



winbond
We Deliver

Corporate
Social
Responsibility Report

2018

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About this Report

Winbond Electronics Corporation (hereinafter referred to as Winbond) published its first CSR Report in 2015, enabling the stakeholders to be aware of our emphasis on and behavior in the face of sustainable development issues and stating the impacts of the company's operation in terms of environmental, social and economic aspects. This Report discloses Winbond's efforts and endeavors not only in its operation in the industry but also in social justice, community welfare, employee development, environmental protection, operational activities and promotion and the implementation of relevant measures to timely respond to the stakeholders' requirements in sustainable development and management.

Scope of the Report and Statistics Basis

The scope of this Report covers the Headquarters of Winbond Electronics Corporation and its related operating systems and activities. There are no major changes in the organization and its supply chain. The reporting period was from January 1 to December 31 in 2018. The financial data were audited and verified by Deloitte, and were calculated in New Taiwan Dollars; the ISO 14064-1 GHG emissions were verified by the British Standards Institute (BSI Taiwan); the ISO 14001, OHSAS 18001 and CNS 15506 were verified by DQS Taiwan Inc. Compared to our 2017 Report, there is no information re-editing and no noticeable difference in the scope of this 2018 Report.

Referred Guidelines and Principles in Report Writing

This report is compiled primarily in accordance with the Global Reporting Initiative (GRI Standards) and the "Core" option. The identification, implementation and information disclosed in this Report regarding Winbond's CSR policy has been verified using the AA1000 assurance criteria. The programs and initiatives referred to are as follows.

- (Global Reporting Initiative) GRI Standards
- Stakeholder Engagement Standard, AA1000 SES
- United Nations' Sustainable Development Goals (SDGs)
- Code of Conduct- Responsible Business Alliance (RBA)
- Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Corporate Social Responsibility Reports by TWSE Listed Companies
- United Nations' Global Compact
- ISO 26000 Social Responsibility Guidance



Third-party Verification

This Report was verified by British Standard Institution (BSI Taiwan), which conforms to the core items of GRI Standards and AA 1000 Accountability Principles Standard (AA1000 SES, Type I) in June, 2019. Independent verification was conducted to ensure the reliability of information disclosure. This Report was verified to be in compliance with GRI Standards: Core option and AA1000 SES, Type I, the Moderate Assurance. BSI verification report is detailed in Appendix IV.

Report Publication Schedule

Winbond publishes its CSR Report annually. This is the fifth issuance of our CSR Report. In response to energy conservation, carbon reduction and environmental protection and following the practices in the past, this 2018 CSR Report is disclosed in electronic form on Winbond's official website for all to download and read. Winbond strives for energy conservation and carbon reduction and fully implements paperless operations.

Current Issue: June, 2019

Previous Issue: June, 2018

Contact Information

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Message from the Chairman and CEO

Winbond continued to grow steadily and delivered brilliant results in 2018. Our consolidated revenue reached a record high and has been profitable for six consecutive years. While we celebrate the great results together, how to prepare for a future full of challenges is an even more important issue. Based on the modern management theory, in the face of various challenges, there is a need to strengthen core competitiveness and enhance the competition barriers in various fields. Today, the competitive barriers are no longer built with soil and stone but invisible corporate culture, management systems, customer relationship, core technologies, etc.

For sustainable existence of an enterprise, good products and innovative services should be continuously presented. At Winbond, business integrity is held as the highest ethical standards. We insist that all operational activities should take social responsibility into account. We create values for our employees, shareholders, and the society while persistently pursue sustainability toward our visions of "health, LOHAS, public welfare, environmental friendliness, and earth preservation."

Corporate Governance

Based on a comprehensive governance structure, Winbond effectively supervises its operations and prevents unlawful operations. The board actively participates in the making of strategic decisions with effective oversight. We strive to improve transparency in the operational information and safeguard shareholders' fundamental rights and the rights to participate in decision-making to establish a reputation as a trustworthy and respectable company.

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Economic Development

Winbond upholds the "pursuit for excellence" and demands "zero defects" as its standards for high-quality products. Winbond is committed to total memory solutions, focusing on the design and manufacturing of Specialty DRAM. We are ranked among the world's top five DRAM manufacturers, and also a leading Serial NOR Flash supplier. We are one of a few memory solution providers with both DRAM and Flash product lines in the world. Winbond continues to deepen the multiple application market with innovative products, advanced process technology, and global marketing, along with perfect after-sale services and stable supplying abilities, maintaining good long-term partnership with major customers, and has been keeping tabs on customers and the market demand for new products to maintain our long-term competitiveness.

We commit ourselves to promoting our productivity and the quality of human life by creating new products and green technologies that feature low energy consumption and carbon emissions, while respecting intellectual property rights and reinforcing information security and business confidentiality. Regarding the supply chain management, Winbond strengthens the cooperation with its suppliers and strives to build a good and stable supply chain relationship with our suppliers.

Environmental Sustainability

Winbond strives to become a green corporation with environmentally sustainable development and complies with environmental laws, regulations, and international standards, working on proper protection of the natural environment and pursuing our aims of an "environmentally friendly life with low carbon footprint" and "a balanced and sustainable development of economy, society, and ecology" when implementing operating activities and internal management.

In addition, we are committed to continuous improvement and lowering the environmental impact



of production through source reduction and full participation, and strives to eliminate any foreseeable risks of environmental pollution. Improvement of the utilization efficiency of various energy resources, building and strengthening of environmental protection related treatment facilities are conducted to avoid water, air and land pollution. What is more, the measures of the best feasible pollution prevention and control technologies are also adopted. Key performance indicators (KPIs) for water and electricity are set for the utilization rate of all important energy resources. Moreover, targets are set every year, management plans are carried out with low impact on the environment are used to promote circular economy and to enable sustainable resources use on earth.

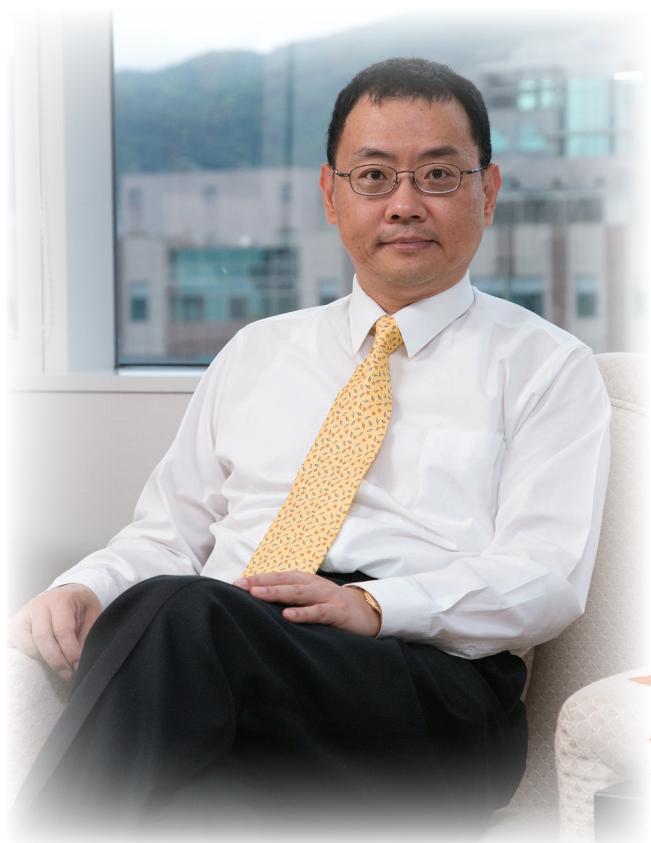
Social Care

"Caring for the underprivileged, emphasizing environmental sustainability, and being socially responsible" is Winbond's long-term commitment to the society. To fulfill the ideals of caring for the society, serving the public and being environmentally friendly, Winbond keeps implementing social care in the fields of "caring for children and teenagers", "helping the disadvantaged", "public welfare promotion", "emergency assistance" and "academic sponsorship", and at the same time maintain staff cohesion while conveying the importance of giving back to the society, setting an example in fulfilling its corporate social responsibility.

Furthermore, to enhance the happiness indexes of our employees, Winbond advocates a balanced development of health, family, and work by actively promoting a wide variety of events such as LOHAS, sports activities, family day, parenting subsidies, multiple association activities, and a number of benefits to enable our employees to gain a sense of fulfillment and satisfaction of body and mind both from their jobs and from the time they spend with their family.

When pursuing growth and profit, we must bear in mind that the ultimate goal of all efforts is to make the world a better place. We encourage our employees to maintain health and family harmony and continue to promote social charity and sustainable development on earth. As the world grows exponentially and with the coming of the era of cloud computing, big data, artificial intelligence and industry 4.0, technology brings convenience to human beings, but it also has a major impact on human resource value. As a technology innovator, Winbond will incorporate technology into the lives of all mankind and will add a new chapter to our corporate social responsibility. We need to develop a deep understanding of the interaction between human and technology, making efforts in the sustainable development of ecology on earth.

Chairman and CEO
Arthur Yu-Cheng Chiao





Honors and Awards

Winbond was awarded ISO 26262 certificate in accordance with highest safety standard in automotive vehicles. Winbond is also the first vehicle memory IC company who received the process certificate of ISO 26262, Road Vehicles – Functional Safety Standard by SGS in Taiwan.



Winbond was recognized as the "Quality Star" by Siemens Industrial Automation Products Ltd. Chengdu, which demonstrated Winbond's customer-oriented services and resulted in strengthened customer satisfaction.



Winbond's 1.2V Serial NOR Flash was awarded the ASPENCORE 2018 World Electronics Achievement Award. The ultra-low power consumption of this product was selected as the Innovative Product of the Year in the memory product category.





Winbond was awarded the Sustainability Excellence Award by the British Standards Institute (BSI Taiwan)



The 31th Taiwan Continuous Improvement Awards Silver Tower Prize (2 Awards in total)



The 31th Taiwan Continuous Improvement Awards Bronze Tower Prize





Sustainable Development Goals (SDGs) and Annual Performance

The 17 Sustainable Development Goals (SDGs) with their 169 targets will serve as the main axis of the development issues for 2016-2030 in the world. Winbond's sustainable behavior is in response to 11 of the SDGs.

Goal 1: End poverty in all its forms everywhere

Target 1.b: Create sound policy frameworks, at national, regional and international levels, based on pro-poor and gender-sensitive development strategies to support accelerated investments in poverty eradication actions.

In 2018, Winbond's basic salary of inexperienced staff was superior to the statutory minimum basic salary and continued to increase from 1.4 times to 1.8 times of the statutory minimum salary, coupled with performance related pay to encourage and retain talents.

Goal 3. Ensure healthy lives and promote well-being for all at all ages

Target 3.8: Achieve universal health coverage (UHC), including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

1. Winbond offers every employee a quality and meaningful health examination annually that exceeds the standards required by laws and regulations as well as special health checkups for those involved in tasks with special health hazards. In addition, regular advanced abdominal ultrasound examination, cancer screening by Pap-smear and other methods for females, eye examination, physical fitness test (PFT) coupled with health education and consultation activities provided by specialist physicians are also given. From the perspective of preventive medicine, early screening and preventive measures are beneficial for the promotion of comprehensive health management.

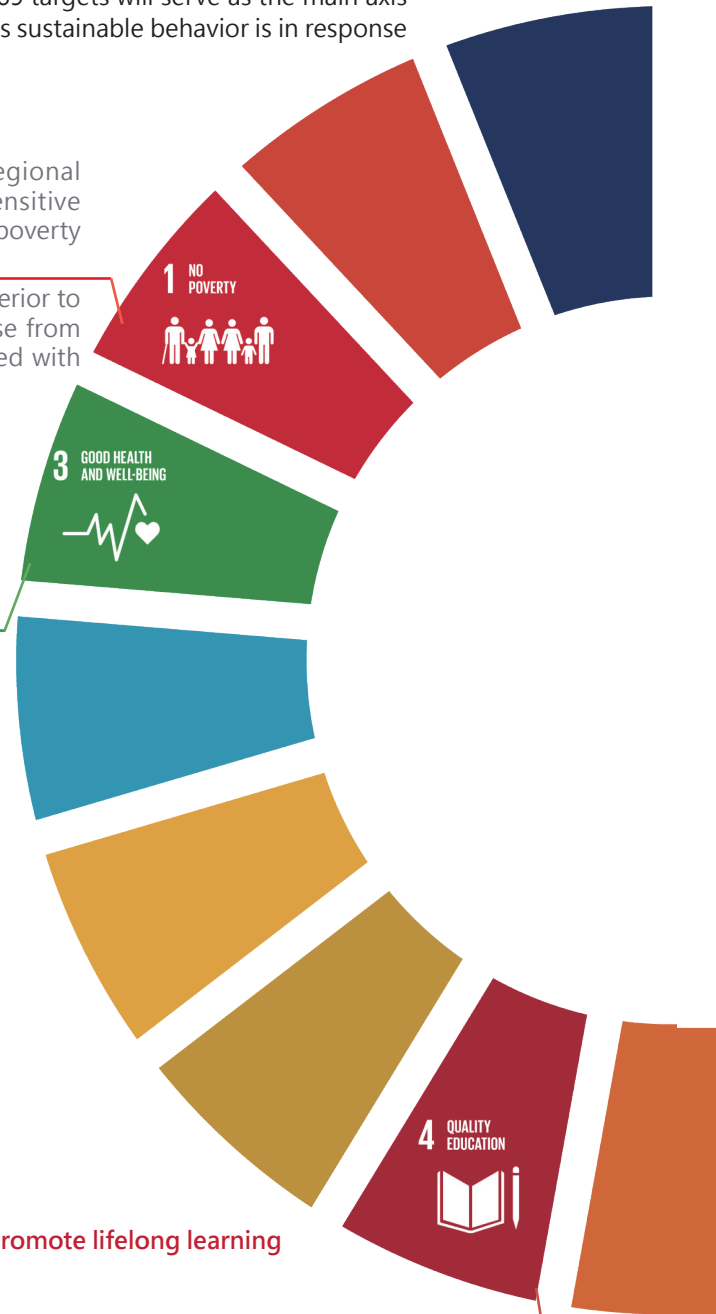
2. Winbond regularly arranges practicing physicians and nurses who are qualified for labor health promotion services and safety professionals to visit the working sites for observing and evaluating potential health risks from a medical point of view. This is part of the efforts to provide employees with a safe and secure work environment, reducing risks of occupation-related diseases.

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Target 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

Target 4.5: By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

1. Based on the company policy every year and supplemented by the survey of training needs, tailor-made learning courses and individual personal learning development courses are carefully planned to provide our employees with opportunities for self-growth and development.
2. We actively hire employees with physical and mental disabilities, and as of the end of 2018, there were 21 employees with disabilities at Winbond.



Goal 5. Achieve gender equality and empower all women and girls

Target 5.1: End all forms of discrimination against all women and girls everywhere

1. In 2018, Winbond's basic salary of inexperienced staff was superior to the statutory minimum basic salary and continued to increase from 1.4 times to 1.8 times of the statutory minimum salary.
2. Winbond adheres to the Act of Gender Equality in Employment, and all employees may apply for leaves on the basis of menstrual leave, Tocolysis leave, routine prenatal visit, maternity leave, paternity leave, parental leave without pay, and family care leave.

Goal 6. Ensure availability and sustainable management of water and sanitation for all

Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

We continue to improve the reclaim rate of used-water. In 2018, the reclaim rate in the whole plant was about 82% while that during the process was about 91% (conforming to the EIA Commitments- more than 77% of the reclaim rate in the whole plant and more than 85% in the process).

Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all

Target 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services

1. We continue the development of power-saving technology to reduce electricity or battery consumption and to create more energy-saving and environmentally friendly products for not only our customers but also for the earth.
2. Twenty-one new energy-saving measures were introduced in 2018 and five energy-saving measures from 2017 were still being implemented, saving approximately 31,213 billion joules.
3. Winbond's total water consumption in 2018 was approximately 3.13 million m³. Water consumption per unit of product – the average water consumption for each reticle layer of 12-inch wafers is 139 liters.



Sustainable Development Goals (SDGs) and Annual Performance

The 17 Sustainable Development Goals (SDGs) with their 169 targets will serve as the main axis of the development issues for 2016-2030 in the world. Winbond's sustainable behavior is in response to 11 of the SDGs.

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

Target 8.7: Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms

1. Hire people with disabilities to promote employment opportunities for the disadvantaged groups.
2. Winbond adheres to domestic and foreign requirements and regulations and does not employ child labor or those under the age of completing compulsory education.

Goal 13. Take urgent action to combat climate change and its impacts

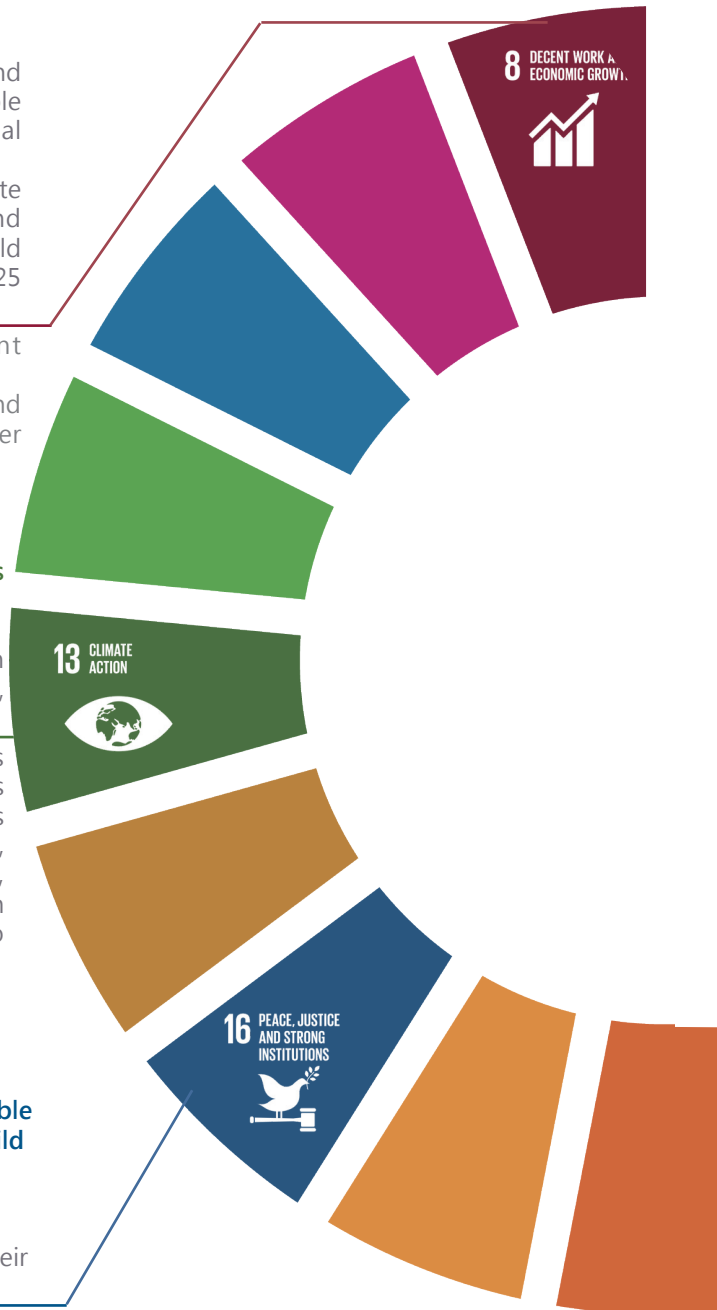
Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Winbond continues to implement the Greenhouse Gas Emissions Reduction Project. Through manufacturing process adjustments, use of alternative gases, and deployment of FCs reduction equipment, GHG emissions are reduced. Besides, through the water-saving and energy conservation measures, the risk impact is reduced, enhancing our ability to cope with climate change and strengthening our competitiveness to create opportunities.

Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Target 16.5: Substantially reduce corruption and bribery in all their forms

1. No violation of integrity was reported through the grievance channels in 2018.
2. No incident of corruption occurred in 2018.
3. No incident of discrimination occurred in 2018.



Goal 10. Reduce inequality within and among countries

Target 10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

The company abides by relevant laws and regulations, such as the Act of Gender Equality in Employment, right to work and elimination of discrimination and also complies with internationally recognized labor rights, such as freedom of association, collective bargaining rights, caring for the disadvantaged groups, prohibition of child labor, elimination of all forms of forced labor, hiring and employment discrimination. The personnel system (e.g., salary, welfare, assessment, promotion, rewards and punishments, cultivation, job placement, and termination of contract) treats every employee equally, regardless of gender, race, skin color, nationality, social status, language, thoughts, religion, political affiliation, place of origin, place of birth, sexual orientation, age, marital status, pregnancy, blood type, star sign, appearance, facial features, disability, or union membership. The equality and fairness in employment, hiring conditions, remuneration, benefits, training, assessment and promotion opportunity is implemented.

Goal 12. Ensure sustainable consumption and production patterns

Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources

Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

1. No chemical or wastewater leakage or environmental violations occurred at Winbond in 2018. No penalties due to environmental violations occurred in Winbond in 2018, nor was there any case of "environmental impact" complaint or protest.
2. In 2018, the waste generated at Winbond was approximately 6,082 tons. When measured with the per unit of product indicator, the production for each reticle layer of 12-inch wafer produces approximately 0.270 tons of waste; all hazardous business waste was disposed by domestic qualified waste disposal organizations.



Annual Sustainable Development Goals and Evaluations

Sustainable development goals and achievement status

Material topics		Goals for 2018	Achievement status in 2018	
Economic Aspect	Economic Performance	To continue to understand short-term operational performance with various financial indicators.	1. The consolidated revenue of 2018 amounted to NTD 51.19 billion, an 8% increase compared with the NTD 47.592 billion in 2017. 2. The EPS after tax was NTD 1.87 in 2018.	
	Patent	Investment in R&D of resources, compliance with legal requirements, and meeting the requirements for information security indicators.	The quantity of annual targets for inventions in 2018 was 130, and the actual invention proposals was 219 (target achieved).	
Environmental Aspect	Environmental compliance	No violations of environmental regulations.	There were no violations of environmental regulations (target achieved).	
	Energy Water GHG Gases	1. The goal of electricity consumption per unit of product was 85.2 MJ/layer. 2. The goal of water consumption per unit of product was ≤ 150 liter/layer.in 2018; the water reclaim rate of the whole plant was $\geq 80\%$; the water reclaim rate in the process was $\geq 85\%$. 3. The goal of GHG emission per unit of product was less than 15.3Kg CO ₂ e/ layer in 2018.	1. The electricity consumption per unit of product in 2018 was 79.6 MJ/layer (target achieved). 2. The water consumption per unit of product in 2018 was 139 liter/layer, the water reclaim rate of the whole plant 82% and the water reclaim rate in the process 91% (target achieved). 3. The GHG emission per unit of product in 2018 was 15.2KgCO ₂ e/layer (target achieved).	
	Chimney Emission Effluents Waste	1. The discharge of air pollutant complies with the requirements of Stationary Pollution Source Operating Permit. 2. The effluents and Wastewater should meet the discharge criteria of the Central Taiwan Science Park. 3. Waste recycling rate $\geq 90\%$.	1. The discharge of air pollutant in 2018 complied with the requirements of Stationary Pollution Source Operating Permit (target achieved). 2. The effluents and Wastewater of 2018 met the discharge criteria of the Central Taiwan Science Park (target achieved). 3. Waste recycling rate of 2018 was 92% (target achieved).	

