159**	**119,244**	**109,315**	**176,121**
China	WNC (Kunshan)[Note 4]	60,494	59,363	59,392	0	962	760	60,494	60,325	60,152
	Wistron NeWeb (Kunshan)	106,032	99,640	83,365	420	479	0	106,452	100,119	83,365
	WebCom (Kunshan)	25,624	22,531	15,475	208	692	753	25,832	23,223	16,228
	WebCom (Nanjing)	720	920	1,000	0	0	0	720	920	1,000
	Subtotal	**192,870**	**182,454**	**159,232**	**628**	**2,133**	**1,513**	**193,498**	**184,587**	**160,745**
Total		**312,004**	**291,612**	**323,434**	**738**	**2,287**	**1,672**	**312,742**	**293,899**	**336,866**

Note 1: Electricity statistics for WNC (Taiwan) are compiled based on the utility billing cycle.
Note 2: According to the heat content of energy sources and the energy unit conversion table in the Energy Statistics Handbook 2018, one liter of diesel equals 0.0352 GJ.
Note 3: Data from WNC headquarters also includes power consumption at the Lihsin office, which was sold in 2017. The electricity statistics for said office stops at the end of March 2017.
Note 4: WNC (Kunshan)'s data includes power consumption at NeWeb Service.
Note 5: Electricity consumption unit: GJ; Electricity use intensity unit: GJ / million NT$

Electricity Consumption and Electricity Use Intensity in WNC (Taiwan) in the Last Three Years[Note 5]

	2017	2018	2019
Electricity Consumption	119,134	109,158	164,202
Electricity Use Intensity	2.16	1.99	2.79
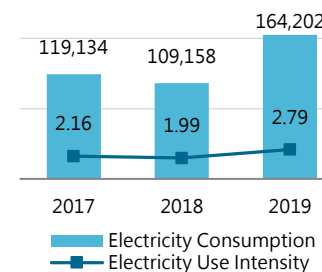
Electricity Consumption and Electricity Use Intensity in WNC's sites in China in the Last Three Years[Note 5]

	2017	2018	2019
Electricity Consumption	192,870	182,454	159,232
Electricity Use Intensity	5.81	5.43	5.26
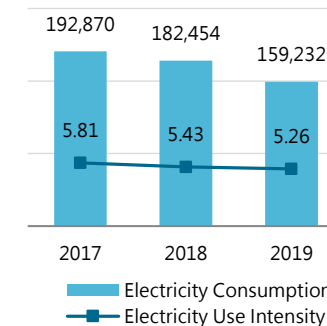
Renewable Energy

A total of 1,860 MWh of electricity was generated from WNC's solar power plants in 2019, and approximately 1,090 tonnes of CO_2e was reduced. The annual power generation equates to a carbon absorption capacity of approximately 2.8 times that of Daan Forest Park.

Benefits Brought About by Solar Power Stations in 2019

Item	Taiwan			China	Total
	HQ (Parking structure roof)	S1 (Plant roof)	S2 (Plant roof)	Wistron NeWeb (Kunshan) (Plant roof)	
Solar panel surface area (m²)	2,445	4,000	2,959	1,952	11,357
Solar power station capacity (MW)	0.37	0.50	0.50	0.33	1.70
Energy generation (MWh)[Note 1]	421	595	481	363	1,860
Carbon emissions reduction (tonnes CO_2e)[Note 2]	225	317	256	292	1,090

Note 1: By referencing the average solar radiation data provided by the National Aeronautics and Space Administration Atmospheric Science Data Center (NASA ASDC) at the locations of the solar power generating units, the projected energy generation can be estimated after all energy losses are deducted.

Note 2: According to the information released by the Energy Bureau of the Ministry of Economic Affairs in 2019, the Grid Emission Factor in Taiwan is 0.533 t-CO_2e/MWh; according to the 2018 Baseline Emission Factors for Regional Power Grids in China (published by the Department of Climate Change of the National Development and Reform Commission), the Grid Emission Factor in East China is 0.8046 t-CO_2e/MWh.

Solar panels on the roof of the parking structure of WNC headquarters

Solar panels on the roof of S1

Solar panels on the roof of Wistron NeWeb (Kunshan)

Energy Conservation

In addition to enhancing the resource efficiency of our product design as well as R&D and production processes, we have also implemented energy conservation and carbon reduction measures at our sites. These measures include recording and analyzing daily energy consumption, improving electricity usage efficiency, improving piping and electrical wiring, improving and/or replacing old facility equipment, and implementing various energy conservation programs. WNC has implemented the ISO 50001 energy management system and formulated specific improvement plans for its illumination systems, exhaust systems, air-conditioning systems and air compression systems. The effects of these energy conservation measures are presented in the table below.

Energy Conservation Results in 2019[Note 1]

System	Item	Taiwan	China	Total
Illumination	Number of Energy Conservation Plans	3	4	7
	Electricity Saved (GJ)	472	336	808
	Amount invested (unit: ten thousand NT$)	28	15	43
Exhaust	Number of Energy Conservation Plans	5	0	5
	Electricity Saved (GJ)	505	0	505
	Amount invested (unit: ten thousand NT$)	91	0	91
Air-conditioning	Number of Energy Conservation Plans	2	0	2
	Electricity Saved (GJ)	1,894	0	1,894
	Amount invested (unit: ten thousand NT$)	0	0	0
Air compression	Number of Energy Conservation Plans	0	0	0
	Electricity Saved (GJ)	0	0	0
	Amount invested (unit: ten thousand NT$)	0	0	0
Production processes	Number of Energy Conservation Plans	0	1	1
	Electricity Saved (GJ)	0	428	428
	Amount invested (unit: ten thousand NT$)	0	3	3
Other	Number of Energy Conservation Plans	1	0	1
	Electricity Saved (GJ)	21	0	21
	Amount invested (unit: ten thousand NT$)	13	0	13
Total	Number of Energy Conservation Plans	11	5	16
	Electricity Saved (GJ)	2,892	764	3,656
	Amount invested (unit: ten thousand NT$)	132	19	150

Note 1: The amount of energy saved is calculated by comparing the power consumption before and after the improvements are made to the system, then estimating the amount of energy saved.

Note 2: For WNC (Taiwan), the amounts of electricity saved were calculated using NT$2.6 per kilowatt hour. For WNC's sites in China, the amounts of electricity saved were calculated using NT$3.2 per kilowatt hour.

Energy conservation contribution percentage by category in 2019

- Air-con 51.8%
- Illumination 22.1%
- Exhaust 13.8%
- Production processes 11.7%
- Other 0.6%

Number of Energy Conservation Plans
16 (includes two plans started in 2018)

Electricity Saved
3,656 GJ

Estimated Savings[Note 2]
NT$2.77 million

Amount Invested
NT$1.50 million
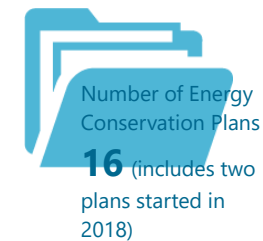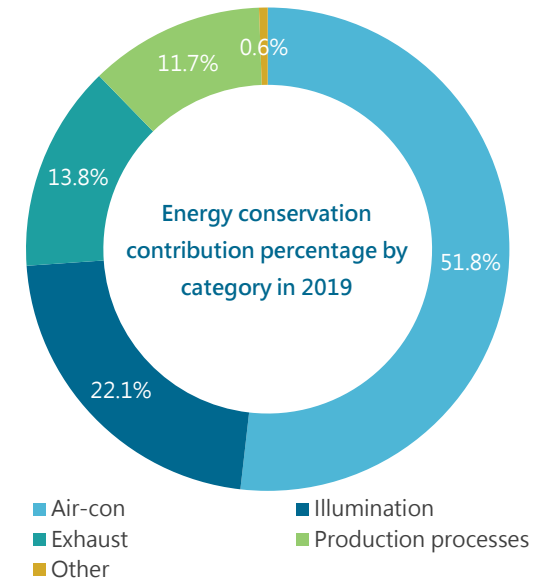
4.4.2 Water

WNC operates in an R&D- and technology-intensive industry, and only tap water is used in its operations. Compared to 2018, total water withdrawal, discharge and consumption at WNC (Taiwan) all increased due to the establishment of the S2 site and production capacity expansion. The total water withdrawal, discharge and consumption at WNC (Taiwan) and WNC's sites in China in the last three years is shown in the table below.

Breakdown of Water Usage at WNC in the Last Three Years   (Unit: megaliters)

Site\Item[Note 1]		Total Water Withdrawal			Total Water Discharge			Total Water Consumption		
		2017	2018	2019	2017	2018	2019	2017	2018	2019
Taiwan	WNC Headquarters	38.399	32.510	40.391	12.794	14.180	21.909	25.605	18.330	18.482
	S1	83.852	87.532	118.817	17.035	17.578	15.201	66.817	69.954	103.616
	S2	0	0	45.159	0	0	15.460	0	0	29.699
	Subtotal	122.251	120.042	204.367	29.829	31.758	52.570	92.422	88.284	151.797
China	WNC (Kunshan)[Note 2]	62.757	53.760	51.568	31.378	26.880	25.784	31,379	26,880	25.784
	Wistron NeWeb (Kunshan)	141.392	166.500	147.790	70.696	83.250	73.895	70,696	83,250	73.895
	WebCom (Kunshan)	22.920	23.505	16.621	11.389	11.753	8.311	11,531	11,753	8.311
	WebCom (Nanjing)	2.253	4.035	2.863	1.190	1.832	1.923	1.063	2.203	940
	Subtotal	229.332	247.800	218.842	114.653	123.715	109.913	114.669	124.086	108.930
Total		351.573	367.842	423.209	144.482	155.473	162.483	207.091	212.370	260.727

Note 1: The amount of water withdrawn and discharged in Taiwan is based on daily meter readings; the amount of water withdrawn in China is based on monthly meter readings, with water discharge comprising half of the water withdrawn.
Note 2: WNC (Kunshan)'s data includes water withdrawal and consumption at NeWeb Service.