	Goals for 2019	Medium- and long-term goals
	To pursue stable operation and profit growth.	To create the corporate value for sustainable management.
	The quantity of annual targets for inventions in 2019 is 240.	To continue to improve the quality of patents, invest in relevant resources and increase the company's competitiveness.
	Continue to maintain zero violations of environmental regulations.	Conduct related operations in accordance with environmental protection laws and regulations.
	<ol style="list-style-type: none"> 1. The goal of electricity consumption per unit of product for 2019 is 84 MJ/layer. 2. The goal of water consumption per unit of product for 2019 is ≤ 150 liter/layer; the water reclaim rate of the whole plant is $\geq 80\%$; the water reclaim rate in the process is $\geq 85\%$. 3. The goal of GHG emission per unit of product for 2019 is less than 15.2Kg CO₂e/layer. 	<ol style="list-style-type: none"> 1. The goal of electricity consumption per unit of product for 2019 is the same as that in 2010 (82.8 MJ/layer). 2. The goal of water consumption per unit of product for 2020 is ≤ 150 liter/layer; the water reclaim rate of the whole plant for 2020 is $\geq 80\%$; the water reclaim rate in the process is $\geq 85\%$. 3. 2010 was set as the base year for the GHG emission per unit of product, and the goal of GHG emission per unit of product for 2020 is 15.1Kg CO₂e/layer.
	<ol style="list-style-type: none"> 1. The discharge of air pollutant continues to comply with the requirements of Stationary Pollution Source Operating Permit. 2. Waste recycling rate continues to be kept at $\geq 90\%$. 	<ol style="list-style-type: none"> 1. A green enterprise of sustainable development environmentally. 2. To keep the waste recycling rate for 2020 at $\geq 90\%$.





Annual Sustainable Development Goals and Evaluations

Sustainable development goals and achievement status

	Material topics	Goals for 2018	Achievement status in 2018	
Social Aspect	Employment Labor/ Management Relations	<ol style="list-style-type: none"> 1. Increase the quality of recruited talent and the number of recruits to reach 70% of the annual target. 2. Harmonious Labor and Management Relations without any labor disputes. 3. Review legal requirements related to business every quarter. 	<ol style="list-style-type: none"> 1. In 2018, the number of recruits reached 95% (target achieved). 2. No labor disputes or violations of relevant labor regulations in 2018 (target achieved). 3. Reviewed legal requirements related to business every quarter and updated internal regulations depending on the needs (target achieved). 	
	Training and Education	<ol style="list-style-type: none"> 1. Arrange and compile annual training plans for various courses, and the annual course open rate shall reach 80% of all courses listed in the plan. 2. Satisfaction survey after the course. 3. The average education and training hours should reach more than 30 hours per capita. 	<ol style="list-style-type: none"> 1. The annual course open rate reached 86% of all courses listed in the plan (target achieved). 2. The average score of the satisfaction survey after the courses was 4.4 points (out of 5 points). 3. The average education and training hours was 31.5 hours per capita. (target achieved). 	
	Occupational Health and Safety	<ol style="list-style-type: none"> 1. The important statistical index for disabling injury FR is 1 and SR is 2. 2. Cumulative number of participants of related sports $\geq 40,000$ people/year. 3. No violation of occupational safety and health regulations in the year. 	<ol style="list-style-type: none"> 1. In 2018, the FR was 0.37 but the SR was 6, failing to reach the target. Related improvement measures have been proposed. 2. In 2018, a total of 56,217 people participated in sport activities (target achieved). 3. In 2018, there was no records of violation of occupational safety and health regulations (target achieved). 	
	Socioeconomic Compliance Anti-competitive Behavior Customer Privacy	<ol style="list-style-type: none"> 1. There was zero violation of relevant social and economic regulations. 2. Continue to understand short-term operational performance with various financial indicators. 3. Compliance with regulatory requirements and the information security index should be 100%. 4. The staff and engineering assistants' training rate for Education and Training for the Ethics and Business Conduct of Practitioners should reach 100%. 	<ol style="list-style-type: none"> 1. There was zero violation of relevant social and economic regulations in 2018. (target achieved). 2. There was zero legal action or dispute against anti-competitive behavior, antitrust and monopoly in 2018. (target achieved). 3. In 2018, there were no complaints about infringement of customer privacy or loss of customer information in the whole year (target achieved). 4. The education and staff' s training rate for Education and Training for the Ethics and Business Conduct of Practitioners reached 100% (target achieved). 	
	Customer Health and Safety	To provide customers with green products with lower power consumption and lower environmental impacts to enhance the sustainable competitiveness of the overall supply chain.	<ol style="list-style-type: none"> 1. In 2018, there was no penalty due to violation of relevant laws and regulations concerning product liability (target achieved). 2. The products were 100% in compliance with international standards (target achieved). 	

Annual Sustainable Development Goals and Evaluations

	Goals for 2019	Medium- and long-term goals
	<ol style="list-style-type: none"> 1. To maintain the industrial competitiveness to attract and retain outstanding talents and to conduct annual salary review and adjustment. 2. Review legal requirements related to business every quarter. 	<ol style="list-style-type: none"> 1. Excellent talents can bring new ideas and thinking to the enterprise, enhance the company's productivity and enable the company to make profits and grow steadily. 2. To reach zero violation and be superior to regulatory requirements.
	Continue to maintain the annual course open rate at 80% of all courses listed in the plan.	Excellent talent will bring new ideas and thinking for enterprises, enhancing the company's productivity and bringing the stable profit growth to the company.
	<ol style="list-style-type: none"> 1. To keep the important statistical index for disabling injury FR at 0 and SR at 0. 2. It is expected to complete the verification of ISO 45001 conversion. 3. Participants of related sport events in 2019 is estimated to reach $\geq 60,000$ people/ year. 	<ol style="list-style-type: none"> 1. To reach zero violation and be superior to regulatory requirements. 2. Participants of related sport events in 2020 is expected to reach 70,000 people/ year.
	<ol style="list-style-type: none"> 1. There was zero violation of relevant social and economic regulations. 2. To pursue stable operation and profit growth. 3. Continue to comply with regulatory requirements and the information security index. 	<ol style="list-style-type: none"> 1. Conduct related operations in accordance with social and economic regulations. 2. To create the corporate value for sustainable management and zero violation. 3. Customer satisfaction survey reached 90%.
	To abide by Responsible Business Alliance (RBA) and local governmental regulations and establish relevant management practices and procedures.	Continue to develop power-saving technologies to reduce the consumption of electricity or batteries and create more energy-saving and more environmentally friendly products for our customers.





1. Sustainable Management-Strengthened Communication

1.1 About Winbond

1.2 Sustainable Development Strategies

1.3 Stakeholder Communication

1.4 Management of Material Topics

- ▶ This CSR Report was revised from GRI G4 to the latest version of **GRI Standards**.
- ▶ A total of **164 copies** of questionnaires concerning level of concern of material topics among the **7 stakeholders** were returned.



► **17 material topics** and 22 subtopics were identified.

► Winbond's sustainable behavior is in response to **11 of the SDGs**.

1.1 About Winbond

Winbond was established in September, 1987 and officially listed on Taiwan Stock Exchange in October, 1995. Our corporate director, Walsin Lihwa, is not only our founding shareholder but also the largest shareholder since establishment, with the shareholding ratio at 22%.

The current status of Winbond is as follows :

Full name of Company	Winbond Electronics Corporation
Number of employees (Globally)	3,069
Capital	NT\$39.8 billion
Date of Establishment	1987/9/29
Main Products and Technologies	Code Storage Flash Memory, Specialty DRAM and Mobile DRAM
Chairman & CEO	Arthur Yu-Cheng Chiao
President	Tung-Yi Chan
Headquarters	No. 8, Keya 1st Rd., Daya Dist., Central Taiwan Science Park, Taichung City
Operation Centers	Taiwan, USA, Japan, Israel, China, Hong Kong

Winbond is a specialty memory IC company engaged in design, manufacturing and sales services. From product design, research and development, and wafer fabrication to the marketing of brand name products, Winbond endeavors to provide its global clientele top quality low to medium density memory solutions. Winbond's major product lines include Code Storage Flash Memory, Specialty DRAM and Mobile DRAM. Our advantage of technological autonomy and prudent capacity strategy enable us to build a highly flexible production system and create synergy among product lines, which allows us to meet the diverse demands of customers while building the brand image.

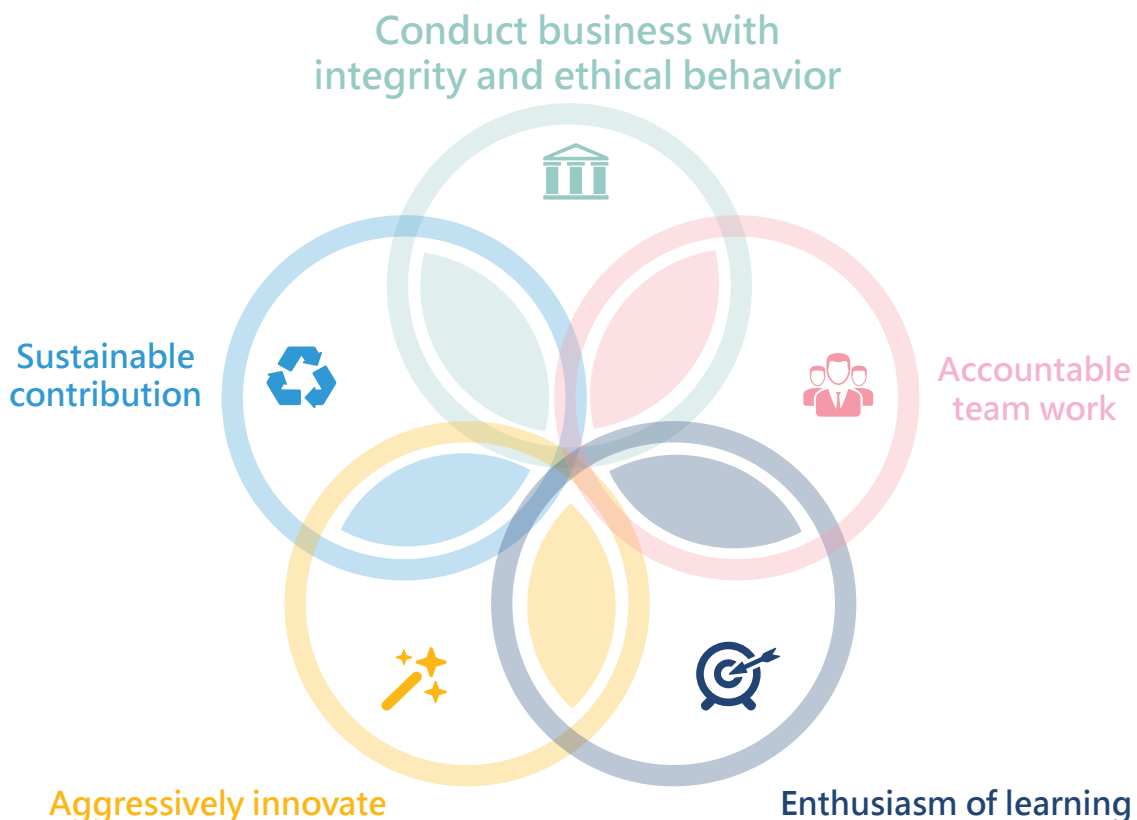
In the area of Code Storage Flash Memory products, we focus on the "low to medium density" market by offering a full spectrum of Serial Flash products. Our Flash memory packages offer features such as low pin count, small size and low cost. We also develop SPI NAND and SLC NAND flash products to meet client demands for code storage. With considerable market share in computer peripheral markets, we also actively develop a diversity of flash memory products for applications in mobile devices, consumer electronics, automotive electronics, IoT and wearable devices. Winbond specializes in the design of high-performance, low-power memory. With a 12-inch fab, we offer a whole series of Specialty DRAM and Mobile DRAM products that target a top-tier clientele and quality-oriented applications. Winbond's products are used extensively in handheld devices, consumer electronics and computer peripherals. We also focus on high-barrier, high-quality applications, such as KGD, automotive and industrial electronics.

To provide timely and respective services to clients around the world, Winbond has set up operations and distributor networks in the USA, Japan, China, Hong Kong and Israel to serve clients better and expand the depth and breadth of product sales. With regard to quality, Winbond implements rigorous process control and quality control, strengthening yield analysis and supply chain management to satisfy customer needs. The long-standing efforts in quality assurance have earned the Company a good reputation and resulted in the accreditation of ISO 9001, ISO 26262, IATF 16949, QC 080000, ISO 14001 and OHSAS 18001.

In the future, Winbond will continue to provide customer-oriented services and concentrate our resources on the markets in which we have a competitive advantage. At the same time, riding on the strength of our advanced semiconductor design and manufacturing know-how, coupled with the innovation and wisdom of our employees, observing the core values of "Conduct business with integrity and ethical behavior, Accountable team work, Enthusiasm of learning, Aggressively innovate, Sustainable contribution" in all operational activities, Winbond will strive towards the goal of becoming a world-class solution provider.

Visions of Winbond

"Conduct business with integrity and ethical behavior, Accountable team work, Enthusiasm of learning, Aggressively innovate, Sustainable contribution" is Winbond's corporate culture. It represents the Company's core values, beliefs, and deeds that should be understood and practiced by every member of Winbond. To maintain the core values of the corporate culture, Winbond has set up "Ethical Corporate Management Best Practice Principles", "Code of Ethical Conducts of Employees", and "Corporate Social Responsibility Management Process", setting integrity management as the highest ethical standard of the Company when treating customers, investors, employees, suppliers and everyone we contact.

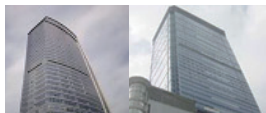


Global Operating Bases

Winbond's major product lines include Code Storage Flash Memory, Specialty DRAM and Mobile DRAM. Our advantage of technological autonomy and prudent capacity strategy enable us to build a highly flexible production system and create synergy among product lines, which allows us to meet the diverse demands of customers while developing the image of our own brand.

Winbond Electronics Corporation established a subsidiary in Hong Kong in 2018.

Please refer to the 2018 Annual Report for detailed information of our operating bases.



▼ Winbond Electronics (H.K.) Limited

Unit 9-11, 22F, Millennium City 2, 378 Kwun Tong Road,
Kowloon, Hong Kong
Tel: 852-27513126



▼ Winbond Electronics Corporation Japan

Shin-Yokohama Square Bldg. 9F 2-3-12 Shin-Yokohama, Kouhoku-ku,
Yokohama, Kanagawa 222-0033, Japan
Tel : 81-45-478-1881

▼ Winbond Electronics (Suzhou) Limited-Shenzhen Branch office

Room 1206 · Kingboard Plaza (Building B, 12 floor),
No.505, Guangming Road, Huaqiao Town, Kunshan City,
Jiangsu Province, China
Tel: 86-512-8163-8168



▼ Winbond Electronics Corporation America

2727 North First Street, San Jose, CA 95134, U.S.A.
Tel : 1-408-943-6666



▼ Winbond Technology LTD

1 Abba Eban Ave, Building B, First Floor,
Herzliya: 4672519, Israel
Tel : 972-9-866-0700



▼ Taiwan (Headquarters) Winbond Electronics Corporation

CTSP Site
No. 8, Keya 1st Rd., Daya Dist., Central Taiwan Science Park,
Taichung City 42881, Taiwan
Tel: 886-4-25218168

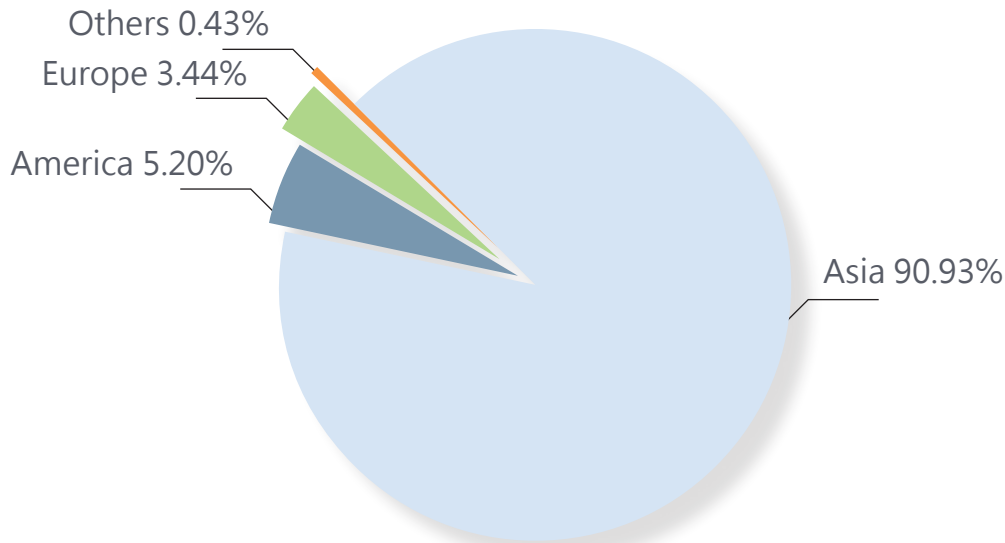
Jhubei Office
Jhubei Office: 6F., No.38, Gaotie 1st Rd., Jhubei City, Hsinchu County 30273, Taiwan
Wenxing LAB: No.186, Sec. 2, Wenxing Rd., Jhubei City, Hsinchu County 30274, Taiwan
Tel: 886-3-5678168

Taipei Office
2F., No.192, Jingye 1st Rd., Zhongshan Dist., Taipei City 10462, Taiwan
26F, No.1, SongZhi Rd., Xinyi Dist., Taipei City 11047, Taiwan
Tel: 886-2-81777168

Please refer to the Annual Report for the information of Winbond and its related companies.

Sales Distribution

▼ Market distribution in 2018



Participation in External Organizations

Winbond has been actively involved in relevant organizations, technological alliances and their activities in order to obtain industrial and technological knowledge and establish good relationships, including Taiwan Electrical and Electronic Manufacturers' Association (TEEMA) with our Chairman and CEO, Mr. Arthur Yu-Cheng Chiao serving as the honorary chairman, Taiwan Semiconductor Industry Association (TSIA) with the president, Mr. Tung-Yi Chan serving as the director, and the Allied Association for Science Park Industries, with the Deputy Technical Executive, Mr. Wen-Hua Lu as the supervisor.

Other external organizations that Winbond participated in 2018 are listed as follows :

Association and societies Winbond participates in

- AIP Publishing LLC
- DIGITIMES
- DMASS Limited
- DRAMeXchange
- IEEE
- IHS Global Pte Ltd
- IHS iLibery (iSuppli) DRAM Market Tracker
- IHS Industrial database
- JEDEC Solid State Technology Association
- The Institute of Internal Auditors-Chinese Taiwan
- Taiwan Semiconductor Industry Association, TSIA
- Chinese International Economic Cooperation Association (CIECA), Taiwan
- Computer Audit Association
- Friends of the Police Association - Special Police Second Headquarters
- Bellwether Consulting Ltd.
- Great Taichung Nurses Association
- Association of the Industry, Academician, Training of Central Taiwan Science Park
- The Allied Association for Science Park Industries
- Taiwan Electrical and Electronic Manufacturers' Association
- Advanced Microsystems & Package Technology Alliance, AMPA
- Cross-Strait CEO Summit
- Monte Jade Science & Technology Association of Taiwan
- High-Tech Industry Salary Management Association
- GLORIA NCKU
- Hsinchu County Nurses Association
- Market Intelligence & Consulting Institute

1.2 Sustainable Development Strategies

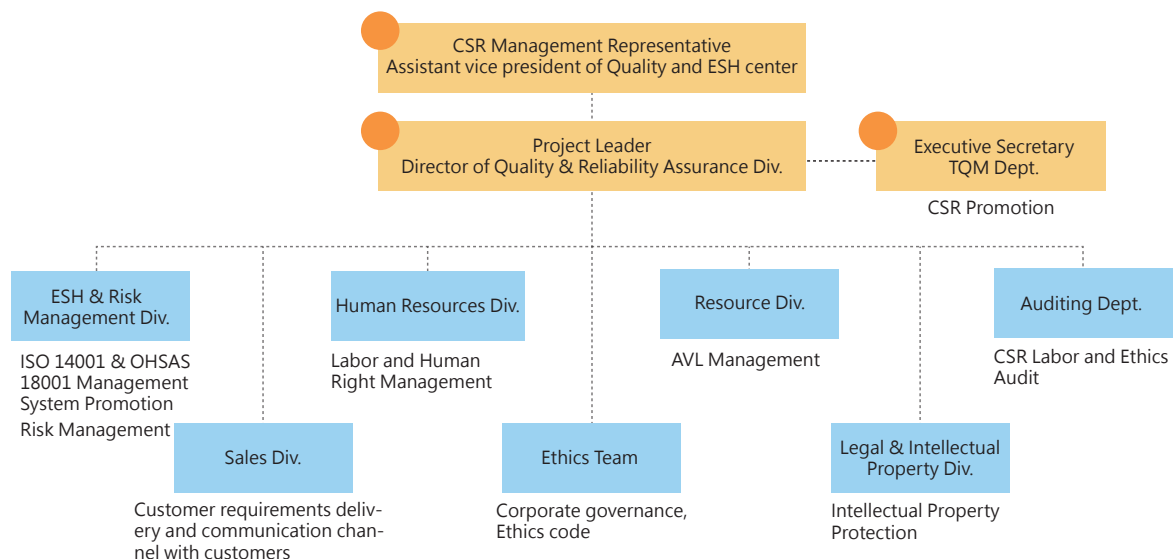
Winbond established the Winbond Corporate Social Responsibility (CSR) Committee in 2015. This Committee is composed of Quality & ESH Team, Product Sales Team, Human Resource Team, Ethics Team and Administration and Production Subcontractor Team. The chief of Quality Assurance Center serves as the management representative of the Committee to ensure the implementation and maintenance of the CSR Committee while its five teams working together to conduct data collection of sustainability issues in terms of economic, environmental and social aspects.

To implement our corporate social responsibility and to facilitate the economic, environmental and social progress so as to meet the goal of sustainable development, the President's Office drafted the Corporate Social Responsibility Policy and the Code of Practice on Corporate Social Responsibility that were approved by the 20th session of Board meeting of 9th Board of Directors (on January 24th, 2014) and the 5th session of Board meeting of 10th Board of Directors (on December 18th, 2014). The President Office is responsible for the formation and implementation of CSR policies, systems or related management guidelines as well as specific promotion plans, and reports to the board of directors regularly.

The president reports to the board meeting in the fourth quarter every year (the 10th Board meeting of the 11th Board of Directors, on October 26, 2018) on the results of CSR promotion of the current year and the work plan for the next year, and also listens to the opinions from the Board for improvement, officially making corporate social responsibility a part of the company's decision making.

▼ Winbond's Corporate Social Responsibility (CSR) Committee

Every year a management review meeting is convened in the first quarter (the most recent meeting: January 29, 2019) to report to senior management on the performance of the implementation of the CSR management system and suggestions of required improvement.




Corporate Social Responsibility Policy

The Company insists that all business operating activities must take corporate social responsibility into account. Corporate ethics and compliance of government statutes are ensured through strengthened employee education and training as well as the internal control system of the company. Meanwhile, we continue to pursue improvement of quality management and environmental protection. In addition, we are committed to social welfare and good communication with the stakeholders. The Company expects all its business partners to support and comply with CSR requirements.

1.3 Stakeholder Communication

Aiming at sustainable development and long-term operation, Winbond identifies its stakeholders based on the five major principles of the AA1000 SES (Stakeholder Engagement Standard 2015), including Dependency, Responsibility, Influence, Tension, and Diverse Perspectives. Seven categories of key stakeholders were identified, including employees, government, clients/distributors, suppliers/subcontractors, shareholders/investors, banks/financial institutions, and media. In 2018, there was no difference in the categories of key stakeholders compared to 2017.




▼ Stakeholder Communication

Stakeholders	Concerned issues	Communication channel	Results of communication during 2018
 Employees	<ul style="list-style-type: none"> • Employment • Training and Education • Market Presence • Economic Performance • Labor/Management Relations 	<ul style="list-style-type: none"> • Employees Grievance hotline (at all times) • Employee committee against sexual harassment (at all times) • Functional communication meeting (periodical) • Bulletin board of Winbond's internal Website (occasional) • Training course (periodical) • Employee Welfare Association (occasional) • Health care activities (occasional) • Industrial safety meeting (monthly) • ESH Council (quarterly) • Employees suggestion boxes (at all times) • Health counseling (at all times) • Health, stress, soreness questionnaire (yearly) • Regular training concerning environmental protection and safety and health education (periodical) • CSR questionnaire (yearly) 	<ol style="list-style-type: none"> 1. 3 proposals were received and processed through the suggestion boxes in 2018. 2. The Company set a grievance hotline (75234) for employees. Two grievance cases were reported in 2018. 3. No sexual harassment case was reported in 2018. 4. 8 labor-management meetings and 2 briefings were held during 2018; 6 workday issues were reported. 5. A total of 4 sessions of "Management Discussion Meeting" were held in 2018, with a total of 1,324 participants. 6. One session of "Discussion Meeting with the President" was held in 2018, and a total of 1,017 employees participated in this meeting. 7. By the end of 2018, a total of 2,893 people received CSR related courses (including labor rights, environmental protection, health and safety, and code of ethics), with a total of 1,447 training hours and a completion rate of 100%.

Stakeholders	Concerned issues	Communication channel	Results of communication during 2018
 Clients / distributors	<ul style="list-style-type: none"> Marketing and Labeling Patent Customer Privacy Employment Economic Performance 	<ul style="list-style-type: none"> Client audit (occasional) Business meeting (periodical) Technical seminar (occasional) Telephone, email (instant) Responses in questionnaire (instant) CSR questionnaire (yearly) Customer satisfaction survey (on a yearly basis) 	<ol style="list-style-type: none"> In 2018, the customer satisfaction survey was conducted, and the average satisfaction was over 89%. In addition to regular visits to customers, our sales staff usually make use of the telephone and email to make instant contact and solve the problems. General customers can also make use of the interface on our official website for consultation. The Company regularly attends the Electronica held in Munich biennially. We attend customer internal training for the demonstration and presentation of the products.
 Shareholders/ investors	<ul style="list-style-type: none"> Diversity and Equal Opportunity Non-discrimination Economic Performance Patent Indirect Economic Impacts 	<ul style="list-style-type: none"> Shareholders' meeting (annual) Investor conference (every 6 months), and additional conference will be held for special matters IR one-on-one (meeting 10-20 times/quarter) Telephone or e-mail (instant) Stock Exchange Open Information Observatory (occasional) Official Website (occasional) CSR questionnaire (yearly) 	<ol style="list-style-type: none"> Shareholders' meeting annually. The Investor conference is held every six months. Quarterly disclosure of financial statements on the Website. Monthly disclosure of revenue report on the Website.
 Suppliers/ subcontractors	<ul style="list-style-type: none"> Environmental Compliance Socioeconomic Compliance Chimney Emissions Supplier Environmental Assessment 	<ul style="list-style-type: none"> Supplier audit (yearly) Rating of major suppliers (regularly) External complaint channel (instant) Major suppliers' quality meeting (monthly/quarterly) Contractors association meeting (monthly) CSR questionnaire (yearly) 	<ol style="list-style-type: none"> Completion of supplier CSR & HSF audits. 100% suppliers signing the Letter of Commitment for Ethical Integrity & Responsible Business Alliance (RBA) statement. No complaints from suppliers were reported. 100% major suppliers signing the Declaration on Conflict-Free Minerals.

Grievance Mechanism

All business activities within the Company are required to take into account corporate social responsibility, ensuring compliance with corporate ethics and government decrees while upholding ethical operation in all business endeavors. If our employees violate the above behavior, the

Stakeholders	Concerned issues	Communication channel	Results of communication during 2018
 Government	<ul style="list-style-type: none"> • Effluents • Waste • Chimney Emissions • Environmental Compliance • Materials 	<ul style="list-style-type: none"> • Official Documents (non-periodical) • Regulatory briefing (occasional) • Gov't Policies & Decrees (non-periodical) • Inspection of the competent authorities (non-periodical) • CSR questionnaire (yearly) 	<ol style="list-style-type: none"> 1. The carbon reduction measures taken helped reduce 225,592 tons/CO₂e in 2018, equivalent to the annual of carbon fixation of 584 Da An Forest Parks. 2. 615,000 m³ of water was saved. 3. The amount of waste recycled amounted to 5,578 tons. 4. Participated 27 sessions of propaganda meetings held by CTSP and the Environmental Protection Bureau of Taichung City Government. 5. The competent authorities audits and inspected 16 times.
 Banks/ financial institutions	<ul style="list-style-type: none"> • Patent • Economic Performance • Climate Change Risk • Environmental Compliance • Customer Health and Safety 	<ul style="list-style-type: none"> • Official Documents (non-periodical) • Regulatory briefing (occasional) • CSR questionnaire (yearly) 	Obtain the bank financing and strive for lower interest rate based on the company's general capital needs or capital expenditure on expansion to reduce the costs.
 Media	<ul style="list-style-type: none"> • Economic Performance • Environmental Compliance • Customer Health and Safety • Employment • Patent 	<ul style="list-style-type: none"> • Telephone and e-mail (instant) • Press releases (regularly) • CSR questionnaire (yearly) 	<ol style="list-style-type: none"> 1. Provide monthly revenue press release. 2. Provide the press release of the Company's operating report every six months. 3. Two press interviews a year. 4. Irregular communication via phone calls or e-mails.

stakeholders may immediately report it to the relevant personnel of Winbond and provide relevant evidence. The Stakeholder Area on Winbond's Website provides complaint channels for individuals inside or outside of the Company to report violations or misconducts anonymously or non-anonymously. Any individual or group (e.g., customers, suppliers) from outside of the Company may report misconducts to the internal auditing department. Upon reception of such complaints, an ad hoc team may be formed for investigation. In addition to the grievance channel of the Stakeholder Area on Winbond's Website, we also provide supplier complaint hotline and email.



Grievance hotline: +886-4-2521-3579



Grievance email:
internal_audit@winbond.com

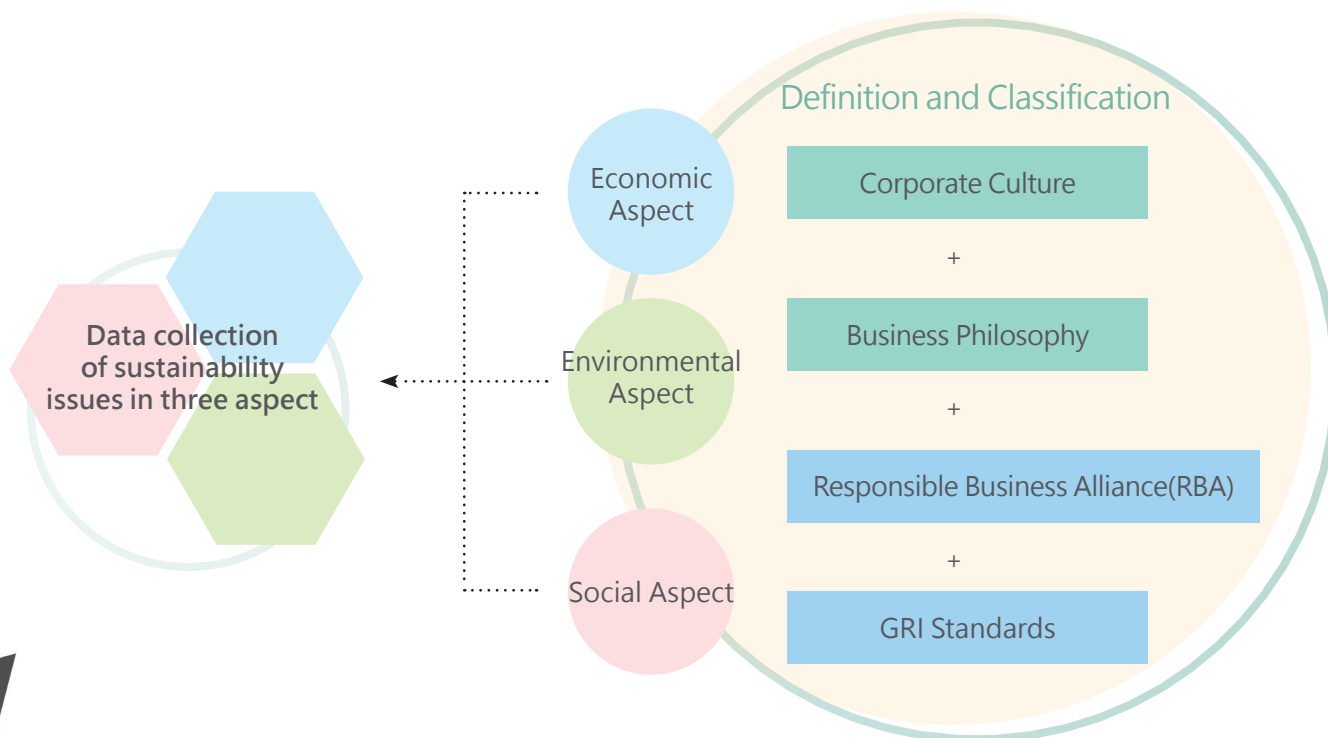
Complaints are handled confidentially with the principle of fair and proper treatment. Filing complaints should not lead the complainant to dismissal, job transfer, or any other negative consequences to their employment, nor should they be discriminated or intimidated by other colleagues. All stakeholders including staff members are encouraged to file complaints against improper conducts.

1.4 Management of Material Topics

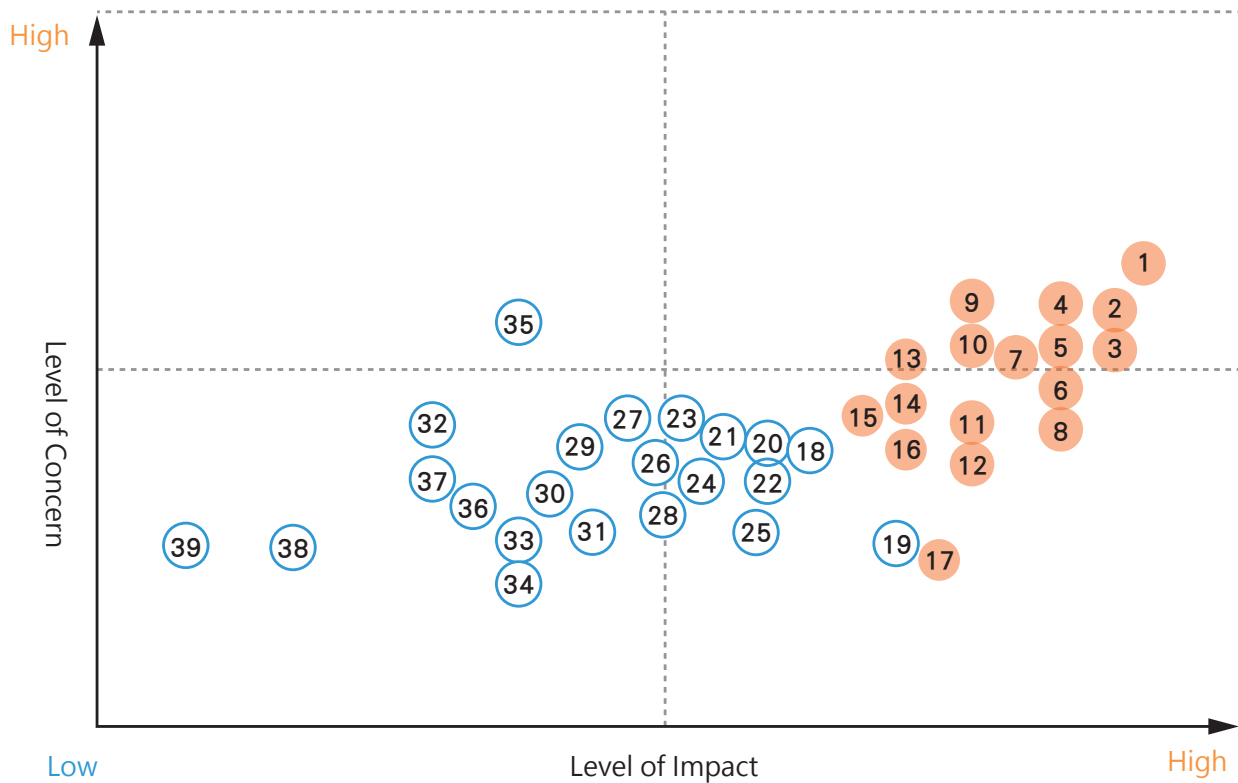
Based on Winbond's corporate culture and business philosophy and according to the definition and categorization of the Responsible Business Alliance (RBA) and the GRI Standards published by the Global Sustainability Report Association (GRI), the CSR Committee makes collection of the sustainability issues from economic, environmental, and societal aspects.

To understand the stakeholders' level of concern in terms of the sustainability issues, we conducted a survey with the corresponding organizations of the stakeholders by means of interviews or questionnaires. The participants were asked to rate their "level of concern of sustainability issues" on a 5-point scale with Extremely concerned, highly concerned, somewhat concerned, slightly concerned, and not at all concerned. During 2018, a total of 164 questionnaires were returned. Similarly, for the question "the impact of sustainability issues on Winbond's operations," the Company's high-level management were asked to rate the level of impact on a 5-point scale.

The substantial analytic results show that seventeen issues were identified as material topics, including Economic Performance, Customer Privacy, Environmental Compliance, Employment, Effluents, Customer Health and Safety, Chimney Emissions, Socioeconomic Compliance, Patent, Waste, Anti-competitive Behavior, Labor/Management Relations, Water, Occupational Safety and Health, Greenhouse Gases, Training and Education, and Energy. For these material issues, DMA (Disclosure on Management Approach) and indicators related to management policy are selected as the main aspect for disclosure. For issues of low-and medium-level of concerns, we also carefully selected their indicators for the disclosure of relevant information.



▼ Results of identification of material topics



▼ Prioritization of Material Topics

Material Topics				
1 Economic Performance	2 Customer Privacy	3 Environmental Compliance	4 Employment	5 Effluents
6 Customer Health and Safety	7 Chimney Emissions	8 Socioeconomic Compliance	9 Patent	10 Waste
11 Anti-competitive Behavior	12 Labor/Management Relations	13 Water	14 Occupational Health and Safety	15 Greenhouse Gases
16 Training and Education	17 Energy			



Subtopics				
18 Marketing and Labeling	19 Anti-corruption	20 Supplier Environmental Assessment	21 No-use of Conflict Minerals	22 Green Products
23 Market Presence	24 Non-discrimination	25 Freedom of Association and Collective Bargaining	26 Forced of Compulsory Labor	27 Indirect Economic Impacts
28 Child Labor	29 Diversity and Equal Opportunity	30 Human Rights Assessment	31 Supplier Social Assessment	32 Materials
33 Security Practices	34 Local Communities	35 Indigenous Rights	36 Climate Change Risk	37 Biodiversity
38 Procurement Practices	39 Public Policy			

Description of the Boundary of Material Topics of the Value Chain

After analysis, the material topics of the 2018 CSR Report were summarized into three major aspects, namely the economic, environmental and social aspects, and the value chain is also used as the boundary analysis factor. Winbond will continue to strengthen management and disclose relevant information in its CSR Report.

Compared with 2017, the material topics of Economic Performance, Customer Health and Safety, Customer Privacy, Water, Environmental Compliance, Socioeconomic Compliance, Energy, Patent, Training and Education, and Labor/Management Relations maintain their materiality while Anti-competitive Behavior, Employment, Occupational Health and Safety and other topics set by Winbond, such as Effluents, Chimney Emissions, Waste and Greenhouse Gases were included in the material topics. This Report focuses on the disclosure of management approaches and performance of the 17 material topics. Other subtopics are also disclosed as much as possible for the transparency of information.

Aspect of sustainability	Corresponding material topics	Winbond value chain boundary	Corresponding chapter of the management approach	Page
Economic	Economic Performance	Winbond	2. Management of Winbond- Integrity Management	P32
	Patent	Winbond, clients / distributors	3. Innovative Winbond- R&D and Growth	P48
	Anti-competitive Behavior	Winbond	2. Management of Winbond- Integrity Management	P32

Aspect of sustainability	Corresponding material topics	Winbond value chain boundary	Corresponding chapter of the management approach	Page
Environmental	Environmental Compliance	Winbond, clients / distributors, suppliers/ subcontractors	4. Green Winbond- Safeguarding the Environment	P68
	Effluents	Winbond, suppliers/ subcontractors	4. Green Winbond- Safeguarding the Environment	P68
	Chimney Emissions	Winbond, suppliers/ subcontractors	4. Green Winbond- Safeguarding the Environment	P68
	Waste	Winbond, suppliers/ subcontractors	4. Green Winbond- Safeguarding the Environment	P68
	Water	Winbond, suppliers/ subcontractors	4. Green Winbond- Safeguarding the Environment	P68
	Greenhouse Gases	Winbond, suppliers/ subcontractors	4. Green Winbond- Safeguarding the Environment	P68
	Energy	Winbond, suppliers/ subcontractors	4. Green Winbond- Safeguarding the Environment	P68
Social	Customer Privacy	Winbond, clients / distributors, suppliers/ subcontractors	3. Innovative Winbond- R&D and Growth	P48
	Employment	Winbond, suppliers/ subcontractors	5. LOHAS at Winbond- A Friendly Workplace	P88
	Customer Health and Safety	Winbond, clients / distributors	3. Innovative Winbond- R&D and Growth	P48
	Socioeconomic Compliance	Winbond, clients / distributors, suppliers/ subcontractors	2. Management of Winbond- Integrity Management	P32
	Labor/ Management Relations	Winbond	5. LOHAS at Winbond- A Friendly Workplace	P88
	Occupational Health and Safety	Winbond, suppliers/ subcontractors, clients / distributors	5. LOHAS at Winbond- A Friendly Workplace	P88
	Training and Education	Winbond, suppliers/ subcontractors	5. LOHAS at Winbond- A Friendly Workplace	P88



2. Management of Winbond-Integrity Management


2.1 Overview of Corporate Governance

2.2 Operational Performance

2.3 Integrity Management

2.4 Risk Management

- ▶ In 2018, the consolidated revenue amounted to NTD **51.19 billion**, an **8% increase** compared with the NTD 47.592 billion in 2017.
- ▶ In 2018, the consolidated net income was NTD **7.728 billion**, a significant increase of 33% compared with the NTD 5.823 billion in 2017. The net profit margin was 15% and the EPS was NTD **1.87**.
- ▶ There was **zero** violation of relevant social and economic regulations in 2018.
- ▶ There was **zero** legal action or dispute against anti-competitive behavior, antitrust and monopoly in 2018.
- ▶ There was **zero** complaint of violations of integrity management in 2018.
- ▶ In 2018, the directors' education training hours reached **9.3 hours** averagely to enhance the directors' corporate governance capabilities.

- 
- In 2018, Winbond continued to pass the RBA VAP and scored **196.5 points** (out of 200 points), received 6 occupational safety and health inspections by the competent authorities, 16 environmental inspections and 3 fire inspections. There was **zero** violation of domestic labor, occupational safety and health, environmental protection and fire protection related laws and regulations.
- In 2018, the ethics and anti-corruption awareness were strengthened, with the training rate reaching **100%**.
- 2018 TSWE RAFIR Taiwan High Compensation 100 Index (HC 100).
- 2018 TWSE RA Taiwan Employment Creation 99 Index.
- 2018 TWSE CG 100 Index.

Winbond clearly stipulates its ethical management policies with a range of internal rules and regulations established, including "Corporate Social Responsibility Management Procedure," "Corporate Social Responsibility Best Practice Principles," "Corporate Governance Best Practice Principles," "Ethical Corporate Management Best Practice Principles," "Work Rules," and "Procedures for Handling Cases Violating Ethical Management." It requires all operational activities of the Company and subsidiaries to comply with relevant laws and regulations, abide by ethical codes of conduct, avoid unfair competition, and stay clear of bribery, striving to build a fair competitive environment by establishing a sound management system.

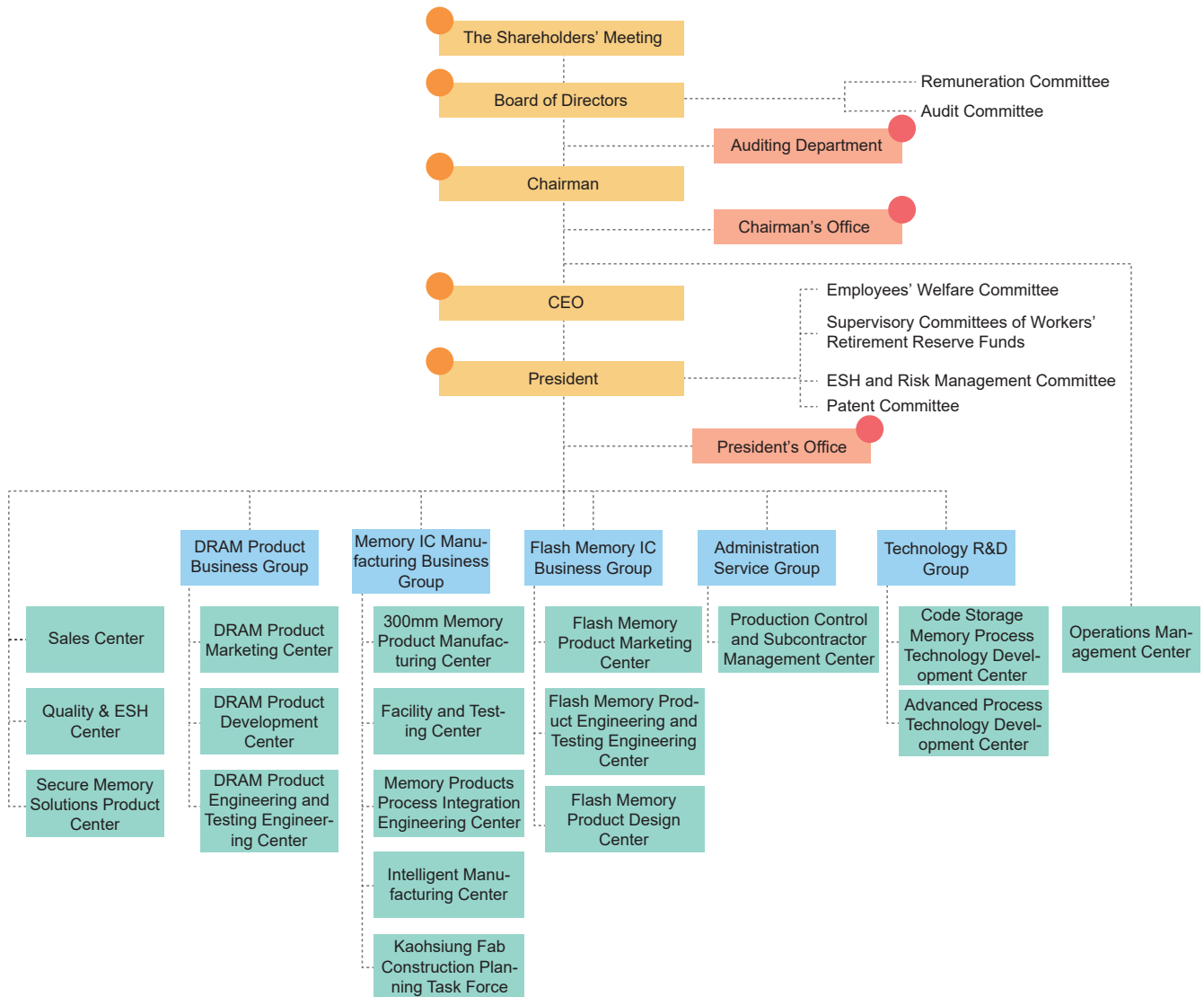




2.1 Overview of Corporate Governance

Upholding "ethical operation" as its topmost ethical standard, the Company strictly prohibits any form of corruption, bribery, extortion, embezzling of public funds, and offering or accepting bribes. In addition, the Company also complies with Code of Conduct for Antitrust Compliance to establish a trustworthy and respected corporate reputation.