For water discharge, besides the water used in washing processes at S1 since July 2017, the rest is all wastewater from everyday use, which is planned discharge. WNC (Taiwan) complies with the Regulations for the Use and Management of Wastewater Treatment and Sewage Systems in Science-based Parks. Before discharging wastewater into the Hsinchu Science Park sewage system and to the sewage treatment plant, WNC determines whether the water quality meets wastewater discharge quality standards of the Park and uses a dedicated pipeline to treat the wastewater until it meets national effluent standards and the values stated in Hsinchu Science Park environmental evaluations. Due to the implementation of advanced production processes, the S1 site purchased wastewater treatment equipment at the end of 2019 to improve water usage efficiency. The equipment is expected to be operational in 2020.

The main water sources in Kunshan, China, are the Yangtze River and the Kuilei Lake, and all wastewater discharged is from everyday use. Water discharge is calculated as half of the water drawn which is then used as the amount to determine wastewater disposal fees. The plants located in Kunshan discharge wastewater to the Kunshan sewage treatment plant in accordance with the Wastewater Quality Standards for Discharge to Municipal Sewers. The main water source for the plants in Nanjing is the Yangtze River, and all wastewater discharged is from everyday use. The plants located in Nanjing discharge wastewater to the sewage treatment plant at the Nanjing Jiangning Economic and Technological Development Zone in accordance with the Nanjing City Water Drainage Management Regulations, and these treatment approaches have not had any significant impact on the water sources.

In 2019, water drawn at WNC's sites in Hsinchu, Tainan, Kunshan, and Nanjing were all far less than 1% of their respective area's total water supply output.

2019 Water Usage at WNC

Area		Water Supply Output of the Area		Impact degree	Water Risk Level[Note 2]	Sewage Treatment Plant	Discharge Destination
		Main Source of Water	Annual Water Supply Output (megaliters)[Note 1]				
Taiwan	Hsinchu	Touqian River, Baoshan Reservoir and Baoshan Second Reservoir	171,643	0.0928%	1-2	Hsinchu Science Park sewage treatment plant	Koya River
	Tainan	Zengwen River, Zengwen Reservoir, and Nanhua Reservoir	328,370	0.0138%	1-2	Tainan Science Park sewage treatment plant	Yanshui River
China	Kunshan	Yangtze River and Kuilei Lake	402,266	0.0606%	3-4	Kunshan sewage treatment plant	Wusong River
	Nanjing	Yangtze River	953,380	0.0003%	2-3	Nanjing Jiangning Economic and Technological Development Zone sewage treatment plant	Yangtze River

Note 1: The annual water supply outputs for the main sources of water in Taiwan are announced by the Taiwan Water Corporation in their annual reports; while the annual water supply outputs of Kunshan and Nanjing are estimated based on the daily water supply outputs announced by the responsible water companies respectively.
Note 2: The water risk levels are determined based on the risk levels announced by World Resource Institute (WRI) for areas across the globe, ranging from the lowest level (0–1) to the highest level (4–5).

Water Conservation

In 2019, saved and recycled water made up approximately 14.8% of the total water withdrawn by WNC, which saved about NT$5.18 million in water withdrawal costs. The water conservation results for the year are listed below.

Water Conservation Results in 2019

Country	Source	Item	Amount of Saved Water (megaliters)	Conservation Benefits[Note 1] (ten thousand NT$)	Ratio to Total Water Withdrawal (%)
Taiwan[Note 2]	Tap water	Water recycled from drinking fountains	1.060	10	12.0%
	Tap water	Water recycled from production processes	6.880	65	
	Tap water, rainwater, and atmospheric water content	Water recycled from cooling water	14.247	134	
	Atmospheric water content	Water recycled from air conditioning systems	21.902	207	
	Rainwater	Rainwater	6.782	64	
	Subtotal		**50.871**	**480**	
China[Note 3]	Tap water	Water-saving mist faucets	2.496	8	2.8%
	Tap water	Water recycled from drinking fountains	4.770	15	
	Atmospheric water content	Water recycled from air conditioning systems	4.536	15	
	Subtotal		**11.802**	**38**	
	Total		**62.673**	**518**	**14.8%**

Note 1: In accordance with local water rates and wastewater processing fees, the water conservation benefits for WNC (Taiwan) are calculated using a rate of NT$94.4 per tonne, while NT$32.1 per tonne is used for WNC's sites in China.

Note 2:
- Water recycled from drinking fountains: The total number of employees is used to calculate the total amount of drinking water dispensed by drinking fountains, which is then used to calculate the amount of water recycled during the year.
- Water recycled from cooling water and water recycled from production processes: The amount of recycled water during the year is estimated using water meter readings.
- Water recycled from air conditioning systems: At WNC headquarters, the estimated amount of water recycled is calculated using the six-month period from May to October (when temperatures are higher than average) and based on 22 workdays per month and 10 work hours per day. The air volume, density and humidity ratio of each air conditioner is also taken into account. At S1, the amount of water recycled during the year is estimated using water meter readings.
- The amount of rainwater recycled during the year is estimated using the volume of water in the rainwater tank and the daily precipitation data compiled by the Central Weather Bureau.

Note 3:
- Water-saving mist faucets: The amount of water saved was calculated using data on the number of hand-washing faucets converted to mist faucets, the number of people who used the faucets, and the amount of time the faucets were in use.
- Water recycled from drinking fountains: The total number of employees is used to calculate the total amount of drinking water dispensed by drinking fountains, which is then used to calculate the amount of water recycled during the year.
- Water recycled from air conditioning systems: The estimated amount of water recycled is calculated using the time period from April to October and based on 26 working days per month and 24 hours per day. The air volume, density and humidity ratio of each air conditioner is also taken into account.

Water Balance in Taiwan Sites

Water Resources Usage

Recycled Water

Other Water Resources Use Cases

Water Discharge

Tap water

Atmospheric water content

Rainwater

- Water for everyday use → Water recycled from drinking fountains → Water for toilets
- Water for manufacturing → Water recycled from production processes → Water for plants → Science Park sewage treatment plant
- Water for air conditioning → Water recycled from cooling water → Water for air conditioning

Science Park Rainwater Sewage

Water Balance in China Sites

Water Resources Usage

Recycled Water

Other Water Resources Use Cases

Water Discharge

Tap water

Atmospheric water content

Rainwater

- Water for everyday use → Water recycled from drinking fountains → Water for toilets
- Water for air conditioning → Water recycled from air conditioning systems → Water for plants → Sewage treatment plant

Municipal rainwater drainage pipes

Daily Energy-Saving Measures

	Energy-Saving Measures at All Sites	WNC (Taiwan)	WNC's sites in China
Enhancing Electricity Usage Efficiency	■ Maintain air-conditioning temperatures at 26 °C ± 2 °C in the summer ■ Lighting is only used in active sections of the production line ■ Manufacturing process exhaust systems are automatically adjusted using variable frequencies ■ Water dispensers are time-controlled	■ Employees are encouraged to use the stairs instead of elevators. ■ The headquarters was designed to make maximum use of natural sunlight. Made of 8+12A+8 mm LOW-E glass, the exterior glass curtain walls achieve energy-saving effects. ■ Implemented floor-access controls for the elevators. ■ Manufacturing process exhaust fans are installed with PID controls and automatically adjust using variable frequencies. ■ Pull cord light switches are installed in office areas so employees can turn the lights above their desks on/off as needed. ■ Parking lot/stairs lighting is managed with time switching or induction lighting. ■ Lighting designs meet CNS standards and adjust according to light attenuation values to avoid over-illumination. ■ Air compressors use load balancing between variable-frequency and full-frequency units to reduce power consumption.	■ Adopted occupancy-based lighting with automatic brightness adjustment for aisles and server rooms in the plants.
Air-Conditioning Control	■ Make-up air unit (MAU) air-conditioning used during winter to reduce indoor temperatures. ■ Cooling towers and fans are installed with temperature-control and frequency-conversion features.	■ Uses a heat recycling system in its main cooling unit. ■ Uses tunneling to reduce external air input temperatures and lessen air-conditioning loads. ■ Increased output water temperature from the air-conditioning chiller to lower power consumption. The starting and stopping of the chillers and feeders are also based on indoor loads. ■ Thermostat-controlled air-conditioning; air-conditioning is also controlled by zone and time to avoid wasting power due to over-cooling. ■ Purchased air conditioners with green product labels.	■ Introduced heat recovery systems, enabling dehumidification in the summer and eliminating the need for purchasing diesel fuel in the winter ■ Added insulating cotton for SMT process exhaust ducts to reduce electricity consumption in the summer ■ Adopted a central air-conditioning cooling system to raise the operational power of SMT reflow ovens and save power ■ Variable frequency operations are adopted in air conditioning units to reduce energy consumption.
Waste reduction Lifestyle Measures	■ Energy conservation and waste reduction slogans and posters posted in the public areas. ■ Health and lifestyle seminars, Earth Week activities held to promote environmental protection awareness. ■ Promotion of programs for a paper-free office and encouragement of employees to recycle resources and reduce waste ■ Disposable eating utensils or paper cups are not provided. ■ Canteens only use reusable eating utensils. ■ Savings on office supplies	■ Dissolvable, short-fiber toilet paper used to reduce garbage. ■ Steel pallets used in the production line and wooden pallets are reused	
Water Conservation Measures	■ Used induction mist faucets in restrooms and setting water taps in tea rooms to suitable water dispensing levels. ■ Implemented water conservation projects	■ Used water-permeable ground to plant plants and grass; use of planting bricks to replace normal bricks on the U-turn floor for cars and parking; these measures increase greening and enhance surface drainage. ■ Reduced usage of irrigation water ■ Recycle wastewater from the ultra-pure water purification equipment at S1	