▼ Winbond's Organizational Structure



2.1.1 Board of Directors

The Board of Directors is Winbond's highest governance body. The 11th-term Board of Directors consists of 10 directors (Note 1). The Board includes 4 independent directors and 3 female directors. Directors who do not hold managerial positions in the Company make up more than two thirds of board members. All board members are highly experienced in business operations. The only institutional director on the board - Walsin Lihwa Corporation is a founder of the Company, also the largest shareholder and a director since Company's inception. The ages of board members cover different generations and their professional background covers different industries. All board members possess the ability to perform their duties and to give constructive feedback and make recommendations for corporate strategies. In 2018, the average education and training hours of the directors was 9.3 hours to reinforce the capacity of the Board of Directors. Please refer to Winbond's 2018 Annual Report for the number of board meeting and attendance of the directors.

The Company holds strategy review meeting every quarter before the scheduled board meeting, at which directors are present to understand Company's finance and business conditions as well as the execution of major business plans. The Company endeavors to enhance the transparency of corporate information. Aside from holding investors conference to discuss the Company's business and financial conditions after the semi-annual and annual board meetings, the Company also posts related information on the Market Observation Post System and Company website.

The expertise and capabilities of the members of the Board are detailed as follows :

Title	Name	Gender	Diverse core items				
			Business Management	Leadership	Industry knowledge	Financial/Accounting	Information Management
Chairman	Arthur Yu-Cheng Chiao	Male	V	V	V	V	V
Vice Chairman	Yuan-Mou Su	Male	V	V	V	V	V
Director	Yung Chin	Female	V	V	V	V	V
Independent Director	Francis Tsai	Male	V	V	V	V	V
Independent Director	Allen Hsu	Male	V	V	V	V	
Independent Director	Jerry Hsu	Male	V	V	V	V	
Independent Director	San-Cheng Chang	Male	V	V	V		V
Director	Wei-Hsin Ma	Female	V	V	V	V	V
Director	Chih-Chen Lin	Male	V	V	V	V	V
Director	Walsin Lihwa Corporation (Representative: Sophi Pan)	Female	V	V	V	V	

Note 1: Mr. Matthew Feng-Chiang Miao resigned from Winbond's Board of Directors on January 1, 2019. Therefore, the current number of board members is 10.

The academic and professional experience, concurrent positions in other companies and professional education and training of the board members can be found in the Company's 2018 Annual Report.

The Company established a Board of Directors performance assessment system in 2011 to measure the works of directors guiding the Company's strategic directions and overseeing the Company's operations and management so as to help increase the long-term shareholder value.



Election of Directors

Winbond's Board of Directors has adopted a candidate nomination system for director election since 2014. Nomination is based on considerations regarding the scale of the Company's growth, distribution of major shareholders, and membership diversity (e.g., professional backgrounds, gender and expertise). The independence of independent director candidates shall also meet the requirements of the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies. The Company set up an audit committee in 2017 in place of supervisors in accordance with Article 14-4 of the Securities and Exchange Act, and the Audit Committee is responsible of enforcing the functions prescribed in the Company Act, Securities and Exchange Act, other laws and the Articles of Incorporation. According to the first clause of Article 192 of the Company Act, shareholders holding more than 1% of the total shares issued by the Company may be nominated in written form as a director and independent director candidate. The list of the candidates may be publicized upon the approval of the Board of Directors. Election will be subsequently conducted at a shareholder meeting. The 11th-term directors and independent directors of the Company were elected through the nomination process and the election.

The Company's board members perform self-assessment of the overall board operation in December every year with respect to participation in company operations, enhancing the quality of board decisions, composition and structure of the Board of Directors, appointment/election of directors and continuing education, and internal controls in accordance with the Rules for Remuneration and Performance Evaluation of Directors. Members of the board also conduct self-assessment of their familiarity with Company goals and missions, knowledge of director's responsibilities, personal participation in company operations, internal relationship management and communications, professional know-how and continuing education, and internal controls. The staff in charge of board meeting affairs will compile the self-assessment results and submit the results to the Remuneration Committee and the Board of Directors, and based on which, draw up the Board of Directors performance enhancement plan. The 2018 overall evaluation results show that the board's participation in company operations, composition of the board and continuing education of directors received respectively a score of 0.97, 0.8 and 0.96 (out of full score of 1 whereas board performance in other areas received a score of 1), which is relatively low. Thus, based on the evaluation results, the Company will provide members of the Board more comprehensive definitions and supplementary information and continue to improve the internal control procedures. Related evaluation results will also be taken into consideration in the composition of the next term Board of Directors. The 2018 evaluation results have been submitted to the Remuneration Committee and the Board of Directors on March 25, 2019.

Avoidance of Conflict of Interests

Since 2014, the Company has set up independent directors. Independent directors may, from an objective and impartial standpoint, make recommendations based on their expertise and experience. The principle of avoidance of conflict of interests should be observed to protect the interests of the Company. The Company regularly updates the names of its associates and includes them into transaction review processes to avoid conflicts of interests.

In addition to the rules of procedure for the Board of Directors, directors must disclose to the Board of Directors, if they themselves, or the juristic person they represent (including the director's spouse, a kinship within the second degree or an enterprise that is in the subordinate relationship with the director), have a conflict of interests with respect to any agenda item, the material contents of the personal interest. Where the director's personal interest is possible to cause damage to the interest of the Company, the interested director shall not participate in any discussion or vote on that agenda item and shall not act as another director's proxy to exercise voting rights on that matter. The code of conduct for directors should be observed for this matter.



Directors recused themselves from discussion or voting on an agenda item in which they have an interest :

Name of Director	Agenda item	Reason for recusal	Voting on the agenda item	Notes
Francis Tsai Jerry Hsu San-Cheng Chang Wei-Hsin Ma Sophi Pan	Remove non-compete clause for directors	The director has an interest in the matter.	Did not participate in voting	6 th meeting of 11 th -term Board
Jerry Hsu	Remove non-compete clause for independent directors	The director has an interest in the matter.	Did not participate in voting	7 th meeting of 11 th -term Board
Arthur Yu-Cheng Chiao Yuan-Mow Su	Performance bonus for Q3 and Q4 2017 and retention of performance bonus for 2017	The director has an interest in the matter.	Did not participate in voting	7 th meeting of 11 th -term Board
Arthur Yu-Cheng Chiao Yuan-Mow Su	2017 employee bonuses for individual managers	The director has an interest in the matter.	Did not participate in voting	7 th meeting of 11 th -term Board
Arthur Yu-Cheng Chiao Yuan-Mow Su	2018 pay and compensation for individual managers	The director has an interest in the matter.	Did not participate in voting	7 th meeting of 11 th -term Board
Arthur Yu-Cheng Chiao Yuan-Mow Su	2018 Q1 and Q2 performance bonus for managers	The director has an interest in the matter.	Did not participate in voting	10 th meeting of 11 th -term Board

2.1.2 Remuneration Committee

Winbond established the Remuneration Committee Charter according to the Regulations Governing the Appointment and Exercise of Powers by the Remuneration Committee of a Company Whose Stock is listed on the Stock Exchange or Traded Over the Counter. The Remuneration Committee was established in 2011 to be responsible for formulating and reviewing policies, systems, criterion, and structure of remuneration and performance assessment of directors and managers of the Company. The committee draws up the Regulations on Managers Remuneration and Performance Appraisal to ensure that the performance of the managers is tightly aligned with the Company's strategies (Economic, Environmental and Social), and that the managers are rewarded with a competitive overall pay package to enhance the operating performance.

Winbond's Remuneration Committee consists of all the independent directors and does not engage remuneration consultants to assist in matters related to the remuneration policy. The Committee should convene at least twice a year, submitting proposals to the Board for deliberation, and regularly adjust the remuneration and benefit standards according to market condition and the needs of the employees. Please refer to our 2018 Annual Report for the number of meetings and attendance of Remuneration Committee meetings.

2.1.3 The Audit Committee

The Audit Committee is composed of all the independent directors. Winbond underwent election of 11th-term directors in the general shareholders' meeting held on June 13, 2017 and set up an audit committee to replace the functions of supervisors. The main purpose of the auditing committee's operation is to supervise the following matters.

1. The acceptable expression of the Company's financial statements.
2. The selection (removal), independence and performance of the Certified Public Account (CPA).
3. The effective implementation of the Company's internal control.
4. The compliance with relevant laws and regulations by the Company.
5. The control of the Company's existing or potential risks.



Annual report

Please refer to our 2018 Annual Report for the number of meetings and attendance of Audit Committee meetings.

2.2 Operational Performance

Winbond has delegated spokesperson, deputy spokesperson, and investor relationship and stock service departments to ensure availability of operational information to our investors and shareholders. The revenue report is disclosed before the 10th of every month, and video recordings and presentation documents of the semiannual investor's conferences are also publicized on our Website. Furthermore, the shareholders may make proposals to the company in written forms at the annual shareholders' meeting. We strive to increase transparency of our finance and operations to inform our investors of better investment decisions based on open information. The company applied for the application of investment tax credits to corporation participating in research and development in 2018 and has not obtained government approval yet.

Winbond's consolidated revenues amounted to NT\$51.19 billion in 2018, an 8 % increase compared to 2017. The consolidated net profit after tax was NT\$7.728 billion, with a NT\$1.87 earnings per share, which was a NT\$0.33 increase over the previous year. Furthermore, the annual income tax paid was NT\$285 million and the cash dividends distributed reached NT\$ 3.98 billion. Please refer to our Annual Report for details of the consolidated revenues of Winbond and its subsidiaries.

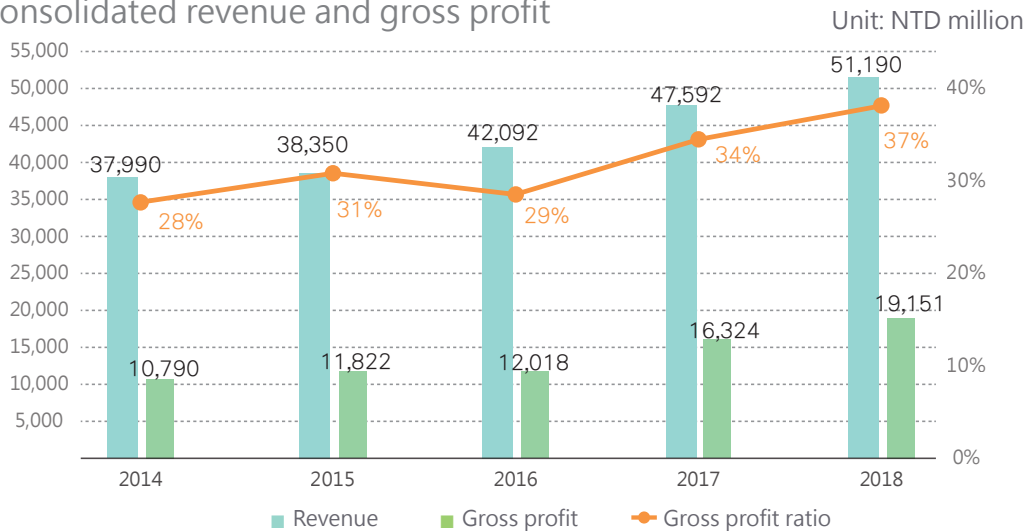
Unit: NTD million

Item/Year	2014	2015	2016	2017	2018
Revenue	37,990	38,350	42,092	47,592	51,190
Gross profit	10,790	11,822	12,018	16,324	19,151
Operation gain (loss)	3,658	4,109	3,713	6,656	7,927
Non-operating income and expenses	283	139	42	442	468
Net profit (loss) before tax	3,941	4,248	3,755	7,098	8,395
Deduction: Income tax expense	730	775	615	1,275	667
Net profit (loss) of the term	3,211	3,473	3,140	5,823	7,728

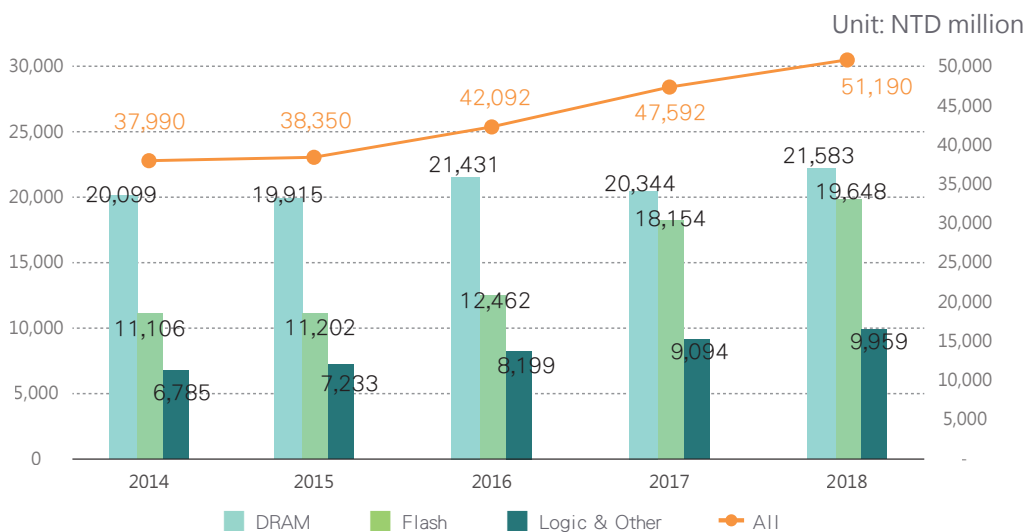
Item/Year	2014	2015	2016	2017	2018
Other comprehensive income of the term	294	(1,754)	2,485	3,750	(1,738)
Total comprehensive income	3,505	1,718	5,625	9,573	5,989
Earnings (loss) per share (NT dollar)	0.83	0.90	0.81	1.54	1.87
Short-term employee benefits	5,591	6,072	6,751	8,122	8,947
Retirement benefits	281	302	368	396	422
Other long-term employee benefits	46	47	-	-	-
Employee benefits	5,918	6,421	7,119	8,518	9,369

Note: The scope of consolidated financial data is the same as that disclosed in the Annual Report, including Nuvoton Technology Group and other subsidiaries, and the entities included in the consolidated financial statement are all included in the financial information.

▼ Consolidated revenue and gross profit



▼ Trend of consolidated net sales during the past five year (2014~2018)



Winbond's Expansion Plan

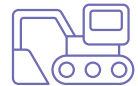
Winbond Electronics Corporation is an important global supplier of Specialty DRAM. In recent years, with the popularity of new applications of cloud computing, big data, artificial intelligence and industry 4.0, the supply has been tight in the face of the surging demands for memory products.

The new Fab, is expected to fulfill the market demand and the commitment to customers. The Company expects to complete the fab construction in 2020 with volume production in 2021. The production capacity will be gradually expanded along with customer demands. The Kaohsiung Fab is located at Kaohsiung Science Park of Southern Taiwan Science Park (STSP) Luchu Base, with an area of 25 hectares. The highest level of smart automation designs, self-developed technologies and flexible production advantages will be implemented in the Kaohsiung Fab so that we will be able to meet the needs of Tier-1 customers and bring growth momentum to our future revenue. As the second 12-inch fab of Winbond, the Kaohsiung Fab will be a key milestone for the Company's development in memory market.

After the completion of construction, it is expected to create nearly a thousand of jobs locally when formal production starts.



2.3 Integrity Management



Winbond complies with the Company Act, Securities and Exchange Act, Business Entity Account Act, Political Donation Act, Anti-Corruption Statute, Government Procurement Act, Act on Recusal of Public Servants Due to Conflicts of Interest, TWSE/GTSM listing rules, or other laws or regulations regarding commercial activities as the underlying basic premise to facilitate ethical corporate management.

Legal Compliance

To improve the organizational structure and the operational management and to fulfill the Corporate Social Responsibility to set an excellent corporate reputation and image, Winbond performs a quarterly review on newly added or revised laws and regulations to check for applicability and compliance and keeps records of the results. At the same time, based on these results, the internal job specifications or procedures are formulated or amended.

Time of legislative notice	Review of laws and regulations related to labor and ethical integrity	Review of laws and regulations related to occupational safety and health, environmental protection, and fire protection
	Review result	Review result
2018 Q1	Review completed in May, 2018	Review completed in April, 2018
2018 Q2	Review completed in August, 2018	Review completed in July, 2018

Time of legislative notice	Review of laws and regulations related to labor and ethical integrity	Review of laws and regulations related to occupational safety and health, environmental protection, and fire protection
	Review result	Review result
2018 Q3	Review completed in November, 2018	Review completed in October, 2018
2018 Q4	Review completed in February, 2019	Review completed in January, 2019

Winbond received 6 inspections on occupational safety and health, 16 inspections on environmental protection, and 3 inspections on fire control by various governmental agencies and passed the Validated Assessment Process of the Responsible Business Alliance (RBA VAP) in 2018. None of these inspections found any violations of laws and regulations related to domestic labor, occupational safety and health, environmental protection, and fire control. On the part of labor and integrity, Winbond has established a sound human resources management system and implemented related operations. The marketing promotion of the company is based on the codes of conduct in the pursuit of honest and fair industry competition and is in compliance with relevant laws and antitrust code of conduct, which has earned Winbond a reputation of trustworthy and respectable company. The competent authority carried out two labor inspection in 2018, and there was no violation of the provisions of domestic labor laws.

Winbond has no major violations in the following fields in 2018:

Anti-competition and antitrust law	✓ No violations	Product and service safety regulations	✓ No violations
Product labeling regulations	✓ No violations	Marketing communication regulations	✓ No violations
Political donation	✓ No violations	Anti-corruption	✓ No violations
Customer privacy	✓ No violations	Child labor	✓ No violations
Forced labor (including suppliers audit)	✓ No violations	Discrimination	✓ No violations
Infringement of the rights of indigenous people	✓ No violations	Relevant environmental regulations	✓ No violations
Severe leakage	✓ No violations	Various economic and social regulations	✓ No violations
Infringement of others' patent or intellectual property rights	✓ No violations	Customer privacy	✓ No violations

Note: The case is regarded as a severe event when more than NTD 1 million is involved.

Anti-corruption

In the aspect of business ethics, Winbond has set Integrity Management as one of the five major corporate cultures and established Code of Integrity, prescribing the investigation procedures for violations and providing proper complaint channels and confidentiality measures to ensure the employees of smooth channels to report corruption cases and eliminate illegal acts such as accepting bribes and kickbacks.

Winbond is committed to abiding by labor regulations and Code of Conduct of Responsible Business Alliance (RBA). Every year, the propagation course of ethical conducts for practitioners are provided to all employees to strengthen code of ethics and awareness of anti-corruption, with the training rate reaching 100%.



2.4 Risk Management

As a semiconductor manufacturing company, Winbond is deeply conscious of the potential impacts that natural disasters, contingencies, and man-made accidents may bring to the production and operation, financial management, and information security. Consequently, we handle hazard and risk management with a positive attitude. Through rigorous management on risk-prone engineer projects, and practical management on safety standards and benchmark, Winbond pursues the highest standards of semiconductor industry security, financial security, and information security.

2.4.1 Operational Risk Management

Semiconductor factories are characterized by costly plants and equipment, long setup time, high precision and sensitivity machinery, high cleanliness production environment with stable temperature and humidity, and the need for sustained and stable hydro-power supply and other resources. However, exposure to flammable and corrosive chemicals in semiconductor manufacturing process is inevitable. In addition, Taiwan is located in the seismic zone and typhoon-prone zone. To further complicate the situation, the global climate change is taking a toll on the stability of power and water supply in Taiwan. In the face of these environmental challenges, how to cope with internal and external risks to ensure the continuity of operations becomes a challenge that must be carefully addressed.

In response to the risks of operational interruption, Winbond has developed the following countermeasures :

 Potential risks	 Preemptive measures and loss control
Internal Environment <ul style="list-style-type: none">• Fire, explosion• Leakage of chemicals contaminates plants or equipment• Leakage causes equipment damage• Critical equipment failure	<ul style="list-style-type: none">• Design and establish fire protection system according to international standards (NFPA, FM) and domestic firefighting laws, including fire alarm system, automated fire extinguishing system, and fire protection zoning.• Design and construct plant facilities following international industrial standards.• Purchase machines that meet international standards (SEMI-S2, FM4910)• Always have backup devices for major equipment• Establish appropriate inventory of spare parts• Establish appropriate inventory for the products• Make regular maintenance plans• Safety management / control mechanisms• Regular inspection mechanism• Emergency Response Plan• Business Continuity Planning

Potential risks		Preemptive measures and loss control
External Environment	<ul style="list-style-type: none"> • Earthquake • Typhoon or rainstorm • Unstable power supply or outage • Water shortage • Interruption of gas supply (gas utilities such as natural gas and nitrogen) • Raw materials in short supply • Legislative changes (e.g., domestic environmental protection law, international regulation on restricted use of substance) • Major infectious diseases 	<ul style="list-style-type: none"> • Grade 7 Aseismic design for plants and equipment (equivalent to MMI 9) • The plant is located 160 meters above sea level • Dual power supply feeders • Emergency generator and uninterruptible power system (DUPS, UPS) • Spare pool • Spare liquid gas tank • Spare liquid nitrogen reservoir • Maintain two or more suppliers • Regularly collect market information of the supply condition of raw materials • Maintain reasonable stock of raw materials • Legal check, responsive mechanism and management system • Monitoring and early warning of major infectious diseases and contingency plans • Emergency Response Plan • Business Continuity Plan

Rated as highly protected risk (HPR), Winbond was awarded the Best of Class Award by FM Global, and was the first Asian semiconductor manufacturer to receive this honor. FM Global is one of the world's most recognized international insurance companies with rigorous standards for disaster risk management. Winbond won this award for its excellence in all items relating to human element control and physical protection.

In addition, to reduce the impact of accidents on the Company's operation and finance, Winbond has purchased a wide range of insurances covering Property Damage Insurance, Business Interruption Insurance, Transportation Insurance, Engineering Insurance, Product Liability Insurance and Public Liability Insurance to minimize potential losses caused by natural or man-made disasters so as to protect the interests of stakeholders. Throughout 2018, Winbond did not suffer from any property loss or business interruption due to natural or man-made disasters.

2.4.2 Financial Risk Management



Interest rate

- ✦ The Company's interest rate risk is associated mainly with long-term floating rate loans borrowed to meet the operational needs of process upgrade or capacity expansion. At the time of financing, the Company negotiated better rates based on the market conditions to reduce the impact brought about by interest rate fluctuation. The Company pays a fixed rate on the corporate bonds issued, which will not affect cash flows during interest rate fluctuation.
- ✦ The consolidated interest expense in 2018 amounted to NT\$88,466 thousand, accounting for 0.17% of 2018 consolidated revenue and 1.05% of 2018 consolidated net income before tax. Rate changes are not expected to produce much impact on Company operations. In the future, the Company will watch closely of interest rate movement and the impact on cash flows.





Exchange rate

The Company's exchange gain (loss) arises mainly from the foreign currency positions associated with its import/export business. We will continue to adopt the following response actions for exchange rate risk.

- ✦ The Company keeps abreast of financial market information, predicts market trends, gets familiar with financial products and related regulations and trading techniques, and provides full and timely information to the management and relevant departments for reference.
- ✦ Engage in financial derivatives transactions for the main purpose of hedging exchange rate risks, and choose financial derivative products to primarily hedge the risks associated with the Company's business operations. In the selection of trading counterparty, give primary consideration to credit risk to avoid loss arising from counterparty's failure to perform its contractual obligation. In addition, financial institutions with low credit risk and good relationship with the Company; and having the capability to provide the Company with professional information will be chosen as trading counterparties.
- ✦ The Company sets the limit of unrealized loss on all financial derivatives contracts to 20% of the contract values or 3% of stockholders' equity, whichever is lower. The financial department evaluates the Company's position on financial derivatives every month and produces a report therefor, which is submitted to the head of finance and senior management authorized by the Board of Directors for review in the hope to predict the risk of each and every transaction and potential loss.

2.4.3 Information Security Risk Management

Winbond has established the "Information Security Policy" and the "Instructions for Technology and Classified Information Management" to protect classified information of the Company, including business secrets and intellectual properties to make sure customer privacy is safeguarded. In November 2015, Winbond's TrustME™ Secure Flash Memory products and the related operating environment passed the Common Criteria EAL 5+ certification. It means Winbond's controls over the information security of products meet the requirements of Common Criteria, and Winbond manufactures trusted secure products that meet international standards and protect customer information and assets. Common Criteria certification for TrustME™ consists of the following phases: design & development, production, and delivery. In 2018, the review audit was completed, and relevant operating procedures and environment were in line with Common Criteria EAL 5+ requirements.

In accordance with the implementation procedures of the Information Security Policy, representatives from relevant departments form an information security organization responsible for the deliberation, establishment, promotion and auditing of the control operations of information security of the company. Regular meetings are held to discuss and resolve issues related to information security, covering the aspects of human resources, physical security, information and logical security. When major changes or incidents concerning information security occur, temporary meetings will be held.

Through the education and training and internal notices and announcements every year, we continue to conduct information security related advocacy and communication with our employees to implement our information security policy. In 2018, all our employees have received Cognition Course of Information Security and Advocacy of Personal Information Protection Act and passed the assessment. In addition, the Information Engineering Department also conducts a drill for data protection every six months by switching to the backup system and conducting access testing. The most recent drill was conducted in September 2018.

Moreover, for the security needs, access control and monitoring, access management of the information system as well as the access records should be kept and reviewed to strengthen the safety of important product information and to avoid improper access to or falsification of Company information, preventing theft or leakage of business secrets and intellectual property.



3. Innovative Winbond- R&D and Growth

3.1 Main Products and Patents

3.2 Product Application

3.3 Green Products

3.4 Customer Privacy and Satisfaction

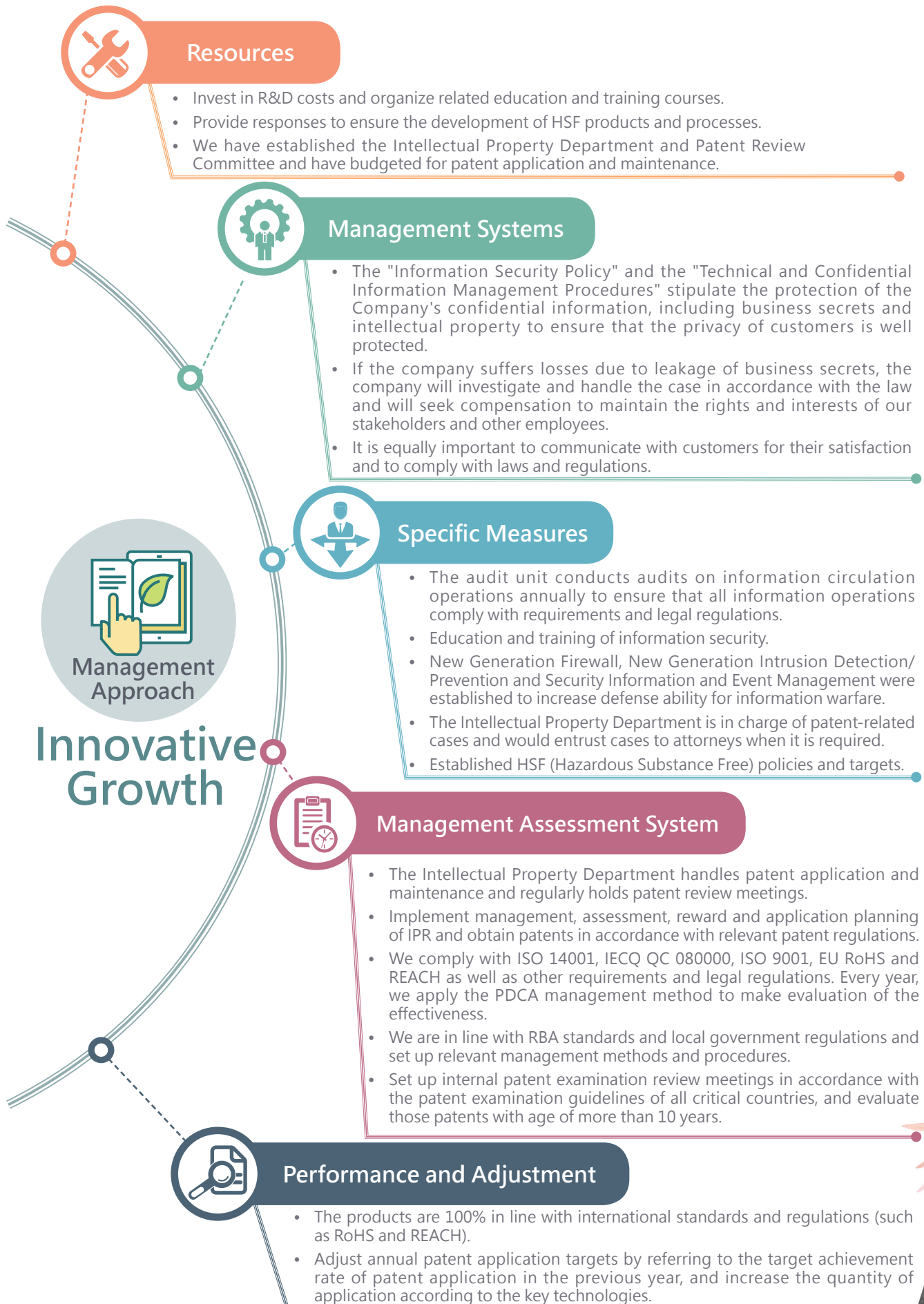
3.5 Certificate in International Systems

- ▶ In 2018, our products are **100%** in line with international standards and regulations (such as RoHS and REACH).
- ▶ We **applied for 436** Invention Patents in 2018, and **381** applications were approved.
- ▶ The 2018 customer satisfaction survey consists of five key indicators. The items and satisfaction results include Sales & order (90%), Product & Technology support (88%), Quality (91%), Other services (87%), Overall (87%) respectively, with an average satisfaction of **more than 89%**.
- ▶ Up to 99.9% raw material was purchased locally in 2018, an **increase of 0.6%** compared with the previous year.

- 
- The background of the slide is a teal gradient. It features several glowing, translucent spheres of varying sizes, some of which are connected by thin, light-colored lines, creating a network-like or molecular structure. The spheres have a warm, golden-yellow glow from within.
- ▶ **No** customer privacy violation incidents or loss of customer information were reported in 2018.
 - ▶ In 2018, **100%** of our new suppliers passed the quality system questionnaire and completed the signing of Letter of Undertaking of Integrity
 - ▶ In 2018, Winbond conducted 35 supplier audits in CSR, Responsible Business Alliance (RBA), conflict minerals, RoHS, Reach and QC080000, and the results showed that **100%** of the suppliers were in line with the requirements of the Company.
 - ▶ The Company carried out conflict mineral investigation of 20 suppliers (including subcontractors), and **100%** of the suppliers were in line with relevant regulations.

Winbond will continue to provide customer-oriented services and concentrate our resources on the markets in which we have competitive advantages. At the same time, riding on the strength of our advanced semiconductor design and manufacturing know-how, coupled with the innovation and wisdom of our employees, implements its corporate values in all operational activities, Winbond will strive towards the goal of becoming a world-class solution provider.





3.1 Main Products and Patents

Winbond's major product lines include Code Storage Flash Memory, Specialty DRAM and Mobile DRAM.

✦ Code Storage Flash Memory

In the area of Code Storage Flash Memory products, we focus on the "low to medium density" market by offering a full spectrum of Serial Flash products and offer features such as low pin count, small size and low cost. We also offer Serial NAND Flash and SLC NAND Flash Memory products to better meet the customer demands for code storage. With considerable market share in computer peripheral markets, we also actively develop a diversity of flash memory products for applications in mobile devices, consumer electronics, automotive electronics, IoT and wearable devices. In addition, Winbond introduced the TrustME™ Secure Flash Memory which obtained Common Criteria EAL 5+ certification as the pioneer in industry for applications that improve system security.



✦ Specialty DRAM

✦ Mobile DRAM

Winbond specializes in the design of high performance and low power memory. With a 12-inch fab, we offer a whole series of Specialty DRAM and Mobile DRAM products that target a top-tier clientele and quality-oriented applications. Winbond's products are used extensively in handheld devices, consumer electronics and computer peripherals. We also focus on high-barrier, high-quality applications, such as KGD, automobile and industrial electronics.





Patent Management

To implement the management and application planning of intellectual property rights (IPR), the Company encourages the employees to create inventions and apply for patent to protect the IPR and R&D results. Internally, relevant measures (such as patent application and rewards) and the unit(s) in charge (such as Intellectual Property Department and Patent Committee) are established to implement the management, assessment, reward and application planning of the IPR. After the internal patent assessment and the strict review mechanism of the external competent units in accordance with the patent laws and review requirements of patent offices in the world, the Company can obtain effective patent issued by different countries.

The R&D units of the Company have the annual targets for inventions. In addition, there are also several meetings on innovation and brainstorming every year to actively tap the idea of inventions for facilitating patent output. For the cumulative amount of patents, they will be regularly categorized into different grades based on the Company's assessment criteria for the utilization of patents according to the needs (such as interactive authorization, assignment, and termination of maintenance). From 2013 to 2018, education and training on the technology development of cutting-edge products of DRAM/FLASH and training on IPR related topics were held to establish IPR protection concepts for our employees, to stimulate their ideas of invention and to assist in the production of proposals for inventions, and the number of proposals significantly increased year by year.



Year	Number of Patents
2014	We applied for 356 inventions and were granted 105 patents.
2015	We applied for 306 inventions and were granted 209 patents.
2016	We applied for 354 inventions and were granted 318 patents.
2017	We applied for 429 inventions and were granted 306 patents.
2018	We applied for 436 inventions and were granted 381 patents.

3.2 Product Application

Winbond's products are applied in more diverse and comprehensive application domains in addition to the widely known areas such as computing, network communication, and consumer electronics. Based on the experiences accumulated in the three major existing areas, we are able to provide our customers with faster solutions. There was no violation of relevant product regulations leading to the prohibition of the sale of products in 2018.

3.2.1 Automotive

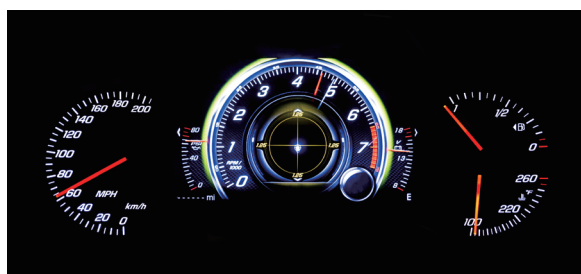
✎ Advanced Driver Assistance Systems (ADAS)

Advancement in automotive electronics, stringent government regulations to reduce road fatalities, and development of low-cost driver assistance solutions are making road safety a priority for a better quality of life for everyone. For advancements in autonomous driving in the automotive industry, adaptive cruise control (ACC), blind spot detection (BSD), night vision (NV) and driver drowsiness detection (DDD) are some of the features being incorporated. Multiple video cameras dispersed throughout the vehicle, each utilizing high quality Winbond memories, are connected to the ADAS console to provide a safer journey for the drivers.



✎ Instrument Clusters

Digital displays have been added to automotive dashboards showing digital graphic instruments including speedometer, gas & temperature gauges and other indicators, as well as heads-up display. These cluster of instruments ensure that the driver is comprehensively and reliably informed at all times. These displays need to be instant on and render 2D/3D images. This high speed requirement can only be achieved with the help of memories including Winbond's Flash and DRAMs.



✎ Infotainment

The center console of an automobile is being conveniently used for the display of in-vehicle information and entertainment including automotive navigation systems, video players, USB and Bluetooth connectivity, Computer, in-car internet, and WiFi. Infotainment systems also include steering wheel audio controls and hands-free voice control which helps resolve safety concerns related to distracted driving. Taking advantage of Winbond's long history in the consumer market, the benefits of memories are brought to bear on the automotive infotainment market with the help of very small packaged parts for space constrained applications and higher density DRAMs and Flash memories for advanced applications.



3.2.2 Industrial

Industrial applications typically require high reliability, wide temperature coverage, and longevity of products used in these applications. There are many applications including Aerospace, medical, safety equipment, health & fitness, industrial controls, instrumentation, security, transportation, telecommunications, PoS machines, Human Machine Interface, Programmable Logic Controller, Smart Meter, and Industrial networking to name a few. Winbond memories – Serial NOR Flash, NAND Flash, Embedded and low-power DRAMs are commonly used in all these applications.

To explain a few examples, the part of the machine that handles the Human-machine interaction is called the Human-machine interface such as touch screen. A Programmable Logic Controller is a digital computer used for automation of electromechanical processes such as control of machinery on factory assembly lines, and amusement rides. A smart meter is usually an electronic device that records consumption of electric energy at regular intervals and communicates that information to the utility company for monitoring and billing purposes. Network Switch, HUB, and Wireless access point are network devices delivering stable communication in industries and residences. Point of Sales equipment are like cash registers at which a customer makes a payment to the merchant in exchange for goods or services.



✎ Point of Sale



✎ Smart Meter



✎ programmable logic controller



✎ HMI



✎ Industrial Networking



3.2.3 Communication

Winbond's high-quality and cost-effective DRAMs, Code Storage Flash ranging from low to high density are being used on communication and networking devices such as Set Top Box (STB), Switches, Routers, Passive Optical Networks, xDSL, Wireless Access Point, Cable Modem, Power Line Communications M2M(Machine to Machine), Mobile phones, Base Stations, DECT phones, and many other new communication products.



🔧 Mobile phone



🔧 Networks



🔧 Switches



🔧 Wireless Access Points



🔧 Set Top Box



3.2.4 Computer

The PC segment is a familiar territory for Code Storage Flash used in Desktops, laptops, servers, gaming laptops, ultrabooks, tablets, convertibles, HDD, and SSD. Standard and low power DRAMs are being used in embedded applications on servers and other computer solutions for high performance and low power requirements.



🖱️ Laptops



🖱️ Gaming



🖱️ Desktops



🖱️ Drives



🖱️ Ultrabooks



3.2.5 Consumer

Winbond offers tiny WLCSP, TSOP and SON packages that are very convenient to use in space constrained applications including Wearable, MP3 players, smart watches, games, digital radio, toys, cameras, digital photo album, GPS, Bluetooth and WiFi modules. Winbond's full range of low power and high-speed Flash and DRAMs are also used on Television, Display and home electronics. Low standby current and deep power down features are effective in extending battery life for small consumer devices, and Known Good Die for SiP solution are ideal to fit small form factor requirements.



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Wearable



GPS



MP3 Players



Digital Cameras



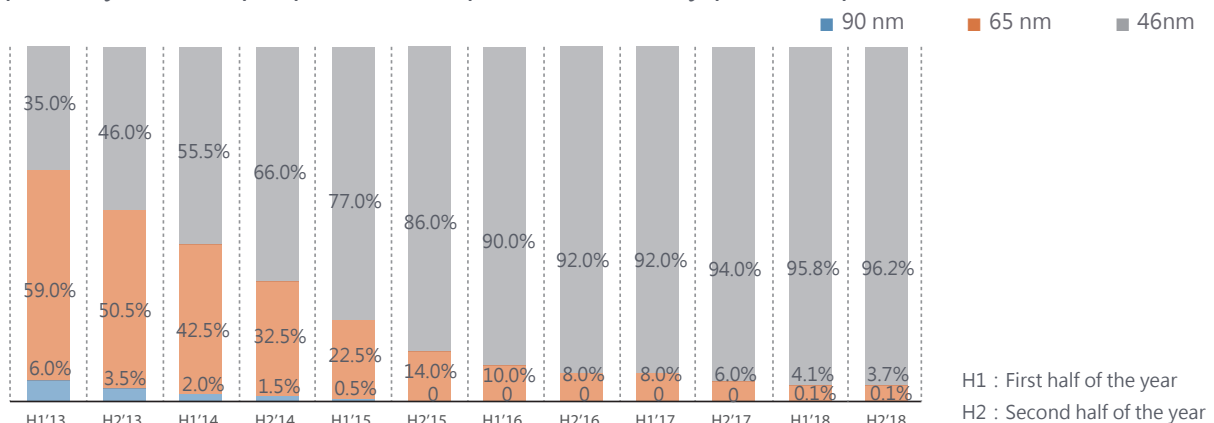
Bluetooth



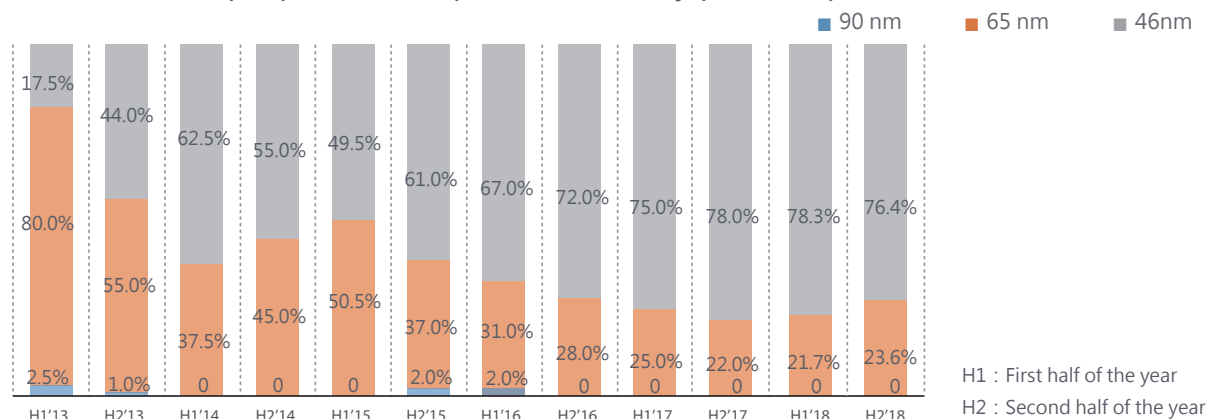
3.3 Green Products

Winbond constantly pursues competitive edge through innovation in product and technology development. Investments continued in 2018 and was aimed at expanding production capacity and upgrading the manufacturing process, so as to provide our customers with green products of lower energy-consumption and lower impacts to the environment, and to improve the sustainable competitiveness of our supply chain. The sales of Specialty DRAM 46 nm manufacturing process in 2018 accounted for 96%, which of Mobile DRAM accounted for 77% and the sales of Code Storage Flash Memory 46 nm manufacturing process in 2018 accounted for 28%. We do not recycle the products that have been sold and packaging materials of those products.

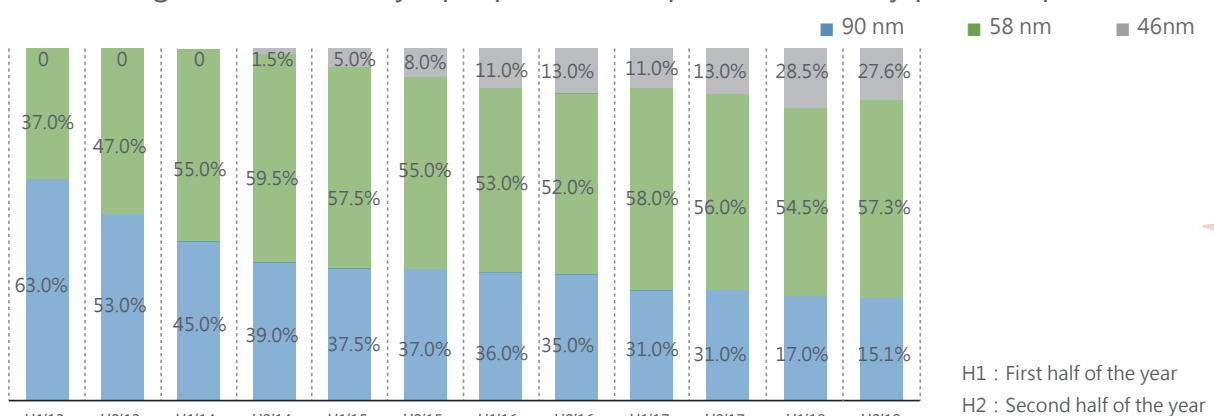
▼ Specialty DRAM-proportions of performance by product processes



▼ Mobile DRAM - proportions of performance by product processes



▼ Code Storage Flash Memory - proportions of performance by product processes



Low power Products

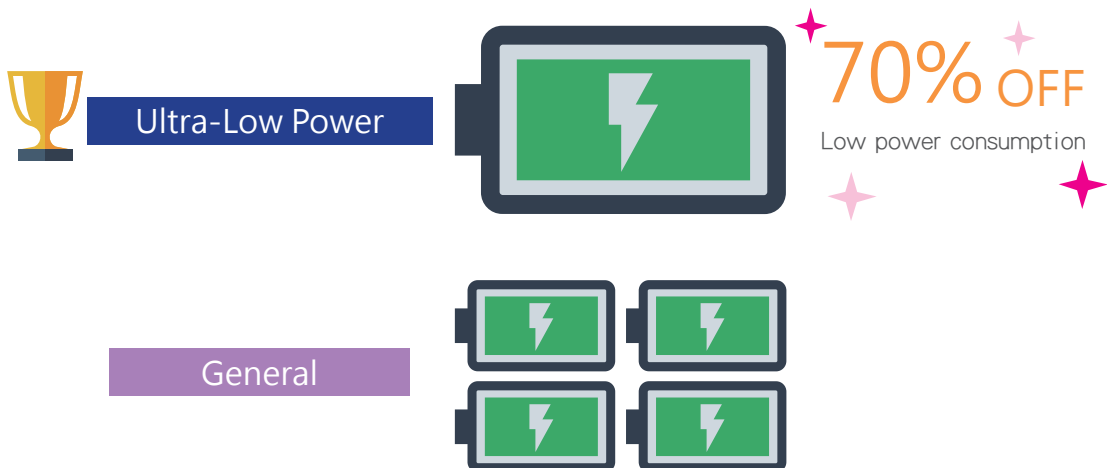
Winbond Electronics Corporation is a leading supplier of semiconductor solutions to the consumer, computer, communications, and electronics product markets. In order to expand the market, the Mobile DRAM product line was set up. The products including PSRAM, LPDDR, LPDDR2, LPDDR3 and LPDDR4(X). Winbond specially designed products combining HyperRAM SDRAM and LPDDR SDRAM and at the same time supporting both x16 and x32 data widths so that customers can make a more convenient choice. Major features for the families of products include the following: Sequential or Interleave burst, High Clock rate, Standard Self Refresh, Partial-Array Self Refresh (PASR), Automatic Temperature Compensated Self Refresh Rate (ATCSR), and Deep Power-Down (DPD).