05

Strengthening the Value Chain & Our Relationships with Society

Customer Relations

Supplier Management

Contractor Management

Participation in Society

WNC's Global Manufacturing Headquarters, along with the Industrial Safety Unit, the Facility Center, and the Digital Management Information Systems Div., are responsible for implementing energy-saving and carbon-reduction measures for plants, production lines, equipment energy consumption and processes, and for improving and establishing solar power panels. A Supervisory Control and Data Acquisition (SCADA) system, and an Energy Management System Committee have been implemented to introduce energy management systems to actively reduce energy consumption during production and daily operations. These units also help raise environmental protection awareness by organizing related activities. With these measures we hope we can effectively reduce carbon emissions and move towards becoming a green manufacturing facility.

2019 Annual Performance

Social Participation

- Sponsored remote elementary school education and university service clubs donating total funds of NT$ 1.42 million.
- A total of 200 employees supported the social care donation plan for disadvantaged children in remote areas.
- Invited charity organizations to participate in the WNC Charity Sale and had combined sales revenue of NT$270,000.

Industry-Academia Partnership Project

- Worked with the China University of Science and Technology (CUST) to offer an industry-academia partnership project class. Currently a total of 113 students are recruited, with a retention rate of 92.6%.

Sustainable Supply Chain

- 391 suppliers have signed the Supplier CSR Declaration
- 363 suppliers have signed the Supplier CSR Questionnaire
- 187 suppliers have completed the CSR audit

Customer Satisfaction

- Average customer satisfaction score was 94.4.
- No litigation record for breach of customers' confidential information and no cases on appeal

Good Food Movement

- Organic vegetables purchased from social enterprise Buy Nearby amounted to NT$2.46 million.

5.1 Customer Relations

5.1.1 Confidential Information Protection

WNC strictly complies with the stipulations of customer contracts as well as non-disclosure agreements. To control confidential information, WNC has formulated an Information Security Policy and established the ISO/IEC 27001 Information Security Management System (ISMS). In 2019, WNC had no litigation record for breach of any customer's confidential information and no cases on appeal.

Structure of the Information Security Committee

In 2014 an Information Security Committee was established comprising top-tier managers of each business unit. The President and CEO serves as the chairman and the convener is the Chief Information Security Officer. The committee holds audit meetings semi-annually and is in charge of formulating and implementing information control measures. The committee includes three function teams: an Information Security Team, an Emergency Response Team, and an Information Security Audit Team, all headed by the Chief Information Security Officer.

Information Security Committee

Chairman: President & CEO

Convener: Chief Information Security Officer

Information Security Audit Team

Information Security Execution Team

Emergency Response Team
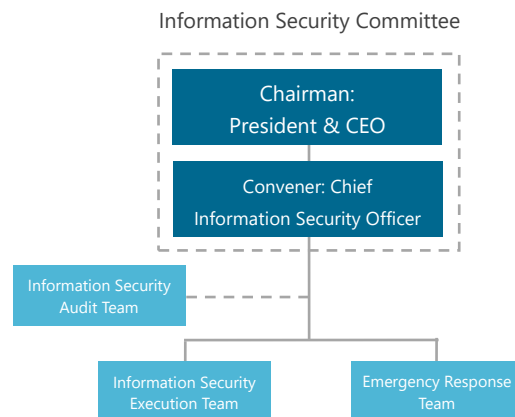
Information Security Management Mechanism

To ensure the confidentiality, completeness, and usability of all data, the company has drafted management documents in accordance with ISO/IEC 27001: 2013 standards. Each year inventory is taken and the information asset list is updated. Risk assessment, business impact analysis, disaster recovery drills, user account reviews and firewall rules reviews are performed, and information security awareness programs and training courses, vulnerability scanning, penetration testing, management review meetings, and social engineering drills are executed.

WNC's Information Security Management

Continuous Improvement
- Perform business impact analysis regularly
- Perform disaster recovery planning regularly
- Improve measures and track improvement results

Risk Identification
- Assess information asset risks regularly
- Perform internal/external audits regularly

Incident
- Incident reporting/response/handling

Governance

Information Security Management System

Examination

Implementation

Policy Formulation
- Formulate information security management system SOP
- Update provisions based on current situation and policies

Awareness Program
- - Information security awareness program and training
- -Social engineering drills

Compliance
- Comply with ISO27001
- Comply with relevant domestic and foreign laws
- Follow customer requirements

Information Security Control Mechanism

WNC have external and internal information security control measures in place. External measures include building firewalls and intrusion prevention systems to prevent virus and hacker attacks. Internal measures include prohibiting the use of communications software and plug-in devices to prevent leakage of sensitive data.

Information Security Training Courses

Awareness Programs	New employees	New employees must sign a confidentiality agreement.
	All employees	Information security related information can be accessed through WNC's intranet.
Training Courses	New employees	New employees must complete information security courses, including information security policies, provisions, and examples.
	All employees	All employees must complete topical information security courses each year.

5.1.2 Customer Satisfaction Performance

Being customer-focused is a core value of WNC. WNC's Customer Service Dept. is managed by the Quality Assurance Division and is responsible for customer service, which includes Dead on Arrival (DOA) actions for new products, Return of Materials Authorization (RMA), sales of parts for maintenance, customer complaint handling and reporting, as well as the annual customer satisfaction survey, in order to provide our customers with the best technical support and after-sales services.

Business groups or units, the quality assurance unit, R&D, supply chain management units, and manufacturing units are respectively designated as points-of-contact for different customers. According to project needs, customers and point(s)-of-contact participate in weekly, monthly, and quarterly meetings to review product development and each item's achievement rate. Each business group/unit also appoints representatives to join a quarterly supplier business review meeting with their respective customers to enhance communication and build trust.

WNC's Customer Service Dept. performs customer satisfaction surveys in Q4 each year, where the survey collection rate for crucial customer groups of each business group/unit must reach 70% or above to ensure that customer requests have been handled promptly and appropriately. The content and targets of each year's customer satisfaction survey are established in the quality management system review meeting. In 2019, the target customer satisfaction score was 90.

Despite the fact that different products and services offered by different business groups/units lead to different satisfaction scores, overall customer satisfaction remains high. In 2019, WNC's business groups/units received positive feedback and encouragement from customers, among which "after-sales service" and "product quality" garnered the highest scores in the customer satisfaction rating. For suggestions raised by customers and the items that have not been achieved according to the year's survey, responsible business group/unit will communicate with customers and offer corresponding improvement measures.

Results of Customer Satisfaction Surveys in the Last Five Years

Year	2015	2016	2017	2018	2019
Average Customer Satisfaction Score	91.5	93.9	94.4	95.2	94.4

Findings on Customer Satisfaction in the Last Five Years
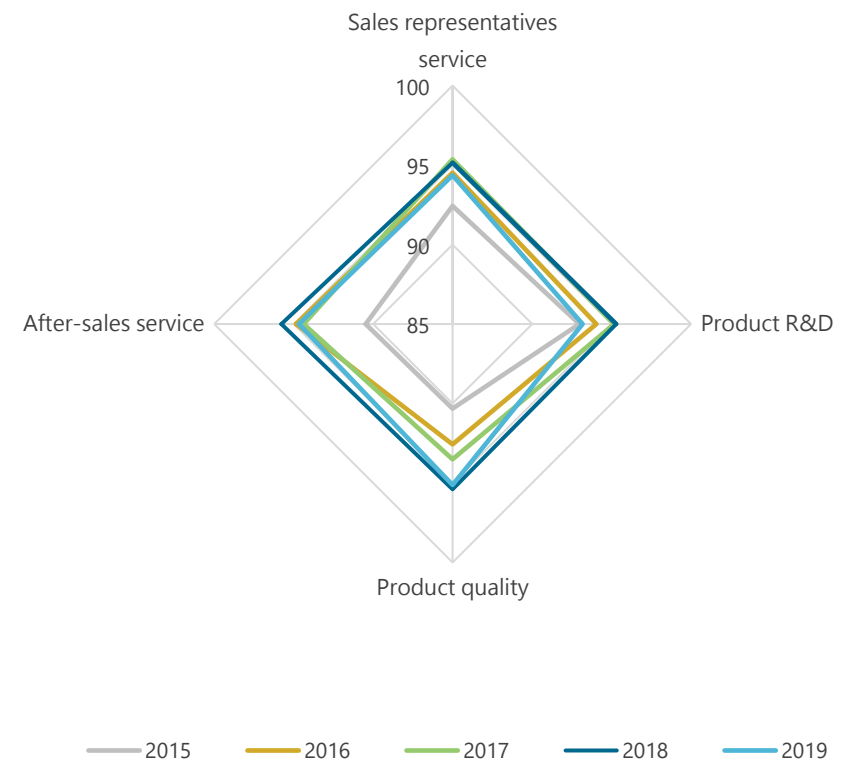
5.2 Supplier Management

Global Supply Chain Management Policy

Policy
WNC and our suppliers work hand-in-hand to maintain a sustainable supply chain through optimization of supplier-management strategies and operations efficiency. This facilitates balanced growth of operating profits, while protecting the environment and fulfilling social responsibilities, in order to realize increased value for all stakeholders.