Moreover, Winbond is committed to the development of advanced process and special niche products with unique power-saving features. Also, Winbond has developed power-efficient Ultra-Low Power (ULP) product, which provides low standby power consumption to save power, and was chosen to supply 5G/ LTE mobile communications and was even extended to mobile consumer electronics. It is quite ideal for portable multimedia players, wearable/mobile devices, automotive electronics applications, consumer electronics and gaming devices. For the 25-nm and 38-nm products, the originated feature of Deep Self-refresh (DSR) and the upcoming Hybrid Sleep Mode allow the chip standby current to be reduced by more than 70% compared to the normal standby mode. Winbond believes that the continued development of power-saving technology can reduce the amount of electricity and battery usage, creating a more environmentally friendly products for our customers and for the earth. Among which, ULP products can enable elaborate application of IoT or wearable devices, serving as a perfect solution for low power products and Winbond's commitment to the sustainable development of the earth.

Winbond Innovative Low Power DRAM

Our Ultra-Low 256Mb LPDDR1 is to optimize your IoT & Wearable application.

The special features DSR(Deep Self Refresh) and Hybrid mode can last device battery life longer than you can image.



3.4 Customer Privacy and Satisfaction

Winbond exercises strict protection over customer information. All correspondence and business data with customers are under a strict internal oversight. Staff operation permission is granted based on predefined SOPs. Since 2013, all staff members must complete a training program for information security cognition. Throughout 2018, no complaint has been filed with regard to customer privacy infringement or customer data loss. No fines due to the violation of laws and regulations concerning product liability were imposed to Winbond.

EU's GDPR (General Data Protection Regulation) came into effect in May 2018. We have revised the company website and re-examined the online member information in accordance with requirements of GDPR and relevant adjustments were made to comply with GDPR regulations.

Winbond regularly conducts customer satisfaction surveys. The 2018 customer satisfaction survey consists of five key indicators. The items and satisfaction results include Sales & order (90%), Product & Technology support (88%), Quality (91%), Other services (87%) and Overall (87%) respectively, with an average satisfaction of more than 89%. To strengthen product competitiveness and to meet the needs of our customers worldwide, besides the headquarter in Taiwan, Winbond has established subsidiaries and service bases in the United States, Japan, Israel, Mainland China and Hong Kong. In addition to the sales centers established in the above areas, Winbond also actively develops distribution channels in other countries. So far, dealerships and technical service centers are built throughout Asia, Europe, and America.

3.5 Certificate in International Systems

Winbond implements rigorous process control and quality control, strengthening yield analysis and supply chain management to satisfy customer needs. The long-standing efforts in quality assurance have earned the Company a good reputation and resulted in the accreditation of ISO26262, ISO 9001, IATF 16949, QC 080000, ISO 14001 and OHSAS 18001 to ensure that requirements of international standards can be met in terms of economic, environmental and social aspects while meeting the high standards of customers.

Winbond actively obtained validation in terms of product quality, hazardous substance management, production environment management and corporate social responsibility to ensure that requirements of international standards can be met in economic, environmental and social aspects as well as the high standards of customers.



RBA Validation

The Responsible Business Alliance (RBA), formerly the Electronic Industry Citizenship Coalition (EICC), Code of Conduct established standards to ensure that working conditions in the electronics industry or industries in which electronics is a key component and its supply chains are safe, that workers are treated with respect and dignity, and that business operations are environmentally responsible and conducted ethically.

Considered as part of the electronics industry for purposes of this Code are all organizations that may design, market, manufacture, or provide goods and services that are used to produce electronic goods. The Code may be voluntarily adopted by any business in the electronics sector and subsequently applied by that business to its supply chain and subcontractors, including providers of contract labor.

A. LABOR	B. HEALTH and SAFETY	C. ENVIRONMENTAL
<ul style="list-style-type: none"> • Freely Chosen Employment • Young Workers • Working Hours • Wages and Benefits • Humane Treatment • Non-Discrimination • Freedom of Association 	<ul style="list-style-type: none"> • Occupational Safety • Emergency Preparedness • Occupational Injury and Illness • Industrial Hygiene • Physically Demanding Work • Machine Safeguarding • Sanitation, Food and Housing • Health and Safety Communication 	<ul style="list-style-type: none"> • Environmental Permits and Reporting • Pollution Prevention and Resource Reduction • Hazardous Substances • Solid Waste • Air Emissions • Materials Restrictions • Water Management • Energy Consumption and Greenhouse Gas Emissions
D. ETHICS	E. MANAGEMENT SYSTEMS	
<ul style="list-style-type: none"> • Business Integrity • No Improper Advantage • Disclosure of Information • Intellectual Property • Fair Business, Advertising and Competition • Protection of Identity and Non-Retaliation • Responsible Sourcing of Minerals • Privacy 	<ul style="list-style-type: none"> • Company Commitment • Management Accountability and Responsibility • Legal and Customer Requirements • Risk Assessment and Risk Management • Improvement Objectives • Training 	<ul style="list-style-type: none"> • Communication • Worker Feedback, Participation and Grievance • Audits and Assessments • Corrective Action Process • Documentation and Records • Supplier Responsibility

Winbond obtained the verification of gold level of the Version 6.0 of Responsible Business Alliance in October 2018. We have included regulations of Responsible Business Alliance Code of Conduct (RBA CoC) in the Corporate Social Responsibility Management Procedures for the employees to abide by, and we are committed to the aspects of labor rights, health and safety, environmental protection and ethics to jointly fulfill our responsibility as a corporate citizen and comply with the principle of good faith management.

ISO 26262 Certification of Road Vehicles Functional Safety

The increasing needs of Internet of Vehicles and advanced smart vehicle products have grabbed many attentions from international leading manufacturers in recent years, especially in automotive electronics industry. The reliability and safety are key indicators of product qualification for automotive electronic products. ISO 26262, the Functional Safety Standard which released in 2011, is a certification indicator to verify whether the automotive electronic suppliers meet the requirements of Automotive Safety Integrity Level (ASIL).

The company has long been dedicated to the development and offer high-quality products and services, and has been steadily moving toward the development in automotive in recent years. To upgrade the reliability and functional safety of Winbond's automotive products, we have entered the supply chain of global advanced vehicle safety system and started to implement SGS consulting and certifying services since 2018. We were granted the highest level functional safety standard for the automotive industry, ISO 26262 on February 21, 2019 by SGS, making Winbond the first vehicle memory manufacturer in Taiwan to be awarded the certification of ISO 26262: Road vehicles-functional safety. This also laid a solid foundation for Winbond to develop functional safety of our products and become a trusted partner for international automakers. We have not only obtained the competitive advantage of getting domestic and international orders, in the future, we can even obtain the ASIL certification for individual products and thereby expanding the automotive market and providing automotive to meet the needs of the international automotive supply chain.

Winbond has entered the supply chain of global advanced vehicle safety system and met the requirements of the highest level functional safety standard for the automotive industry, ISO 26262, whose contents includes management of functional safety, concept phase, system-level, hardware, and software designs and verifications, manufacturing, operation, maintenance, and decommissioning services for the entire product life cycle. All requirements have to be met to enter into the high-end automotive electronic market.



3.6 Sustainable Management of the Supply Chain

Social responsibility is the key to business sustainability. By cooperating with localized suppliers, job opportunities are also created for the local business, thus promoting the local socioeconomic development while reducing the energy required for transportation. As a result of Winbond's continued efforts to promote localized purchase, up to 99.9% raw material was purchased locally in 2018, an increase of 0.6% compared with the previous year.

▼ Supplier Status

Type of contract (based on the classification of the Company)	Purchasing area	2014		2015	
		No. of suppliers	Percentage of the purchase amount among total purchase (%)	No. of suppliers	Percentage of the purchase amount among total purchase (%)
Finance (raw materials)	Domestic	45	90.1%	44	96.3%
	Foreign	2	9.9%	1	3.7%
Total		47	100%	45	100%

Type of contract (based on the classification of the Company)	Purchasing area	2016		2017		2018	
		No. of suppliers	Percentage of the purchase amount among total purchase (%)	No. of suppliers	Percentage of the purchase amount among total purchase (%)	No. of suppliers	Percentage of the purchase amount among total purchase (%)
Finance (raw materials)	Domestic	48	96.8%	49	99.3%	53	99.9%
	Foreign	1	3.2%	1	0.7%	1	0.1%
Total		49	100%	50	100%	54	100%

Note: Domestic refers to Taiwan; foreign refers to areas outside Taiwan (such as China, the United States, and Vietnam).

3.6.1 Supplier Audit

Purchases in Winbond are broadly categorized into six types, including equipment, components, raw materials, plant utilities, automation, and backend subcontracting. The implementation of our social responsibility policies has extended from the Company itself to the supply chain. Winbond's supplier policies aim to establish a permanent cooperative partnership with our suppliers. In addition to requirements on quality, delivery dates, prices, and competence in the manufacturing procedure, we also require that our suppliers comply with corporate social responsibility related norms, such as green products, conflict minerals, and business integrity. We expect that common objectives and standards of corporate social responsibility can be shared among all our suppliers.

Based on the implementation of the concept of sustainable management, Winbond is committed to working with suppliers to enhance supply chain flexibility and establish a sound and stable supply chain relationship with suppliers, actively pursuing corporate social responsibility practices. In response to the global trend of social responsibility, we require our suppliers to act responsively with respect to issues such as conflict minerals, ethics and integrity in business operation.

Management of new suppliers at Winbond includes a quality system questionnaire, with the contents covering quality, delivery, service, technology and Responsible Business Alliance (RBA), and Winbond did not have new suppliers in 2018. Winbond promotes corporate social responsibility initiatives with all suppliers every year. We require our suppliers to sign a letter of commitment for business integrity, and 146 suppliers (100%) have signed the letter of commitment.



Winbond's Supplier Audits

Winbond regularly evaluates the qualifications of suppliers with respect to quality, delivery, service, technology, and price levels. Based on the results, suppliers are classified into several grades.

Winbond conducts annual audits of its suppliers and subcontractors in terms of CSR, RBA, conflict minerals, RoHS, REACH, and QC080000 related requirements. For suppliers scoring lower than the required score, Winbond will handle the situation in accordance with the supplier auditing practices. In 2018, all the supplier audit results met the requirements of the Company with 21 raw material suppliers and 14 subcontractors being audited.



Conflict Minerals

In compliance with the Responsible Business Alliance (RBA) Code of Conflict Mineral Guidelines, Winbond is committed not to purchasing or using any mines from conflict areas controlled by non-governmental military groups or illegal military factions in the Democratic Republic of the Congo, including gold (Au), tantalum (Ta), tungsten (W), and tin (Sn). All major suppliers have signed the Winbond Supplier Code of Conduct Commitment Letter, which is publicized on our public websites or promotional letters as an official announcement of Winbond's policy concerning the matter of conflict minerals. Winbond performs investigation of conflict metal suppliers through RBA CMRT, requiring suppliers to disclose the information of refineries for the materials concerned, and to ensure the accuracy of the suppliers' information. In the future, Winbond will continue to work with our suppliers to ensure full compliance with the Tier 1-certified Conflict-Free Smelter publicized by RBA.

The Company carried out a survey of 20 suppliers (including 14 raw material suppliers and 6 subcontractors) on conflict minerals, and all of the suppliers are in line with relevant provisions. There was no incident of the prohibition of sale of products in the Company.



3.6.2 Supplier Management

Subcontractors Meeting

Winbond regularly holds an annual meeting for suppliers, during which subcontractors are informed of Winbond's policies on quality and corporate social responsibility, and prizes are conferred to a selection of suppliers with good performance for their long-term support and cooperation. Through these activities, the cooperative relationship with the subcontractors are strengthened.



Management of Contractors

The Company has set forth relevant provisions for all contractors entering Winbond Plants for operations.

1. Contractors should join in Winbond Contractors Association and sign the "letter of commitment of ESH management and education & training."
2. Those who enter Winbond's Plants for operations are required to be insured by their employers, and the certificate of labor insurance shall be provided to Winbond for verification.
3. Those who enter Winbond's Plants for operations shall be informed of hazards of the plants and relevant records shall be kept. Before operation, all necessities of protective measures necessary should be taken as prescribed.
4. For high-risk operations in Winbond's plants, qualified ESH personnel is required to be present for on-site supervision and in charge of all safety and health management operations within the scope of contractor, implementing self-inspections and establishing ESH management plans for preventing occupational disasters.
5. Before the high-risk operations (such as electrical power system work, construction frame use, scaffolding, confined space work, crane lifting, hot work, special gases/chemicals pipeline removal...etc.), the self-inspection must be completed and an application be submitted. In addition, for special risk operations, the work safety protection plan must be submitted to Winbond for review.

Security Training and Education

1. The security company prepares the annual training courses and regularly implements education and training (including training on human rights).

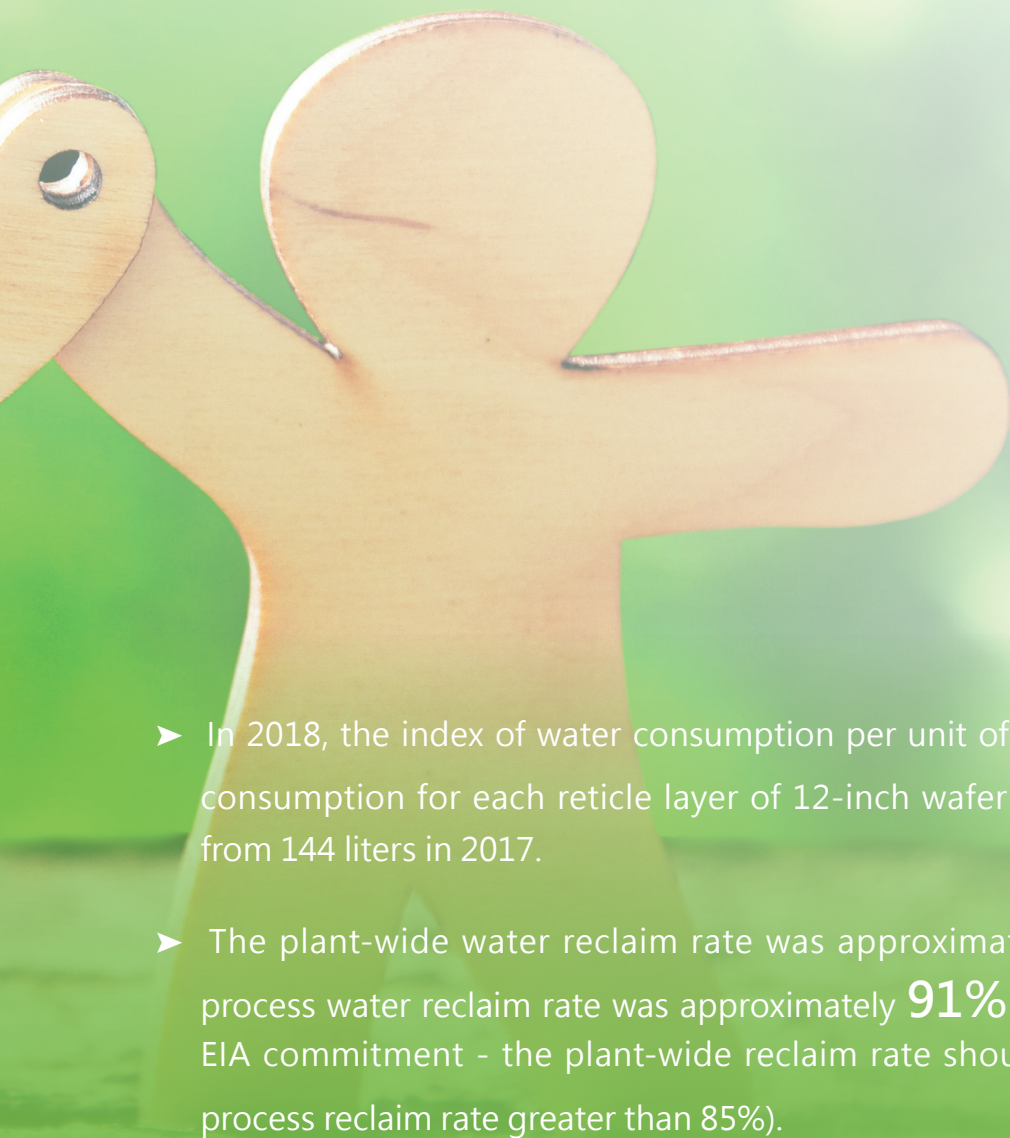
Factory	Number of securities	Training hours of human rights related courses	Course title
CTSP Site	15	0.5H	Propaganda training such as workplace bullying, abuse and harassment
Jhubei Office	12		

2. The security company passed our RBA audit in 2018, and the audit items included the scope of human rights, health and safety, with 10 items in total.

4. Green Winbond- Safeguarding the Environment

- 4.1 Reduction through Process Control
- 4.2 Energy and Resources Management
- 4.3 Greenhouse Gas Inventory
- 4.4 Pollution Control
- 4.5 Expenditure on Environmental Protection

- ▶ The waste recycling rate was **92%** in 2018.
- ▶ There was **zero** violation of environmental regulations in 2018.
- ▶ The energy consumption per unit of product in 2018 was 89.8MJ, compared with the 93.1MJ in 2017, the energy efficiency increased by **3.5%**.
- ▶ Winbond implemented 21 new energy-saving measures during 2018, and continued 5 energy-saving measures from 2017, which ended up saving additional **31,213 BJ** of electricity.



- ▶ In 2018, the index of water consumption per unit of product – the average water consumption for each reticle layer of 12-inch wafer is 139 liters, a **decrease** from 144 liters in 2017.
- ▶ The plant-wide water reclaim rate was approximately **82%** in 2018, and the process water reclaim rate was approximately **91%** (in line with the Science Park EIA commitment - the plant-wide reclaim rate should be greater than 77% and process reclaim rate greater than 85%).
- ▶ During 2018, Winbond implemented 4 new water-saving measures and the amount of water conservation increased by approximately 106,000 m³. From 2014 to 2018, the cumulative water-saving capacity reached 1.81 million m³, equivalent to **0.34** service capacity of Baoshan Reservoir (0.27 in 2017).
- ▶ The carbon reduction measures reduced 225,592 tons/CO₂e in 2018, equivalent to the annual of carbon fixation of **584** Da An Forest Parks.

Green Environment



Management Approach



Corresponding material topics

Environmental Compliance, Energy, Water, Chimney Emission, Greenhouse Gases, Waste, Effluents



Corresponding SDGs



Importance

- Reduce operating costs and the risk of production disruption.
- To effectively manage the climate change risks and regulatory risks concerning environmental protection
- Making responsible management can reduce cost risks and improve product competitiveness in terms of sustainable issues.



Policies

- The main content concerning environmental protection in our ESH policy is "Reducing environmental impacts is the social responsibility a world-class enterprise should bear. Through optimal prevention and improvement measures, resources consumption and pollution are gradually reduced."
- To implement the concept of environmental protection to become a green enterprise with sustainable development.



Goals

- The short-term goal is that the unit electricity consumption per unit of product reaching 84MJ/layer, and the medium-term goal is to keep the electricity consumption rate of 2020 the same as that in 2010 (82.8 MJ/layer).
- To maintain the short-term and medium-term goal of water consumption per unit of product at ≤ 150 liter/layer, the plant-wide water reclaim rate at $\geq 80\%$ and the process water reclaim rate at $\geq 85\%$.
- Setting 2010 as the base year, the short-term goal of the GHG emission per unit of product is ≤ 15.2 Kg CO₂e/layer for 2019, and the medium-term goal of 15.1Kg CO₂e/layer for 2020.
- Discharge of wastewater must meet the CTSP's influent standards.
- To maintain the short- and medium-term goals for waste recycling at $\geq 90\%$
- To become a green enterprise for sustainable development of the environment (Long-term goal).



Units in charge




- Facility Engineering Department, ESH and Risk Management Committee, Module Engineering Department, ESH and Risk Management Department



Greenhouse effects lead to climate changes which impact the environment and business continuity. Regarding regulatory risks, governments worldwide are levying carbon taxes or energy taxes. On the other hand, the prices of raw materials and energy needed for global production are gradually rising, leading to increased production costs. With respect to impacts on the actual environment, climate changes have led to more frequent extreme weather conditions such as windstorms, floods, and droughts. The increased difference in precipitation during rainy seasons and dry seasons in recent years will certainly impact the allocation and use of water resources. Furthermore, consumers are more concerned about climate change issues and they start to demand enterprises to disclose environment-related information.

Winbond has participated in the Perfluorocarbons (PFCs) Greenhouse Gas Emissions Reduction Project of the Taiwan Semiconductor Association since 2000. Through manufacturing process adjustments, use of alternative gases, and deployment of FCs reduction equipment, GHG emissions are reduced. Besides, through the water saving and energy conservation measures, the risk impact is reduced, enhancing our ability to cope with climate change and strengthening our competitiveness to create opportunities. Therefore, Winbond was awarded the honorary title of "Voluntary Greenhouse Gas Emission Reduction Manufacturer" by the Ministry of Economic Affairs. In addition, Winbond also conducts greenhouse gas inventory on a yearly basis and reports the results to the National Greenhouse Gas Registry so as to use the data as a reference for formulating policies related to energy saving, carbon emissions reduction, and GHG reduction.

During the reporting period, there were no records of environmental violations or penalties, nor were there any "environmental impact" complaints or protest :

Category of climate change risk	Potential risk cost	Potential development opportunities	Countermeasures
 GHG Emission Control	Increase in operating costs	To increase capital availability, EPA is establishing a carbon trading platform to encourage enterprises making early actions to obtain carbon credits.	We make reasonable comments to the government through the industry associations and continue to carry out energy conservation and carbon reduction activities to obtain more carbon credits.
 Levy fuel / energy tax	Increase in operating costs	Enhance the competitiveness of the enterprises	We make reasonable comments to the government through the industry associations and participate in climate change seminars with the government, academia and industry. Meanwhile, we also continue to carry out energy-saving activities to reduce operating impact, enhancing the competitiveness.
 Changes of extreme precipitation and drought	Reduction/ disruption of production capacity	Enhance the competitiveness of the enterprises	By promoting water recycling technology, water-saving programs and establishing contingency plans, we increase the ability to adapt to climate changes, enhancing the competitiveness.

4.1 Reduction through Process Control

Winbond performs a company-wide review on the performance of reduction on a regular basis. Parameters of raw material usage are continually adjusted to achieve the state of "optimum," and "minimum," thereby reducing the production of pollutants and waste while cutting production costs, reaching a win-win situation.

Raw material/energy resources	Usage in 2016	Usage in 2017	Usage in 2018
12" wafer (ton)	62	68	76
Power consumption (GWh)	390	452	498
Water consumption (kilo cubic meter)	2,340	2,830	3,130
Process gas consumption (ton)	228	251	278
Process chemical consumption (ton)	7,790	8,735	10,110
Facility gas consumption (million cubic meter)	139	159	188
Facility chemical consumption (ton)	10,797	13,463	15,675
Natural gas consumption (kilo cubic meter)	4,420	4,920	5,470
Diesel consumption (cubic meter)	90	80	138

Note: Due to the product characteristics, recycled input materials cannot be used.

4.2 Energy and Resources Management

4.2.1 Energy Management

Energy Intensity

In 2018, Winbond's total energy consumption was approximately 2,024,278 billion joules. The indicator of energy consumption per unit of product - average energy consumption for each reticle layer of 12-inch wafer reduced from the 93.1 million joules in 2017 to 89.8 million joules in 2018, a decrease of 3.5%, and energy conservation plans will continue to be promoted to lower the environmental impact.