Mission Statement
Based on the principles of supporting business development and improving competitiveness, WNC will continue to effectively manage and enhance our suppliers' performance in: quality, price, lead-time, services, environmental protection, and fulfillment of their social responsibilities. This enables us to develop an optimal supplier portfolio and purchasing guidelines, contributing to a responsible supply chain jointly managed by WNC and suppliers.

The raw materials and components that WNC purchases include integrated circuits, circuit boards, display panels, electromechanical components, mechanical parts, and packaging materials. For production consumables, WNC purchases solder paste and solder wire. As a consequence of the US-China trade war, demand for contract manufacturing (CM) has increased, resulting in a surge in the number of customer-assigned vendors. Therefore, in 2019, the number of suppliers for raw materials, components, production materials, and production consumables that have purchasing transaction records with WNC (Taiwan) and sites in mainland China increased to 1005, from 881 in 2018.

WNC aims to build a world-class supply chain. In addition to requiring suppliers to enhance performance in terms of quality, delivery schedule, service, and value, WNC also includes green product directives requested by customers into supplier's incoming materials inspection procedures and audits of component suppliers. WNC considers supplier management to be one of its most effective tools for promoting social responsibility and conducts corporate social responsibilities audits of all suppliers. Together with our suppliers, we strive to enhance our performance in product and service quality, labor rights, occupational safety and health, and green production.

In May 2019, WNC held a training course for employees of the Global Supply Chain Management Division who are responsible for material purchasing and supplier management. The course focused on sustainable purchasing management and practice, and an external lecturer was invited to WNC headquarters to share trends in sustainable purchasing. The aim was to help these employees practice sustainable purchasing in supplier selection and management. A total of 74 employees completed the training.

5.2.1 Local Procurement

Based on the amount of raw materials, components, and production consumables purchased from different regions, WNC's main suppliers are from Taiwan, 43% of all suppliers in 2019, followed by suppliers from mainland China (23%). Other suppliers were from Europe, America, and other parts of Asia.

Locations of WNC's Suppliers in the Last Three Years

Year	Taiwan	China	the U.S.	the U.K.	Singapore	Others
2019	43%	23%	4%	11%	8%	11%
2018	44%	24%	4%	8%	9%	11%
2017	42%	25%	6%	6%	9%	12%
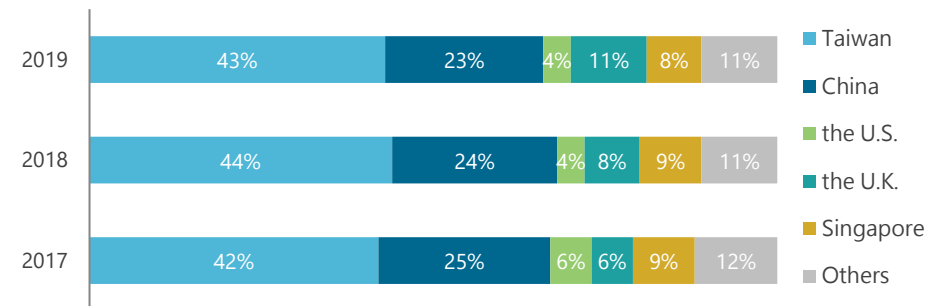
To reduce energy consumption and environmental pollution caused during the transport of raw materials and products, WNC enhances utilization rates of packaging materials and space, uses recyclable packaging materials, encourages localized purchasing, and minimizes unnecessary transportation costs and carbon emissions. WNC has established local purchasing centers for sites in Taiwan and China to be in charge of local supplier selection and management. In 2019, percentage of local purchasing was 46% in Taiwan and 30% at the China sites.

To meet customer needs and deploy WNC's production capacity globally, WNC established V1, a new production base in Vietnam, which began mass production in Q2 2019. Since most suppliers have not yet set up production bases in Vietnam, the raw materials required for V1's production were mainly provided by suppliers in Taiwan and China, resulting in a local purchasing rate of a mere 3%. The main items purchased there are production consumables. WNC has been actively evaluating and planning for the buildup of a local supply chain.

5.2.2 Supplier Selection and Assessment

New Supplier Investigation

The purchasing centers of each site are responsible for requesting investigation of new suppliers based on materials procurement requests and setting up an investigation team to conduct an audit in written form or a field assessment for supplier candidates. The investigation team comprises of representatives from the Global Supply Chain Management Division, the Supplier Quality Management Center, and R&D units. The team conducts investigations regarding candidates' services, quality systems, R&D capabilities, and manufacturing processes. At the same time, we request that suppliers comply with the "WNC Supplier Code of Conduct." Suppliers who meet the standards set by WNC in the supplier investigation and audits will be included in an AVL (Approved Vendor List). In exceptional circumstances, these suppliers will be subject to conditional approval processes. In 2019, a total of 134 new suppliers were assessed according to the Supplier Evaluation and Management SOP and were included in WNC's AVL. Among them, 76 suppliers completed the new supplier CSR investigation plan, accounting for 56.7% of WNC's AVL.

WNC's New Supplier Investigation Process

Initiate new supplier investiga-tion → Written review → Document signing → On-site evaluation → Listed as an AVL

WNC requires that suppliers of general parts obtain ISO 9001 verification, and for automotive component suppliers, IATF 16949 verification is a must. WNC also encourages all its suppliers to obtain the TL 9000 QMS, ISO 14001, and OHSAS 18001 management systems certifications. Besides requesting our suppliers to sign relevant documents for protection of intellectual property such as a WNC Security NDA and/or Restricted Project Acknowledgement, starting from 2016, WNC has introduced a supplier intellectual property protection and management process, whereby new suppliers are requested to comply with protection guidelines and sign documents for the protection of intellectual property rights.

Supplier Performance Evaluation

Quarterly evaluation:

WNC assembles representatives from the Global Purchasing Centers, Supplier Quality Management Center, and R&D units to form a Vendor Performance Evaluation Committee (VPEC) that meets quarterly to perform an overall evaluation based on supplier performance indicators. Through visits and guidance, the committee helps ensure that vendors comply with WNC's overall performance requirements on quality, delivery, service, price competitiveness, and RBA conformity and that WNC's value-chain competitiveness is enhanced. After the quarterly Vendor Performance Evaluation (VPE) is completed, the Global Purchasing Centers, along with the Supplier Quality Management Center, R&D units, and mechanical design units reach a consensus and issue a recommended vendor list (RVL). The list serves as a reference for future projects and order placement. As of

the end of 2019, a total of 1,005 suppliers have completed VPE in accordance with the latest version of the supplier management methods.

Annual Audit and Guidance:

WNC performs annual on-site audits of its key suppliers on products and safe production sites and requires suppliers to continuously improve. For suppliers who fail the audits, WNC assigns review personnel and proposes improvement measures and offers necessary assistance and guidance. In 2019, a total of 964 sessions on supplier on-site audits and counseling were held at WNC's sites in Taiwan, China, and Vietnam.

e-Supplier Management System

The Global Supply Chain Management Division collects and organizes information such as supplier activities, RVLs, product strategies, and customer/supplier audits through the Supplier Relationship Management (SRM) System, enabling effective processing or recording of information related to supplier management.

In 2018, a new CSR section was added, which includes the Corporate Social Responsibility Declaration, Corporate Social Responsibility Questionnaire, and Supplier's Commitment to the Code of Ethics, to foster supplier relations and develop strategies for sustainable development. In 2019, in response to digital transformation, WNC has started planning for the establishment of a new online platform that integrates material purchasing and supplier management. It is expected that after the system becomes operational in 2020, suppliers will be able to log in from a single webpage to perform operations.

5.2.3 Green Procurement

To build a green supply chain and meet international trends and customer demands, WNC has been actively promoting green products, green production, and green procurement concepts and actions to all its suppliers. WNC requires that suppliers include green management principles in their supplier management system and performs source management in manufacturing processes. Beginning in 2006, WNC required suppliers to sign a Supplier Quality Agreement, and sites in China followed suit in 2007. This agreement requires that suppliers observe WNC's Regulations on the Restricted Usage of Environmentally Hazardous Substances and, when required, submit inspection reports from a third-party verification body. WNC also requires that suppliers sign the Supplier Statement on the Non-Use of Environmentally Hazardous Substances. Suppliers in turn must guarantee that products and parts they provide to WNC (including bundled accessories, packaging and other materials) comply with the regulations stated in the Restricted Usage of Environmentally Hazardous Substances and that products meet all relevant directives such as RoHS, WEEE, REACH, ErP and the European Battery Directive. Suppliers also must not use conflict minerals, and observe WNC's restriction on the use of prohibited substances harmful to the environment.

In addition to signing environmental protection declarations, WNC has incorporated hazardous substance controls into its incoming materials inspection procedures. For raw materials that breach the controlled substance regulations, offending suppliers are requested to immediately submit countermeasures for improvement and prevention. In addition, the parts certification process of the Production Part Approval Process (PPAP) has been optimized with clear inspection checklists and regulations in place. This process establishes controls at the source to prevent quality issues with production specifications leading to unnecessary waste and future social costs.

To better collate supplier documents, WNC added relevant terms to the Supplier Quality Agreement in April 2018, requesting that suppliers abide by the RBA CoC, do not use conflict minerals, and submit relevant reports on conflict minerals. In 2019, 90 more suppliers of raw materials, components and production consumables signed WNC's Supplier Quality Agreement. Going forward, we will continue to have all our suppliers sign the agreement to ensure that all products designed and manufactured by WNC meet customer requirements and comply with international hazardous substance regulations, thus realizing a green supply chain.

Prohibition of Conflict Minerals

Prohibition of Conflict Minerals Policy

- No product may use ore from the DRC and illegal mines in the surrounding areas as well as ore mined in sub-optimal working conditions.
- Require suppliers to ban the use of conflict minerals and disclose their sources for tin, tungsten, tantalum, and gold ore.
- Suppliers are asked to convey this policy to their own upstream suppliers and supply chain.

WNC does not directly purchase metals, and has a declared policy to exclude the use of conflict minerals. WNC supports the Responsible Minerals Initiative that was initiated by the RBA and the Global e-Sustainability Initiative (GeSI), adopts the Conflict Minerals Reporting Template (CMRT) stipulated to conduct conflict minerals investigations for suppliers every year, and identifies supplier risk levels based on the investigation results in accordance with WNC's conflict minerals management procedure.

WNC conducts annual surveys on use of conflict minerals to conform whether the smelters associated with our suppliers participate in the Responsible Minerals Assurance Process (RMAP). WNC's suppliers are required to pledge that materials or products provided to WNC do not contain conflict minerals that directly or indirectly finance or benefit any armed groups in the Democratic Republic of Congo (DRC) and its adjoining countries as defined in Section 1502 of the U.S. Dodd-Frank Act, and that they will comply with other international conflict minerals laws and regulations. WNC encourages suppliers to assist smelters that have not participated in RMAP to do so and to strive to be qualified smelters in accordance with the RMAP stipulations.

Supplier's Response Rate to WNC's Conflict Mineral Survey in the Last Five Years

2015	2016	2017	2018	2019
80.3%	82.2%	94.7%	93.8%	91.5%
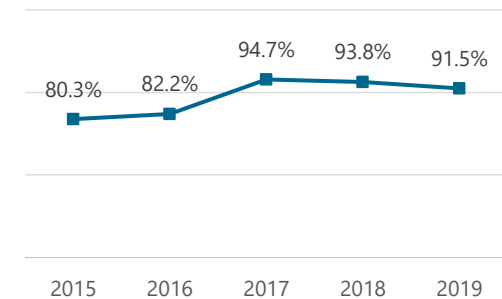
CSR Audits

WNC has formulated a [WNC Supplier Code of Conduct](#) and requires that all new suppliers sign the Supplier CSR Declaration and the Supplier's Commitment to the Code of Ethics," in which they declare their commitment to fulfilling social responsibilities, pledge and promise to ban child labor and forced labor, implement occupational safety and health management, fight against bribery and corruption, promote fair trade, and support employees' freedom of association and bargaining rights with management. WNC also requests that suppliers fill out the WNC Supplier CSR Questionnaire to reveal their implementation results in the areas of labor, health and safety, environmental protection, management systems, and business ethics. As of the end of 2019, 391 suppliers have signed the Supplier CSR Declaration; 363 suppliers have signed the Supplier CSR Questionnaire, and 187 suppliers have completed the CSR audit, accounting for 38.9%, 36.1% and 18.6% of suppliers respectively having transaction records with WNC in 2019.

Number of uppliers that have transaction records, signed CSR declarations with WNC, and undergone on-site audits in the last three years

Year		
2019	1,005 / 391 / 363 / 187	
2018	881 / 389 / 389 / 154	
2017	776 / 393 / 388 / 128	

- Number of suppliers with transaction records
- Number of suppliers who signed the CSR Declaration
- Number of suppliers who replied to CSR Questionnaire
- Number of suppliers audited on-site with CSR

WNC's major suppliers are divided into A (high risk: suppliers of printed circuit boards, paint, plastic injection parts, chemical plating, and stamped parts), B (moderate risk: suppliers of antennas, packing materials, wiring, adapters, connectors, and passive elements) and C (low risk: suppliers of other electronic materials) according to the level of risk they exhibit in aspects of labor, ethics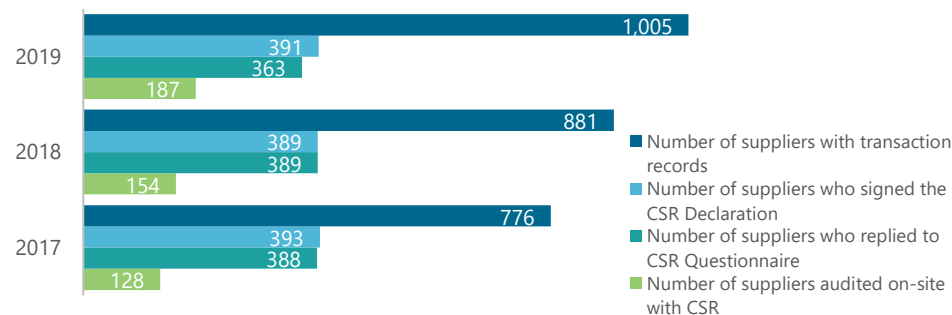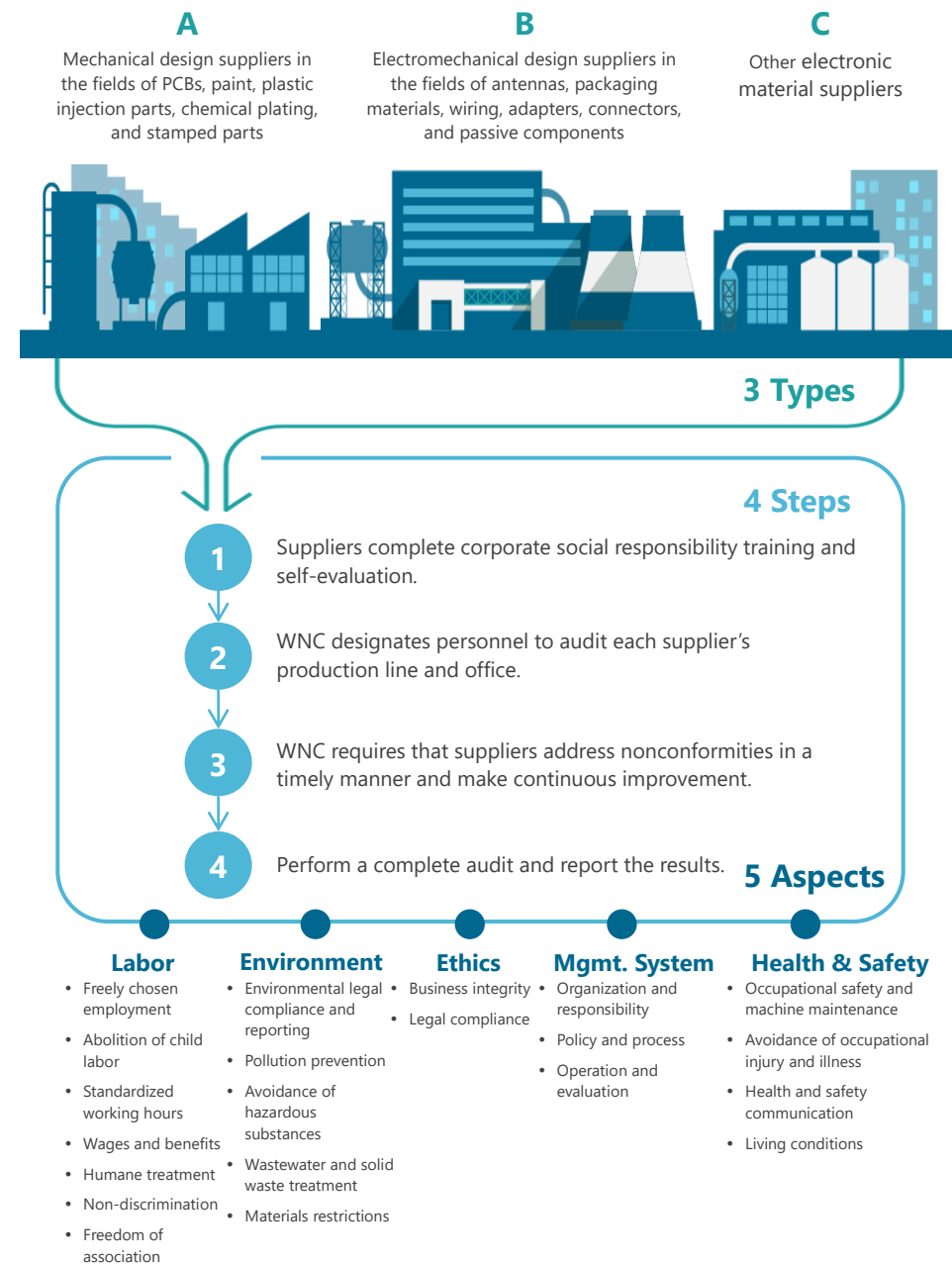, health and safety, and environment and management systems. Further, WNC requests that selected suppliers conduct a CSR audit based on conditions including "Top 10 suppliers in terms of incoming quantities in the previous year which were not audited in the past year;" "complying with customers' CSR requests;" and "Had priority deficiencies in the previous year's audit," and includes them in the annual CSR audit scheme. With the exception of specific suppliers designated by customers, Group C suppliers are only subject to document review given the low level of risk they exhibit, while the other two groups of suppliers must undergo supplier CSR audits according to the following four steps and be assessed on the five aspects of labor, ethics, health and safety, environment, and management systems.