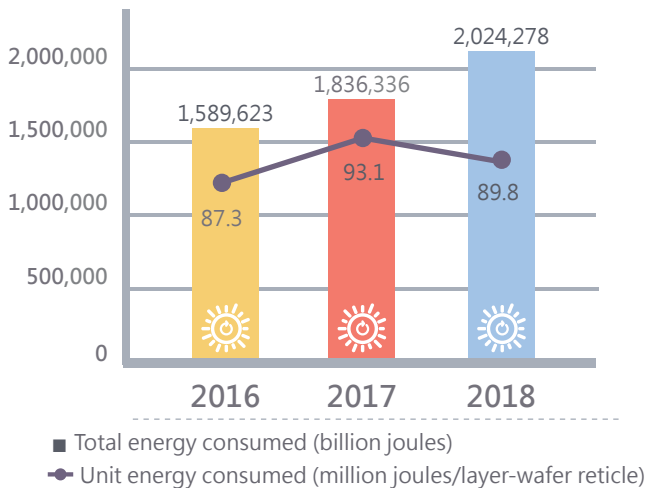
Energy intensity/Year	2016	2017	2018
Total energy consumed (billion joules)	1,589,623	1,836,336	2,024,278
Unit energy consumed (million joules/ layer-wafer reticle)	87.3	93.1	89.8
Total Power consumed (billion joules)	1,403,944	1,630,129	1,793,894
Unit Power consumed (million joules/ layer-wafer reticle)	77.1	82.6	79.6

Energy intensity/Year	2016	2017	2018
Total natural gas consumed (billion joules)	182,514	203,393	225,545
Unit natural gas consumed (million joules/ layer-wafer reticle)	10.0	10.3	10.0
Total diesel consumption (billion joules)	3,165	2,814	4,839
Unit diesel consumption (million joules/ layer-wafer reticle)	0.2	0.1	0.2

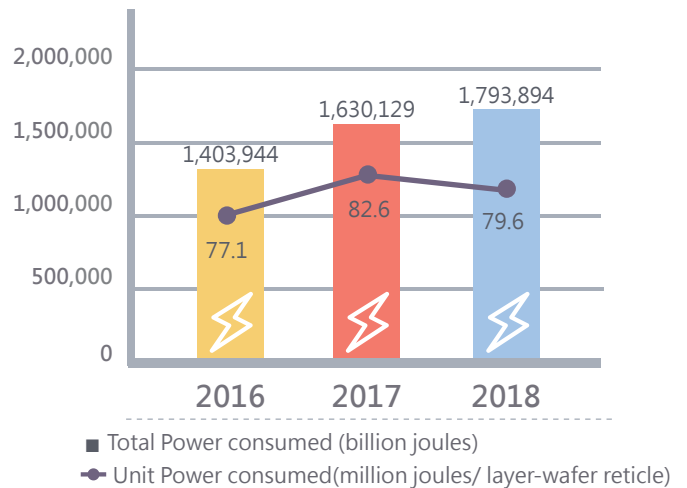
Note:

1. Winbond does not use renewable energy and does not have the projects to sell energy.
2. Energy use has been converted into joules. 1 kWh electricity (kilowatt hour) = 3,600 kilojoules, 1 m³ natural gas=9,843 kcal, 1 liter diesel=8,400 kcal, 1 cal=4.184 joules.
3. Standards, methodologies, hypotheses and/or calculation tool: Energy consumption comes from the measurement of the bills or monthly consumption statement and pickup orders/ part number stock change record check list, and there were no estimated values.
4. Sources of conversion coefficients: Except for that the calculation of calorific value was calculated by the heat value provided by the manufacturer, the rest of calculations were based on the GHG Coefficient Management Table (version 6.0.3) published by EPA.

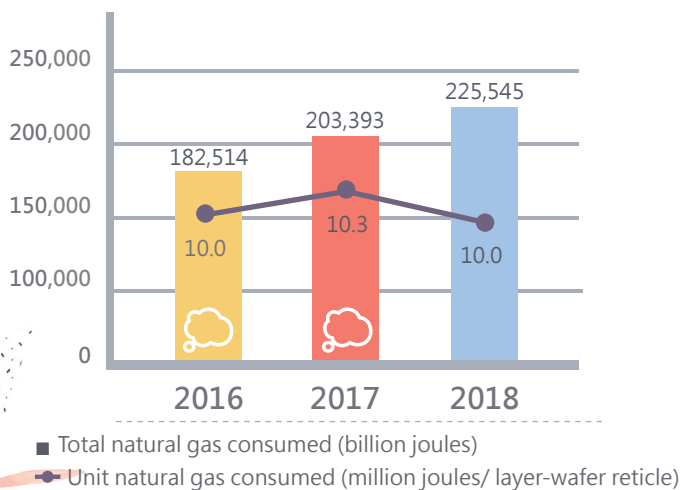
▼ Energy Consumed



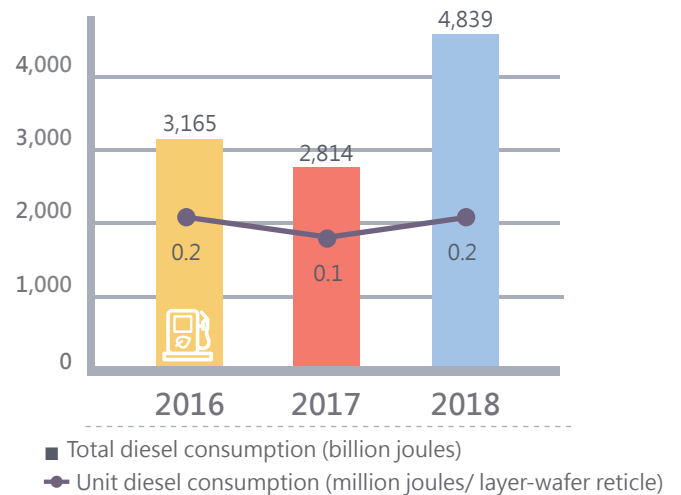
▼ Power Consumed



▼ Natural Gas Consumed



▼ Diesel Consumption

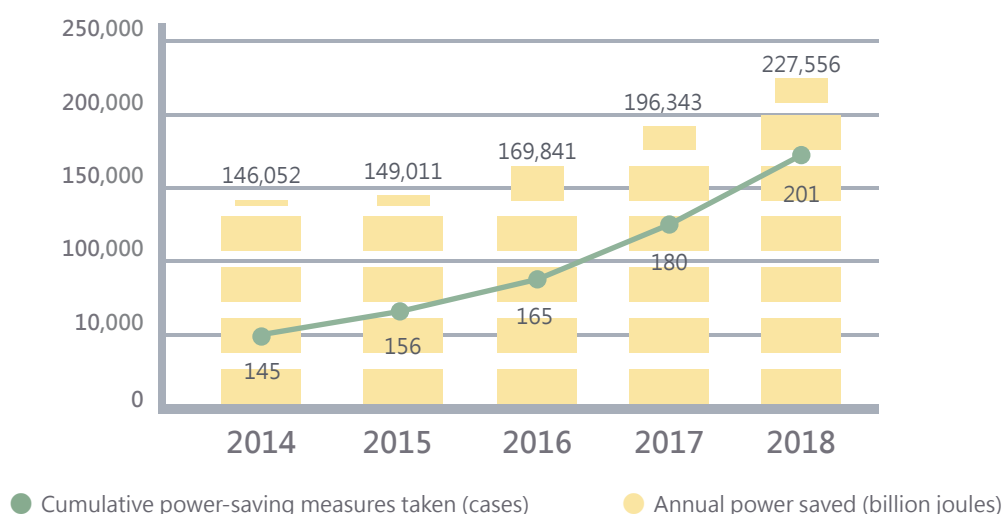


Energy Conservation Measures

21 energy-saving measures were introduced in Winbond during 2018, and 5 energy-saving measures were continued from 2017, which ended up saving 31,213 billion joules of electricity. From 2014 to 2018, the cumulative electricity saved amounted to approximately 888,902 billion joules, equivalent to the annual electricity consumption of 70,467 households combined. (Note: the calculation is based on the figure provided by the Taiwan Power Company - an annual average of 292 KWh per household during 2018, about 1.05 billion joules).

Statistics of power conservation/Year	2014	2015	2016	2017	2018
Cumulative power-saving measures taken (cases)	145	156	165	180	201
Annual power saved (billion joules)	146,052	149,110	169,841	196,343	227,556

▼ Statistics of Power Conservation



▲ 5 energy-saving measures continued from 2017 :

Item	Power-saving measures taken during 2017	Estimated energy saved (billion joules /year)
1	Electricity consumption and cost savings improvement of 9 degree #1Water Pump system	1,293
2	Energy saving improvement of FAB-A exhaust system	53
3	Energy saving improvement of FAB-B exhaust system	47
4	Energy saving improvement of FAB-A lighting	8
5	Optimization of FAB-B MAU system	47

▲ New energy-saving measures taken in 2018 are listed as follows :

Item	Power-saving measures taken during 2018	Estimated energy saved (billion joules /year)
1	Energy efficiency improvement of RF sensible lights	470
2	Energy efficiency improvement of 9 degree #2 chill water pump of the chiller	2,586
3	Improvement of Diesel PUMP chamber exhaust in the diesel tank area	8
4	Improvement of electricity conservation of the chiller system in FAB-C	1,140
5	Improvement of electricity conservation of the motor system in FAB-C	48
6	Improvement of energy conservation of warm water storage	51
7	Improvement of energy conservation of FAB-C MAU air washer	3,529
8	FAB-C 3F FFU: The first phase of energy saving	5,070
9	FAB-C L30 reduction in lighting for energy conservation	819
10	FAB-C AAEX system improvement of energy conservation	1,186
11	FAB-B scrubber Rashing Ring replacement for improvement	192
12	Reuse of RO concentrated water resource of FAB-C water purification system	249
13	Energy saving improvement of FAB-A PCW Heat Exchanger	4,163
14	Improvement of energy conservation of the RO system of the water purification system	7,285
15	Replaced CDO adsorption dryers with heating dryers	394
16	Improvement of energy conservation of air compressors	1,012
17	Improvement of energy conservation of LSR 2nd pump	8
18	Improvement of energy conservation of ammonia nitrogen catalyst tower	66
19	Improvement of energy conservation of lighting in the south office area on the 1F of the office building	148
20	Improvement of energy conservation of the Scrubber LDS dry pump	15
21	Improvement of energy conservation of Mattson A3 TM dry pump	1,325

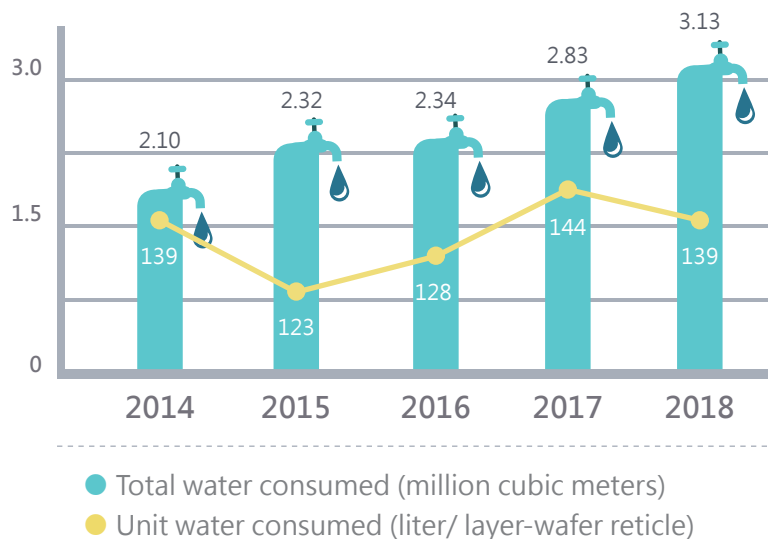
Note: The estimated energy saving results of these energy conservation measures were based on the requirements in the "Energy Audit Form of Energy Conservation of Energy Users" .

4.2.2 Water Resources Management

The main source of water for Winbond is the tap water from Taiwan Water Corporation, which is mainly supplied by LiyuTan Reservoir and ShiGang Dam, with a small amount coming from rainwater and air conditioning condensate water. The main source of water is tap water, and the water usage plans have to be assessed of the impact and approved by Central Taiwan Science Park Bureau. Therefore, Winbond does not have significant impact on water resources due to water withdraw. The total water consumption at Winbond in 2018 was approximately 3.13 million m³. Water consumption per unit of product – the average water consumption for each reticle layer of 12-inch wafer is 139 liters. (Note: 1 cubic meter = 1000 liters).

Water consumption/Year	2014	2015	2016	2017	2018
Total water consumed (million cubic meters)	2.10	2.32	2.34	2.83	3.13
Unit water consumed (liter/ layer-wafer reticle)	139	123	128	144	139

▼ Water Consumption



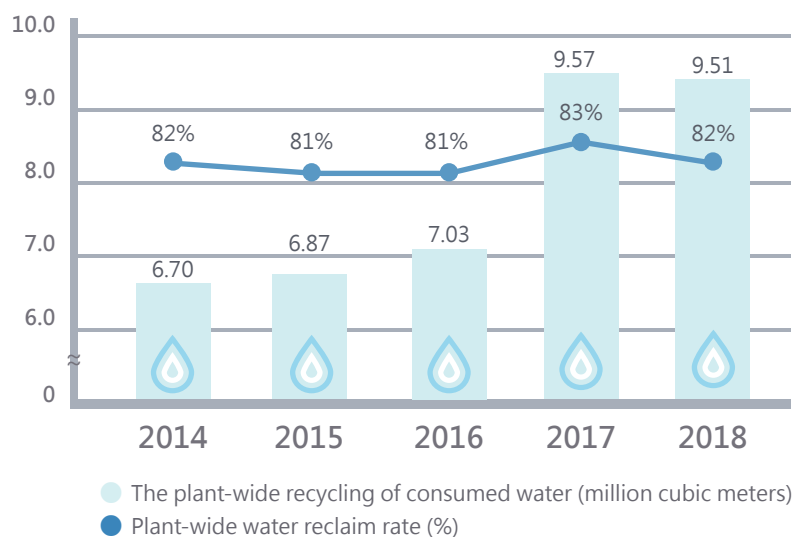
Winbond strives to improve the reclaim rate of used-water. The plant-wide water reclaim rate was approximately 82% in 2018, and the process water reclaim rate was approximately 91% (in line with the Science Park EIA commitment - the plant-wide reclaim rate should be greater than 77%, and process reclaim rate greater than 85%).

Winbond implemented four new water-saving measures in 2018 and the water conservation increased by approximately 106,000 m³. From 2014 to 2018, the cumulative water-saving capacity reached 1.81 million m³, equivalent to 0.34 service capacity of Baoshan Reservoir (Note: The calculation is based on the figure provided by the Water Resources Agency, Ministry of Economic Affairs - the service capacity of Baoshan Reservoir was 5.38 million m³ in 2017).

Water reclaim rate/Year	2014	2015	2016	2017	2018
The plant-wide recycling of consumed water (million cubic meters)	6.70	6.87	7.03	9.57	9.51
Plant-wide water reclaim rate (%)	82	81	81	83	82

Note: The plant-wide water reclaim rate = (condensate water recovery + process water recovery + secondary utilization of wastewater recovery) / (tap water + condensate water recovery + process water recovery + secondary utilization of wastewater recovery - evaporation water).

▼ The plant-wide recycling of consumed water



Water-saving measures

Item	Water-saving measures in 2018	Estimated water saved (Unit: m ³ /year)
1	Reduction of UPW use	36
2	Improvement of energy conservation of Gas Yard evaporator condensate recovery	528
3	Improvement of water and energy conservation of MMF	24,200
4	FAB-C UF concentrated water improvement	80,892

4.3 Greenhouse Gas Inventory

Greenhouse Gas Inventory

Winbond conducts the annual inventory of the greenhouse gas emission in the plants, and the data are used for a better understanding of GHG related activities so as to establish prioritized goals for carbon reduction and for the confirmation of results. In Winbond, greenhouse gases are primarily divided into three scopes. Scope 1 is direct GHG emission from manufacturing processes (e.g., hydrochlorofluorocarbons, perfluorocarbon, Perfluorinated compound, NF_3 , N_2O , CH_4 , and CO_2), fuel combustion (e.g, natural gas, gasoline, and diesel), and dissipative emission sources such as processed organic waste gas, septic-tanks, high or medium-voltage electroplax, and fire-fighting apparatus. Scope 2 is energy indirect greenhouse gas emission, which results primarily from power purchased of external sources. Scope 3 is indirect GHG generated from employees' commuting and traveling, transportation of raw materials, suppliers' production of raw materials and the recycling and handling of waste.

The greenhouse gas inventory in Winbond has passed verifications by third-party agencies during 2006 to 2017 (the internal inventory has completed for the year 2018, and the verification is yet to be conducted by the verification agency).

Unit: tons of CO_2e

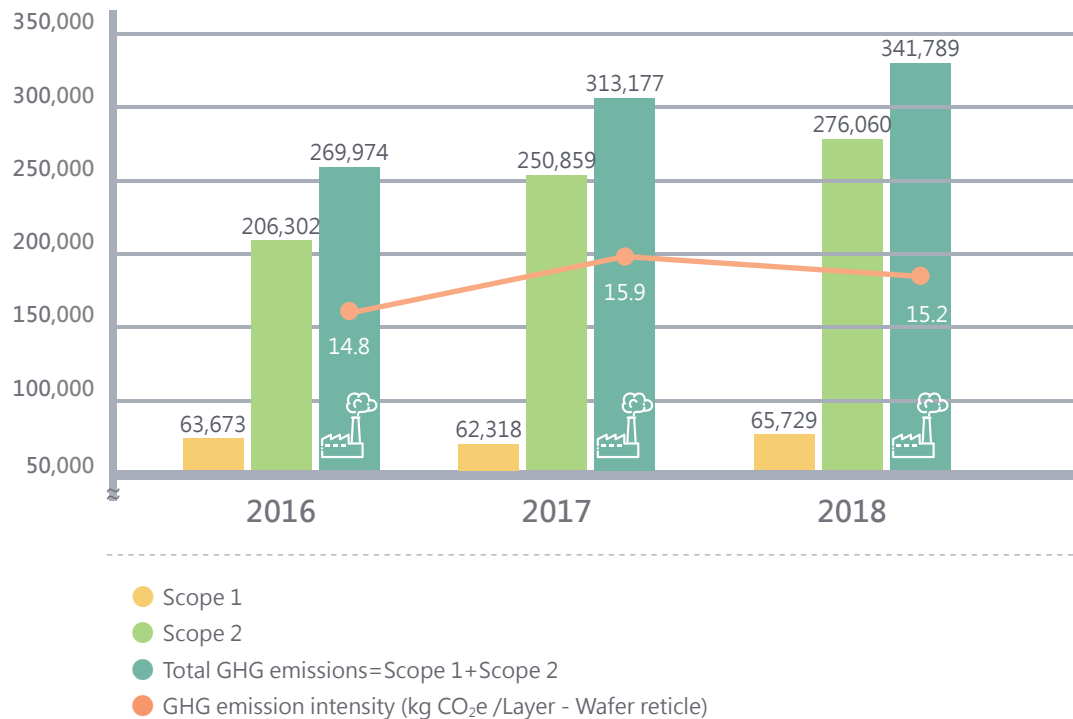
Greenhouse gas inventory/Year	2016	2017	2018 (Estimated)
Scope 1	63,673	62,318	65,729
Scope 2	206,302	250,859	276,060
Total GHG emissions= Scope 1+ Scope 2	269,975	313,177	341,789
GHG emission intensity (kg CO_2e /Layer - Wafer reticle)	14.8	15.9	15.2

Note:

1. In response to the Greenhouse Gas Reduction and Management Act announced by the EPA, Winbond tentatively set 2015 the base year for GHG inventory, with the emission of 251,492 tons of CO_2e .
2. The source of the Global Warming Potential (GWP) used in this table was from IPCC AR4 (2007).
3. GHG include N_2O , CH_4 , CO_2 , HFCs, PFCs, SF_6 , NF_3 and so on.
4. The method of collecting GHG emission amount is operational control.
5. The standards, methodologies, hypotheses and/or calculation tool: Energy consumption comes from the measurement of the bills or monthly consumption statement and pickup orders & AS400 part number stock change record check list, and there were no estimated values. The source of coefficients used is mainly based on the coefficients recommended in EPA's latest version of GHG emission factors, and the uncertainty data for emission factors were referenced. For the uncertainty assessment of activity data, technical specifications of verification and inspection of measuring instrument were used as the basis of the evaluation.



▼ GHG emission



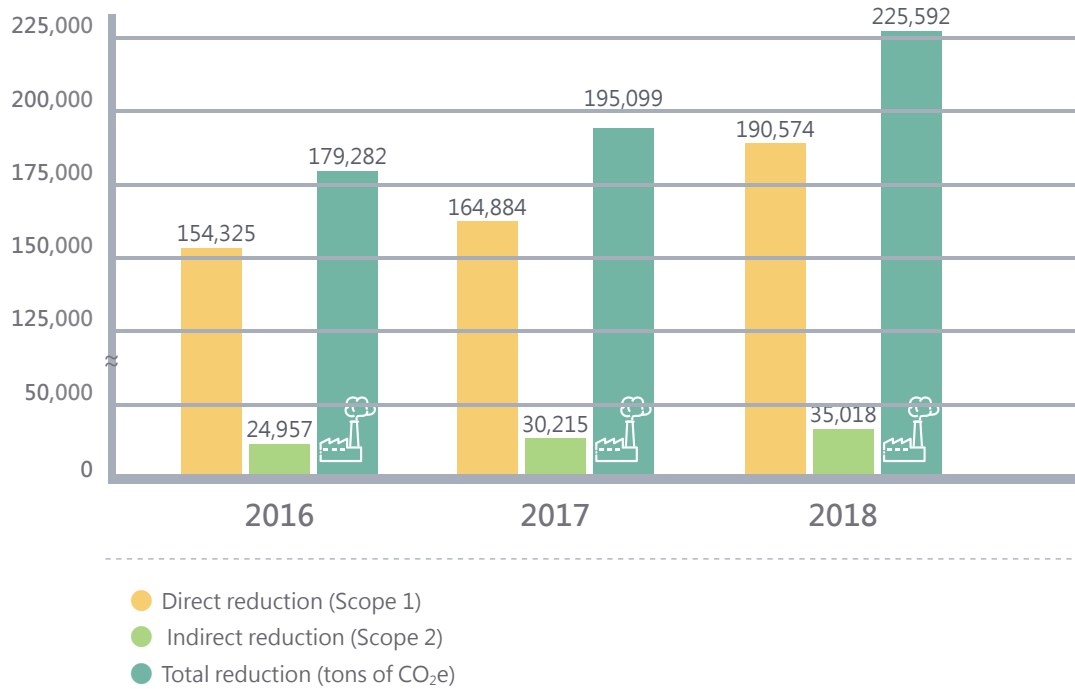
Reduction of GHG Emission

More than 85% of Winbond's GHG emission is resulted from the FCs in manufacturing processes and externally purchased electricity. As a result, our primary goal is to reduce FCs (including the increased process utilization rate and the installation of combustion tail gas treatment equipment) and power consumption. In 2018, the energy saving measures reduced emission by 225,592 tons of CO₂e, which is equivalent to the carbon fixation of 584 Da An Forest Parks (note: Forestry Bureau, Council of Agriculture, Executive Yuan and Lands Bureau of Taipei City Government published data to calculated on the basis that the Da An Forest Park absorbs 386 tons of CO₂ annually). With respect to future research on more advanced technologies and expansion of production capacity, Winbond will continue to promote all carbon-reduction programs and improve energy efficiency.