A
Mechanical design suppliers in the fields of PCBs, paint, plastic injection parts, chemical plating, and stamped parts

B
Electromechanical design suppliers in the fields of antennas, packaging materials, wiring, adapters, connectors, and passive components

C
Other electronic material suppliers

3 Types

4 Steps

1. Suppliers complete corporate social responsibility training and self-evaluation.

2. WNC designates personnel to audit each supplier's production line and office.

3. WNC requires that suppliers address nonconformities in a timely manner and make continuous improvement.

4. Perform a complete audit and report the results.

5 Aspects

Labor
- Freely chosen employment
- Abolition of child labor
- Standardized working hours
- Wages and benefits
- Humane treatment
- Non-discrimination
- Freedom of association

Environment
- Environmental legal compliance and reporting
- Pollution prevention
- Avoidance of hazardous substances
- Wastewater and solid waste treatment
- Materials restrictions

Ethics
- Business integrity
- Legal compliance

Mgmt. System
- Organization and responsibility
- Policy and process
- Operation and evaluation

Health & Safety
- Occupational safety and machine maintenance
- Avoidance of occupational injury and illness
- Health and safety communication
- Living conditions

In 2019, due to the request of key customers, more suppliers were designated for audit. In 2019, 64 suppliers completed the CSR audit, exceeding the target of 58, including 27 suppliers from Group A, 27 suppliers from Group B, and 10 suppliers from Group C. In 2020, the target for the audit is 50.

CSR Audit Times of WNC Suppliers and Targets in Past Years
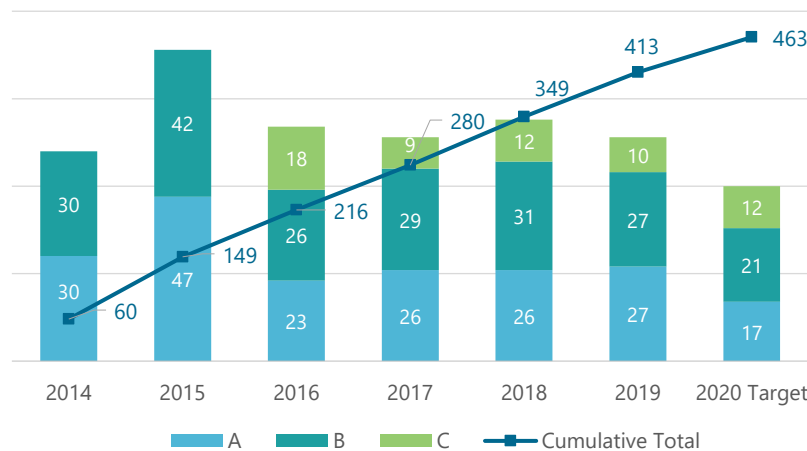
In 2019, the results of the audit indicate that the majority of the non-compliance was related to labor and occupational safety. The on-site supplier audit results and corresponding improvement plans are tracked by the Supplier Quality Management Center, which will also work with the Global Supply Chain Management Division to guide suppliers in their implementation of RBA regulations and continuous improvement pursuant to the Supplier Evaluation & Management SOP. In 2019, no partnerships with suppliers were terminated because of CSR audit results or due to improvements failing to meet the required standards.

5.2.4 Supplier Relations

WNC values the interaction and mutual learning it engages in with its suppliers. In addition to regular business review meetings, WNC expresses its gratitude to suppliers for their outstanding performance and special contributions at the annual Wistron Group Vendor Conference. WNC also engages in a review and looks at prospects with the supplier in terms of product and service quality while exchanging information on industry trends, and WNC CSR regulations. In 2019, a total of 97 WNC suppliers participated in the Wistron Group Vendor Conference, and five outstanding suppliers were awarded.

5.3 Contractor Management

WNC has drawn up a Contractor ESH Management Procedure to ensure the safety of both contractors and WNC employees, maintain facility safety, and observe related ESH regulations. This document clearly demarcates the powers and responsibilities of company units and contractors and describes ESH issues requiring attention. Contractors are required to sign a Commitment to Work Safety for Contractors in WNC Plants before applying to conduct in-plant operations, and are required to participate in the notification of in-plant hazards and educational training for safety and health organized by the Industrial Safety Dept. After in-plant operations are approved, employees of contractors must participate in a tool-kit meeting to understand the hazards that personnel should pay attention to in the plant along with relevant safety procedures, and conduct in-plant operations after confirming operation details with the responsible managers under supervision and assessment of the ESH management units.

Supervision and audit by the Industrial Safety Dept.

Before entering the plant → **After entering the plant**

| Sign the Commitment to Work Safety for Contractors in WNC Plants. | Participate in safety and health training for in-plant hazards. | Apply to construct in WNC plant. | Participate in tool-kit meeting. | Conduct construction operations. | Conduct random health and safety inspection |

To boost contractors' safety and health management during construction, coordinate on-site operations, and build a clear communication channel with our contractors, WNC convenes an annual contractor agreement organizational meeting, where supervising units and the execution units are invited to discuss special operations requiring coordination. In 2019, there were no occupational incidents leading to personnel death or occupational injury, or occupational diseases for WNC's contractors in Taiwan.

In order to bolster execution by contractors (including security guards, on-site food-service vendors, and cleaning staff) with respect to labor rights, non-discrimination, ethics, anti-corruption, violation reporting, and occupational safety and health, starting from 2016, all contractor contracts state that contractors must meet the requirements in the WNC Supplier Code of Conduct and sign the Supplier's Commitment to the Code of Ethics, the Supplier CSR Questionnaire, and the Supplier CSR Declaration before the contracts take effect.

5.4 Participation in Society

WNC organizes a series of social welfare projects and activities to provide opportunities for education and assist disadvantaged groups. WNC's employees, customers, and suppliers are invited to take part.

5.4.1 Assisting University Service Clubs

To encourage college students to apply their knowledge to serve and care for people, serve as volunteers, and further uphold the value of caring for society, WNC provides long-term subsidies for student clubs at National Tsing Hua University (NTHU) and National Cheng Kung University (NCKU). Through its cooperation with the NTHU Indigenous Culture Club, the NTHU Science Promotion Club, the NTHU WHYOU Club, the NCKU Social Service Team, the NCKU Philanthropy Club, and the NCKU Students Service Club, WNC helps college students promote after-school assistance and science education for children from remote areas in Taiwan or from disadvantaged groups. These clubs also offer services for socio-economically disadvantaged elderly, children, and disabled persons.

WNC requires club members to submit proposals at the beginning of the semester and a submit results reports at the end of the semester. This boosts club members' planning, execution, and presentation skills and helps them lay a solid foundation for performance in their future careers. In 2019, WNC and its employees contributed a total of NT$920,000 to these six student service clubs.

Teaching activities conducted by the NTHU Aboriginal Culture Club

NCKU Philanthropy Club camp activity

5.4.2 Rural Education Development

WNC is concerned for Taiwan's disadvantaged children and understands the importance of developing rural education. Since 2013, WNC has assisted Tunan Elementary School in remote Jianshih township in Hsinchu County on aspects of indigenous culture, including developing their talents in Judo, choir singing, and archery. In 2019, WNC and WNC employees donated NT$300,000 to sponsor the facilities, equipment, coach/teacher, and contest costs for the school.

In June 2017, WNC's social care program began providing support to Siang Bi Elementary School in Miaoli County to help develop archery education to enable traditional Atayal hunting and archery culture to be passed on to future generations and facilitate the cultivation of young archery talent. In 2019, WNC employees donated NT$200,000 to help the school purchase archery equipment and participate in regional archery competitions. The students performed exceptionally well in the competitions.

Dance performance by Tunan Elementary School students

A member of the Siang Bi Elementary School archery team

Social Care Donation Plan for Disadvantaged Children in Remote Areas

WNC also extends its helping hands to disadvantaged children in remote areas to provide them with an environment conducive to their education. Working with the Taiwan Fund for Children and Families in Miaoli in mid-2019, WNC solicited 100 employees to sponsor 56 students in remote areas. Many of WNC's employees choose to continue their donations during their employment as a token of support to this program.

In the project achievement report compiled by the Taiwan Fund for Children and Families in Miaoli, we were able to see the growth of many school children, the appreciation of their parents, and many of WNC's sponsoring employees also expressed the joy they found in helping others.

5.4.3 Assisting Social Welfare Groups

WNC kicked off its social care program under the name WNC Social Care Assistance. A WNC Social Care Assistance Platform was also set up on its internal website with the purpose of providing a convenient channel for employees to obtain social care information, to make donations, and offer assistance on-line. Through this platform, employees can get fund-raising information and the results of social care activities anytime. It is hoped that WNC employees can continue to engage in social care with the company.

Charity Fundraising

WNC takes an active part in fundraising events, including organizing internal donation campaigns and encouraging employee donations in response to major disasters or the special needs of colleagues and the community. Care, financial assistance, legal consultation, and/or funeral assistance are also provided for injured/seriously ill employees or for family members of employees who pass away. In 2019, WNC employees and WNC's Employee Welfare Committee (EWC) provided the family members of two employees who passed away due to illness with NT$1,150,000, and the EWC also provided NT$50,000 in emergency relief funding to one employee.

WNC also encourages employees to help those in need and to donate to charity. For example, instead of choosing to receive company gift certificates or gifts to commemorate Chinese New Year, Dragon Boat Festival, and Mid-Autumn Festival, employees may choose to donate an amount equal to the value of the aforementioned company gift certificates or gifts to charity. The money thus donated is given to NTHU and NCKU university service clubs, as well Tunan Elementary School and Siang Bi Elementary School.

Thank you cards from sponsored students

In 2019, WNC and WNC employees donated a combined NT$1,420,000, with employees contributing NT$820,000.

WNC Goods Sharing Platform

The WNC Goods Sharing Platform, which was launched in 2017, gives WNC employees opportunities to help protect the environment, promote upcycling, and donate second-hand goods to those in need. In 2019, the Employee Relations Department organized two donation drives to donate items to schools in remote areas, charity organizations, and other colleagues. The items donated are listed below:
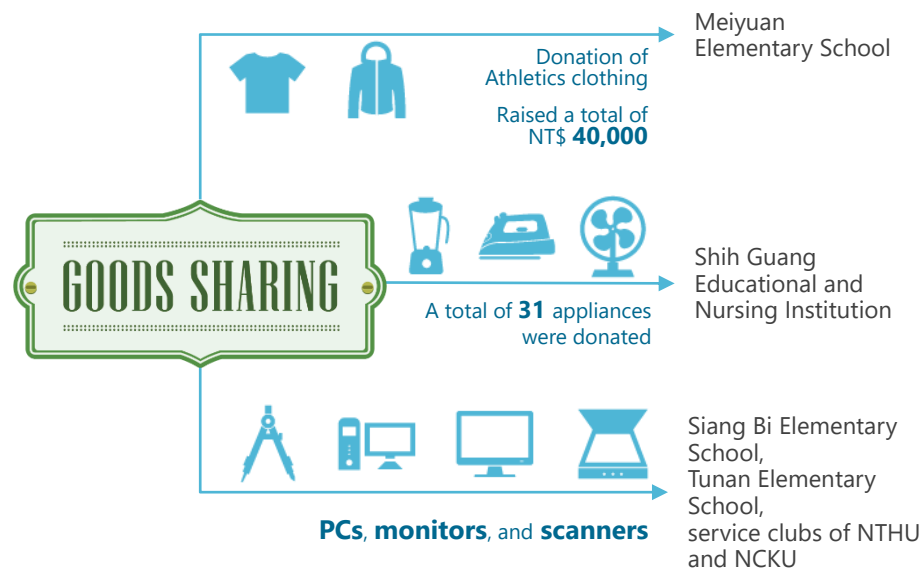
Funds raised for public welfare in WNC's sites in Taiwan in the last three years
(unit: thousand NT$)

	2017	2018	2019
Rural Featured Education	300	450	500
University Service Clubs	650	820	920
Total	950	1,270	1,420

- Rural Featured Education
- University Service Clubs
- Total

GOODS SHARING

Donation of Athletics clothing
Raised a total of NT$ **40,000**
→ Meiyuan Elementary School

A total of **31** appliances were donated
→ Shih Guang Educational and Nursing Institution

PCs, **monitors**, and **scanners**
→ Siang Bi Elementary School, Tunan Elementary School, service clubs of NTHU and NCKU

Charity Sales Events

WNC has designated the fifth of each month to hold a WNC Charity Day Sale. On this day, a charity organization invited by the Employee Relations Department holds a charity sale at WNC headquarters, S1 and S2, and employees are encouraged to shop at the sale to support charity. In 2019, 16 charity organizations participated in the WNC Charity Sale and generated a combined sales revenue of NT$192,652, accounting for nearly 70% of total WNC charity sales in 2019.

In 2019, WNC organized charity sale events celebrating Chinese New Year and Mid-Autumn Festival, to which the charity organizations listed below were invited. The combined sales revenue of the events was NT$81,307.

Charity Sale Events at WNC (Taiwan) in 2019

Event Type	Participating Charities	Revenue (NT$)
Charity Day Sale	Social Welfare Organizations	192,652
	Community Development Organizations	
	Social Enterprises	
Themed Charity Sales	Social Welfare Organizations	81,307
	Community Development Organizations	
Total Charity Sale Revenue		**273,959**

Blood Donation

WNC organizes blood drives each year in April. In April 2019, a total of 59 employees participated in the event, donating a total of 90 bags, or 22,500 c.c. of blood. In October, on being told blood bank reserves were dwindling, WNC employees rolled up their sleeves and this time a total of 97 bags, or 24,250 c.c. of blood was donated.

Blood donation event at WNC HQ

WNC Volunteers Club

The WNC Volunteers Club was founded at the end of 2017. The WNC Volunteers Club had 24 club members as of the end of 2019. Last year, the club participated in two volunteer events, and it will continue to take part in volunteer activities and encourage employees to do the same.

July 13, 2019	September 8, 2019
Worked with TPKR (Taiwan Pawprint K9 Rescue) in Taoyuan, where six members played with golden retrievers, bathed them, dried their hair, and cleaned their dog houses.	Participated in the coastal cleanup and plastic reduction event held by the Toyota Group in Nanliao. A total of five club members took part in the event.

China Plants

In 2014, WNC employees voluntarily established the Mercy Club, which has 16 members to date. In addition, WNC assists employees experiencing financial difficulties or misfortune in applying for funds from trade unions. In 2019, WNC helped three employees apply for a grant of RMB1,000 each from the Sending Warmth and Assistance in the Cold Winter to Needy Families activity organized by the Comprehensive Bonded Zone. In July 2019, WNC subsidiaries in China worked with hospitals and local government agencies to encourage employees to donate blood. A total of 84 employees took part in the activity.

5.4.4 Industry-Academia Partnership Project Classes

To provide students in Hsinchu and its vicinity with work opportunities and to cultivate engineering talent, WNC started working with the Department of Industrial Management at the China University of Science and Technology (CUST) in 2017 to provide courses for the department's students. WNC provides dormitories and shuttle buses for the students, and the courses are taught by WNC employees. Students who pass the courses receive tuition subsidies, and designated teachers from CUST are stationed at the WNC dormitories to assist the students. In 2017, WNC recruited the first class of students from CUST, and recruitment has entered its third year as of 2019, with a total of 122 students recruited. Currently 113 students are employed, with a retention rate of 92.6%. The number of retained students and corresponding retention rates are listed in the table below. The prospective number of students to be recruited in 2020 is 60.

Retention Rate of WNC's Industry-Academia Partnership Project Classes

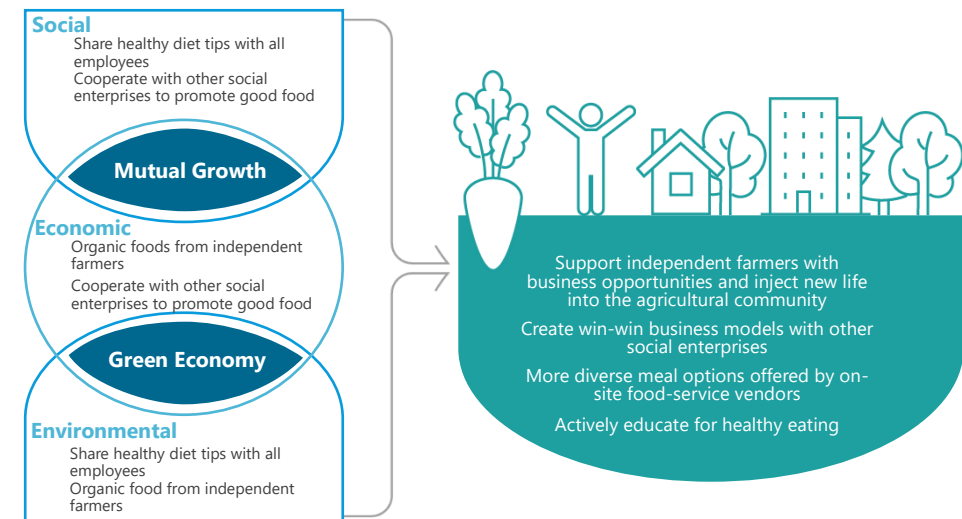| Item	2017 (1st year)	2018 (2nd year)	2019 (3rd year)	Total
Number of students recruited	21	47	54	122
Number of students retained	19	41	53	113
Student retention rate	90.5%	87.2%	98.1%	92.6%

5.4.5 Implementing the Good Food Movement

Since 2014, WNC has worked with Buy Nearby, a social enterprise, to promote the Good Food Movement. In 2019, due to its long-term support of social enterprises, WNC received the silver award in the New Products and Services of Social Innovation Purchasing Reward Program organized by the Ministry of Economic Affairs. The Good Food Movement - Healthy Days Everyday program stemmed from a desire to care for our employees; therefore, the vegetables that the catering companies use are all organic produce provided by independent farmers and suppliers, including leafy vegetables, melons, and gourds.

To diversify risk and improve the quality of the vegetables, we have started to purchase organic vegetables from other vendors so that employees can enjoy more diverse organic produce. We hired Xin-yi fruits and vegetables, Town South Organic Farm, Tyisheng Farm and Wu Shi Shu Organic Farm as our organic produce catering providers; while at S1, we are still working with the social enterprise Buy Nearby to locate local farmers that meet WNC's needs and will cooperate with each other in the future. Buy Nearby arranges for their workers to travel to the farms of independent farmers from time-to-time to provide professional assistance, and train the independent farmers in farming, cultivation, and various production skills to control productivity and improve the quality of the produce.

In 2019, the amount of purchases WNC made through on-site food-service vendors amounted to NT$10,370,084 including NT$5,337,484 paid by WNC and NT$5,032,600 paid by the Employee Welfare Committee. Employees expressed a high level of support and satisfaction for the company's provision of organic vegetables for group meals, as evidenced by the 4.2 rating (out of 5) in the satisfaction survey.

WNC Good Food Movement

Social
Share healthy diet tips with all employees
Cooperate with other social enterprises to promote good food

Mutual Growth

Economic
Organic foods from independent farmers
Cooperate with other social enterprises to promote good food

Green Economy

Environmental
Share healthy diet tips with all employees
Organic food from independent farmers

Support independent farmers with business opportunities and inject new life into the agricultural community

Create win-win business models with other social enterprises

More diverse meal options offered by on-site food-service vendors

Actively educate for healthy eating

06 Appendix

Assurance Statement

GRI Standards Index

Errata from the WNC 2018 Corporate Social Responsibility Report

Page	Chapter	Error	Correction
P76	4.4.1	In 2018, the diesel consumption of S1 was 134 GJ.	In 2018, the diesel consumption of S1 was 137 GJ.
P76	4.4.1	In 2018, the total electricity consumption of WNC (Taiwan) was 109,501 GJ.	In 2018, the total electricity consumption of WNC (Taiwan) was 109,158 GJ.
P79	4.4.2	In 2017 and 2018, total water withdrawal in the WNC Headquarters were 38.607 and 32.527 megaliters, respectively; in 2018, water discharge in the WNC headquarters was 14.193 megaliters.	In 2017 and 2018, total water withdrawal in the WNC Headquarters were 38.399 and 32.510 megaliters, respectively; in 2018, water discharge in the WNC headquarters was 14.180 megaliters.

6.1 Assurance Statement

SGS

ASSURANCE STATEMENT

SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE WISTRON NEWEB CORPORATION'S SOCIAL RESPONSIBILITY REPORT FOR 2019

NATURE AND SCOPE OF THE ASSURANCE/VERIFICATION
SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by Wistron NeWeb Corporation (hereinafter referred to as WNC) to conduct an independent assurance of the Corporate Social Responsibility Report for 2019 (hereinafter referred to as CSR Report). The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the sampled text, and data in accompanying tables, contained in the report presented during on-site verification (21/01/2020-24/06/2020). SGS reserves the right to update the assurance statement from time to time depending on the level of report content discrepancy of the published version from the agreed standards requirements

The information in the WNC's CSR Report of 2019 and its presentation are the responsibility of the management of WNC. SGS has not been involved in the preparation of any of the material included in WNC's CSR Report of 2019.

Our responsibility is to express an opinion on the report content within the scope of verification with the intention to inform all WNC's stakeholders.

The SGS protocols are based upon internationally recognized guidance, including the Principles contained within the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards) 101: Foundation 2016 for accuracy and reliability and the guidance on levels of assurance contained within the AA1000 series of standards and guidance for Assurance Providers.

This report has been assured using our protocols for:
- AA1000 Assurance Standard (2008) Type 1 evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2008) at a moderate level of scrutiny; and
- evaluation of the report against the requirements of Global Reporting Initiative Sustainability Reporting Standards (100, 200, 300 and 400 series) claimed in the GRI content index as material and in accordance with.

The assurance comprised a combination of pre-assurance research, interviews with relevant employees, superintendents, CSR committee members and the senior management in Taiwan; documentation and record review and validation with external bodies and/or stakeholders where relevant.
Financial data drawn directly from independently audited financial accounts and Task Force Climate-related Financial Disclosures have not been checked back to source as part of this assurance process.

STATEMENT OF INDEPENDENCE AND COMPETENCE
The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from WNC, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

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The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 26000, ISO 20121, ISO 50001, SA8000, RBA, QMS, EMS, SMS, GPMS, CFP, WFP, GHG Verification and GHG Validation Lead Auditors and experience on the SRA Assurance service provisions.

VERIFICATION/ ASSURANCE OPINION
On the basis of the methodology described and the verification work performed, we are satisfied that the information and data contained within WNC's CSR Report of 2019 verified is accurate, reliable and provides a fair and balanced representation of WNC sustainability activities in 01/01/2019 to 12/31/2019.

The assurance team is of the opinion that the Report can be used by the Reporting Organization's Stakeholders. We believe that the organization has chosen an appropriate level of assurance for this stage in their reporting. In our opinion, the contents of the report meet the requirements of GRI Standards in accordance with Core Option and AA1000 Assurance Standard (2008) Type 1, Moderate level assurance.

AA1000 ACCOUNTABILITY PRINCIPLES (2008) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

Inclusivity
WNC has demonstrated a good commitment to stakeholder inclusivity and stakeholder engagement. A variety of engagement efforts such as survey and communication to employees, customers, investors, suppliers, CSR experts, and other stakeholders are implemented to underpin the organization's understanding of stakeholder concerns. For future reporting, WNC may proactively consider having more direct two-ways involvement of stakeholders during future engagement.
Materiality
WNC has established effective processes for determining issues that are material to the business. Formal review has identified stakeholders and those issues that are material to each group and the report addresses these at an appropriate level to reflect their importance and priority to these stakeholders.
Responsiveness
The report includes coverage given to stakeholder engagement and channels for stakeholder feedback.

GLOBAL REPORTING INITIATIVE REPORTING STANDARDS CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

The report, WNC's CSR Report of 2019, is adequately in line with the GRI Standards in accordance with Core Option. The material topics and their boundaries within and outside of the organization are properly defined in accordance with GRI's Reporting Principles for Defining Report Content. Disclosures of identified material topics and boundaries, and stakeholder engagement, GRI 102-40 to GRI 102-47, are correctly located in content index and report. For future reporting, the management approach for each identified material topic could be further enhanced with consideration of its related economic, environmental and social impacts and how these impacts are mitigated through WNC's daily operation. When reporting GRI 403:2018, in order to fulfill the requirements, WNC shall follow the requirements of GRI standards accordingly.

Signed:
For and on behalf of SGS Taiwan Ltd.

David Huang
Senior Director
Taipei, Taiwan
15 July, 2020
WWW.SGS.COM

AA1000
Licensed Assurance Provider
000-8

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6.2 GRI Standards Index

General Disclosures

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	102-2	Report the organization's activities, the primary brands, products, and services.	1.3	25-26
	102-3	Report the location of the organization's headquarters.	1.1.1	21
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	102-5	Report the nature of ownership and legal form.	1.1	20
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	102-42	Report the name of the organization.	Identification of Stakeholders	12
	102-43	Report the organization's activities, the primary brands, products, and services.	Response to Stakeholders	17-18

	102-44	Report the location of the organization's headquarters.	Response to Stakeholders	17-18
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	102-46	a. Explain the process for defining the report content and the topic Boundaries. b. Explain how the organization has implemented the Reporting Principles for defining report content.	Communication with Stakeholders	12-18
	102-47	List all the material topics identified in the process for defining report content.	Communication with Stakeholders	12-18
	102-48	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	Did not rearrange the information in previous reports	
	102-49	Report significant changes from previous reporting periods in the list of material topics and topic Boundaries.	No major changes	
	102-50	Reporting period (such as fiscal or calendar year) for information provided.	About this Report	1
	102-51	Date of most recent previous report (if any).	About this Report	1
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	102-53	Provide the contact point for questions regarding the report or its contents.	About this Report	1
	102-54	Report if it has prepared a report in accordance with the GRI Standards	About this Report	1
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