Unit: tons of CO₂e

Reduction of GHG Emission/Year	2016	2017	2018 (Estimated)
Direct reduction (Scope 1)	154,325	164,884	190,574
Indirect reduction (Scope 2)	24,957	30,215	35,018
Total reduction=Scope 1+Scope 2	179,282	195,099	225,592

▼ Reduction of GHG Emission



The company encourage the employees to take the shuttle bus to and from our Jhu-bei office and CTSP site to reduce driving and air pollution. The bus departs 9 times a day on week days. In addition, at our CTSP Site, transportation for engineering assistants is also in place (the routes include downtown Taichung, south-line and north-line) for the engineering assistants to utilize when going to and getting off work.



4.4 Pollution Control

4.4.1 Air Pollution Control

Winbond's air pollution control strategy is to reduce emissions from the source, reduce air pollutants to a reasonable level through process improvement, and then treat the pollutants with high-performance control equipment, keeping pollutant contents that permeate into the atmosphere under (superior to) the standards stipulated by government regulations. Over the years, it's been confirmed by inspection results that Winbond's air pollutant emissions are lower than the EPA's emission standards.

Based on their characteristics, Winbond categorizes the waste gases into acidic exhaust, base exhaust, volatile organic compounds, and general exhaust. General exhaust is generated from the process of machine cooling, which does not cause air pollution. Based on the characteristics of the pollutants, appropriate pollution control equipment is employed. For toxic or flammable waste gases, FCs, or PFCs process waste gases, local scrubbers are installed at the equipment for adsorption first and combustion oxidation is then performed. Exhaust containing inorganic acid and alkali is sent to the central scrubber for washing and neutralization; exhaust containing volatile organic compounds is sent to a rotary zeolite wheel for absorption, and then sent to a thermal oxidizer for combustion treatment.

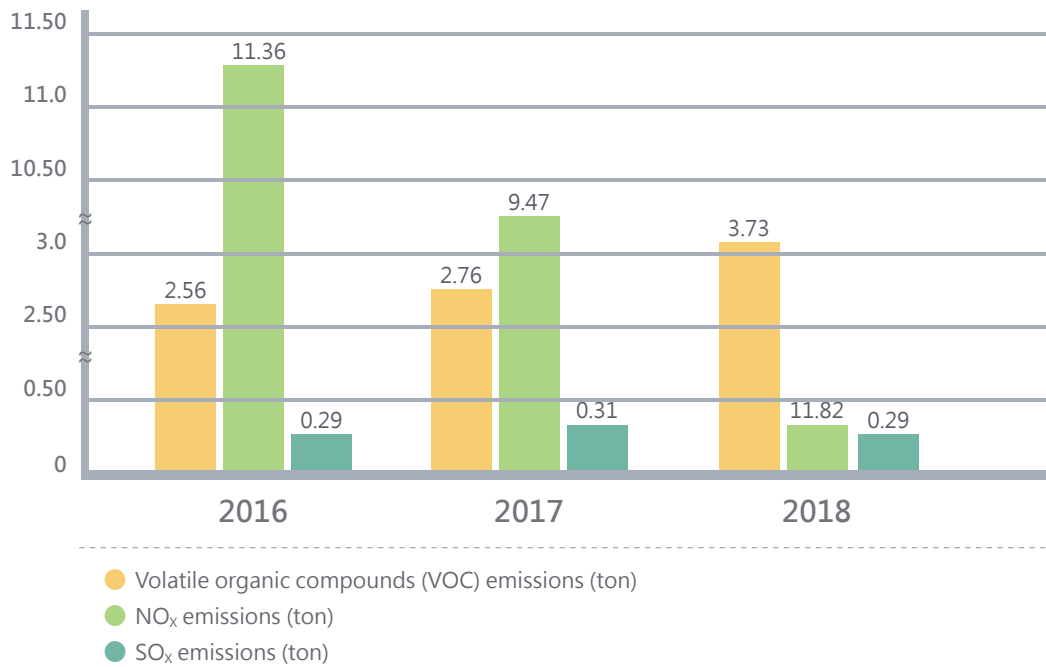
The air pollution control equipment at Winbond operates with what's known as the "N+1" mode, which immediately switches to standby equipment in emergency or during maintenance. Furthermore, an emergency power backup system and an advanced real-time monitoring system are at work to monitor operating parameters around the clock. If any deviation exceeds the preset value, an alarm will be immediately go off, alerting the staff to deal with it immediately. Thus, air pollutants are dealt with 24/7/365, ensuring a full compliance with Taiwan's "Air Pollution Control and Emissions Standards for the Semiconductor Industry" and "Stationary Pollution Source Air Pollutant Emissions Standards".

Winbond's volatile organic compounds (VOC) emissions treatment system uses clean natural gas as fuel to reduce combustion derivative pollution. In 2018, the average VOC removal rate at Winbond was 97%, better than the rate set by EPA. In addition, based on the results of Winbond's routine inspection on emission pipes and the EPA air pollutant emission factors of NO_x and SO_x , it is estimated that the NO_x emissions would be 11.82 tons and SO_x would be 0.29 tons.

Air pollution testing item	2016	2017	2018
Volatile organic compounds (VOC) emissions (ton)	2.56	2.76	3.73
Average removal rate of VOCs	98%	97%	97%
NO_x emissions (ton)	11.36	9.47	11.82
SO_x emissions (ton)	0.29	0.31	0.29



▼ Air pollutant emissions



4.4.2 Water Pollution Control

At the onset of construction, Winbond's waste treatment facilities were designed to have up to 20 types of pipelines, each collecting a different waste liquid generated from operation. Based on characteristics of the waste liquids, eleven categories of waste treatment facilities were built correspondingly. In accordance with water pollution control related laws and regulations and the Soil and Groundwater Pollution Remediation Act, discharge permits are required and applied for. Inspections by the Environmental Analysis Laboratory are conducted twice a month to determine whether the discharge water meets the requirements of the science park. In addition, to reduce environmental load and the use of chemicals, waste waters from the central scrubbers, cooling towers, process cooling waste water, and process soft water are reclaimed. After treatment, the reclaimed water is used as a supply of secondary water in the plant; we continuously promote the advancement of water pollution control facilities to achieve the reduction of pollutant biochemical oxygen demand (BOD), chemical oxygen demand (COD), suspended solids (SS), and sludge. The following table shows the effluent standard at the Central Taiwan Science Park (CTSP) as well as testing data, and all the results showed compliance with the requirement set by CTSP.

	2016	2017	2018
Waste liquids discharge (million m ³)	1.80	2.03	2.18

	COD	SS	BOD
Effluent standard at CTSP	500mg/L	300mg/L	300mg/L
Monitoring value, 2018/5/22	32.9mg/L	21.3mg/L	19.2mg/L
Monitoring value, 2018/11/20	28.6mg/L	<2.5mg/L	12.2mg/L

In order to discharge waste water in compliance with the Wafer and the Semiconductor Manufacturing Industry Effluent Standards and Sewage Treatment Plant in CTSP, Winbond has dedicated plant areas for waste treatment, which are responsible for the treatment of acid and alkaline wastewater, fluoride containing wastewater, CMP wastewater, Ammonia nitrogen wastewater, and TMAH wastewater, copper wastewater, EKC580 and processing domestic sewage generated by employees with the membrane bioreactor system before discharging the treated water to the Sewage Treatment Plant in CTSP. After the sewage treatment, the wastewater that meets the effluent standards is then discharged to Far-Zhi Stream.

The wastewater control equipment at Winbond operates with what's known as the "N +1" mechanism with respect to the processing facilities and spare parts. It has also established a comprehensive set of managerial and operational protocols to maximize the efficiency of the facilities. Monitoring systems are established at the far-end of the pollution control facilities to monitor the status of waste treatment. In the event of abnormality in wastewater analysis, the staff on a 24-hour duty transfer the wastewater back to the facility for reprocessing in accordance with prescribed emergency response and notification procedures in order to avoid environmental pollution and violation of laws and regulations. No chemical or waste liquid leakage or environmental violations occurred in 2018.

4.4.3 Waste Management

In 2018, the waste generated at Winbond was approximately 6,082 tons. When measured with the per unit of product indicator, the production for each reticle layer of 12-inch wafer produces approximately 0.270 tons of waste.

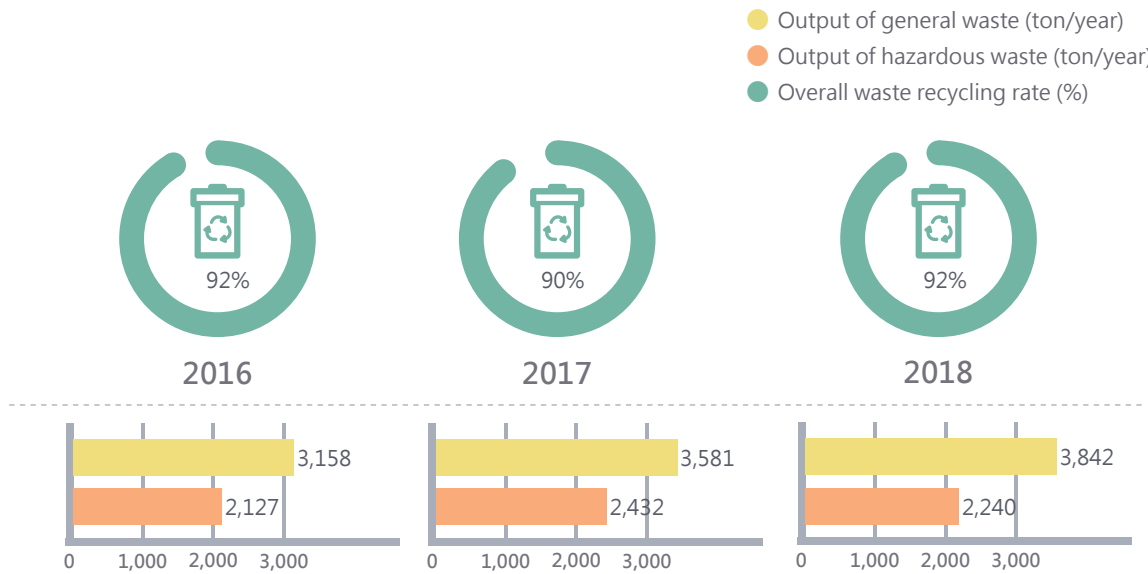
Category	2016	2017	2018
Output of general waste (ton/year)	3,158	3,581	3,842
Recycling (ton)	2,954	3,427	3,770
Incineration (ton)	204	154	70
Landfill (ton)	0	0	2
Output of hazardous waste (ton/year)	2,127	2,432	2,240
Recycling (ton)	1,886	2,006	1,808
Incineration (ton)	238	416	425
Curing amount (ton)	3	9	7
Overall waste recycling rate (%)	92	90	92

Note:

1. All the hazardous business waste is treated and disposed by domestic qualified waste disposal agencies and are not shipped abroad.
2. The amount of waste produced is the prescribed value of Waste Disposal Act.



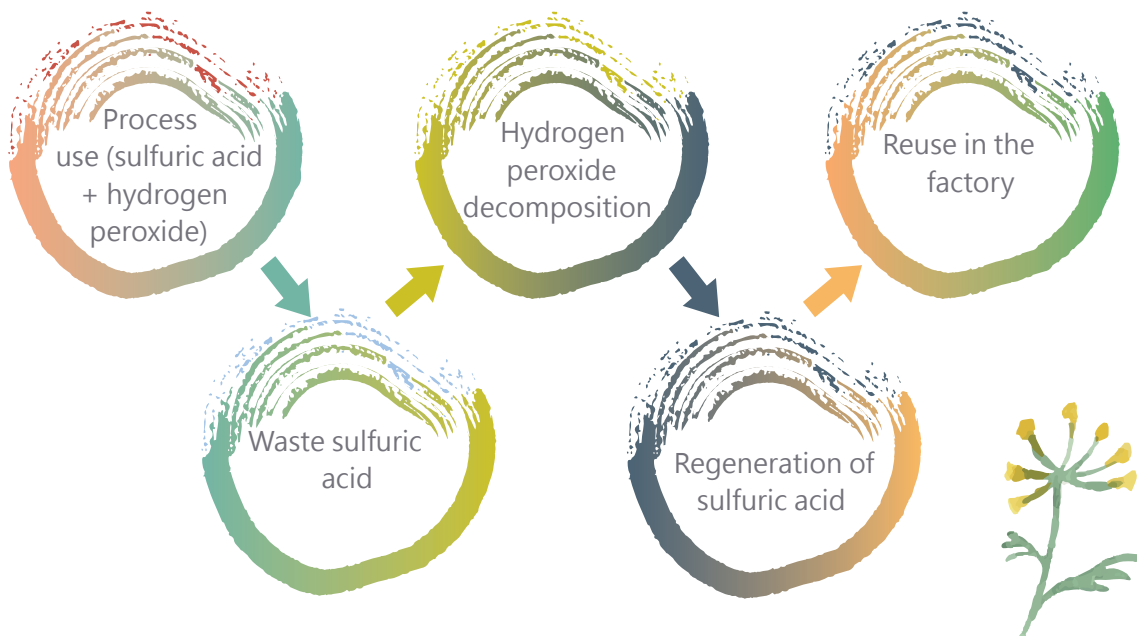
▼ Waste recycling rate



Recycling and Reuse of Waste

Sulfuric Acid Recovery System for in-plant recycling and reuse

In addition to products innovating actively, Winbond has further promoted circular economy. In 2018, the sulfuric acid recovery system was established in the factory. The hydrogen peroxide of waste sulfuric acid after the process is removed with hydrogen peroxide decomposer and made into industrial grade sulfuric acid that is then returned to the factory wastewater treatment system and ammonia nitrogen treatment system for the treatment of various wastewater. The amount of outsourced waste sulfuric acid treatment reduced by approximately 709 tons.



4.5 Expenditure on Environmental Protection

The Company has not yet introduced the Environmental Accounting System, but it still actively promotes the measures to improve the environment and efficiency of the tail-end process and implement as well as observe ESH related regulations and requirements. Environmental expenditures and earnings are listed in the following tables :

Costs (in thousand NTD)

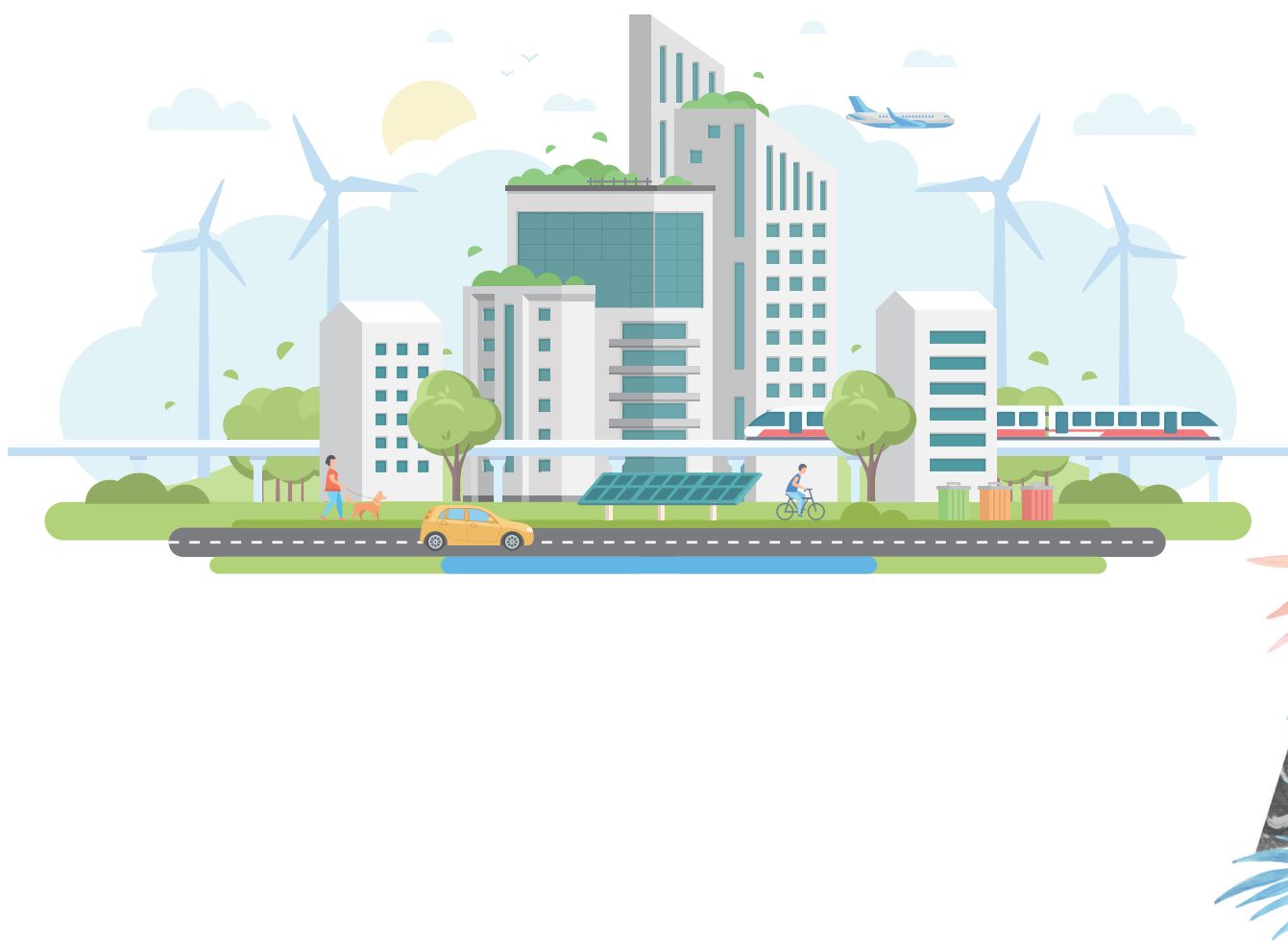
Type of expense	Expenditure item	2016	2017	2018
New pollution control facilities	Air Pollution Control facilities	167,710	31,554	25,437
	Water Pollution Control Facilities	149,923	65,686	71,729
Operation and maintenance of pollution control facilities	Air Pollution Control facilities	41,997	49,212	92,908
	Water Pollution Control facilities	52,693	124,692	165,734
Waste disposal	General Business Waste	14,689	14,644	24,508
	Hazardous Business Waste	21,511	29,193	33,030
Total	--	448,523	314,981	413,346
Revenue (individual)	--	33,534,343	38,102,813	40,733,496
Percentage of the revenue (Total expenditure/ revenue)	--	1.34%	0.83%	1.01%

Earnings (in thousand NTD)

Type	2016	2017	2018
Reuse of Waste	8,161	5,100	4,700

Savings (in thousand NTD)

Type	2016	2017	2018
Power-saving measures	109,150	131,230	157,460
Water-saving measures	3,194	4,845	7,564
Total	112,344	136,075	165,024



5. LOHAS at Winbond- A Friendly Workplace

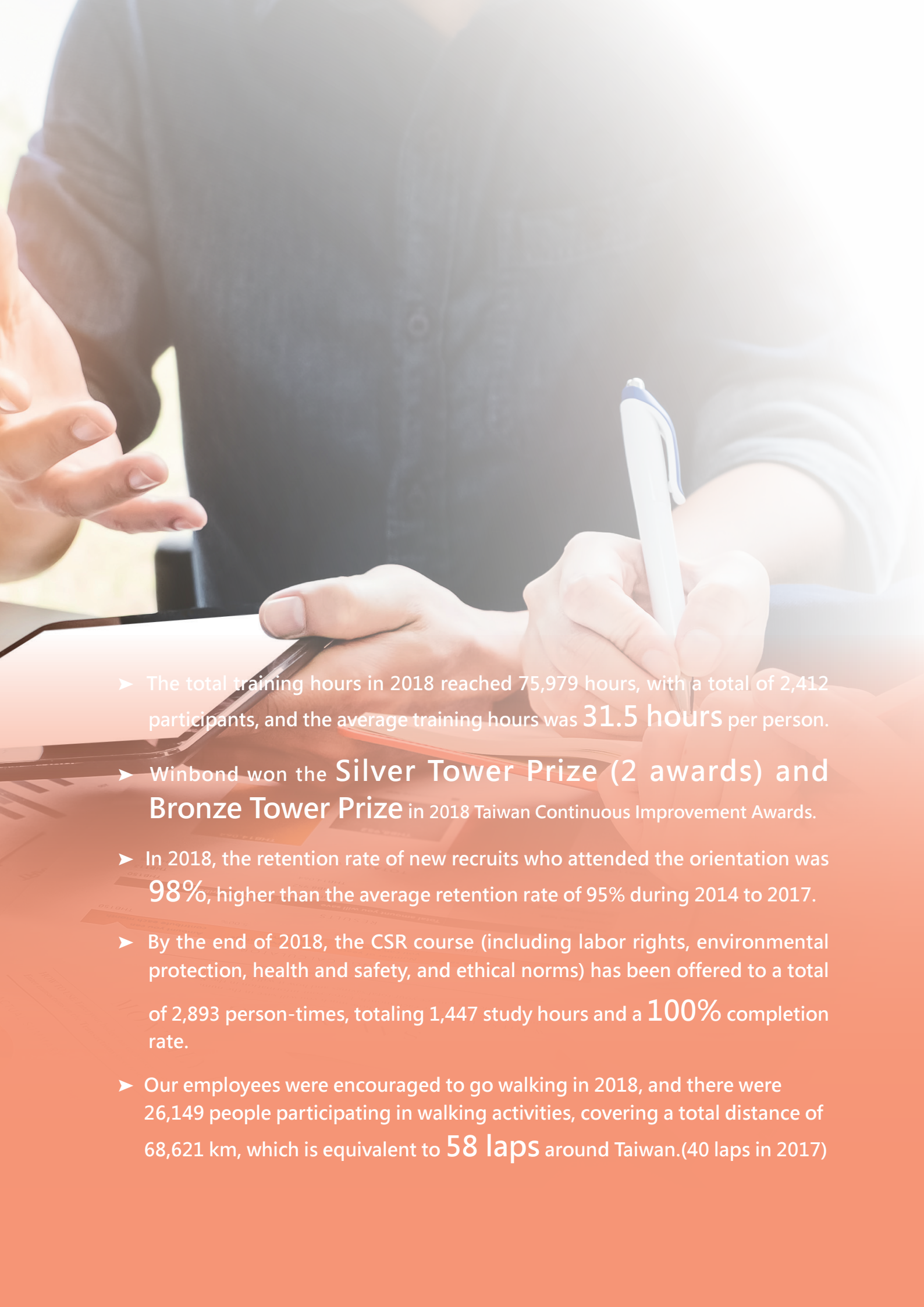
5.1 Talent Attraction and Retention

5.2 Employee Benefits and Rights

5.3 Talent Training

5.4 Occupational Safety & Health and Health Promotion

- ▶ **Zero violation** of Occupational Safety and Health Act occurred in 2018.
- ▶ There was **no violation** of labor laws and regulations, nor were there significant employment issues in 2018.
- ▶ In 2018, the employee turnover rate was **6.16%**, a slight decrease compared with the 6.45% in 2017.
- ▶ In 2018, **100%** of the frontline and supportive staff received performance appraisal.
- ▶ In 2018, the reinstatement rate after the parental leave reached **100%**.
- ▶ 122 employees have been granted the child-rearing allowance with a total subsidy amounting to **NT\$31.68 million** in 2018.
- ▶ In 2018, there was **0** case of sexual harassment.

- 
- ▶ The total training hours in 2018 reached 75,979 hours, with a total of 2,412 participants, and the average training hours was **31.5 hours** per person.
 - ▶ Winbond won the **Silver Tower Prize (2 awards) and Bronze Tower Prize** in 2018 Taiwan Continuous Improvement Awards.
 - ▶ In 2018, the retention rate of new recruits who attended the orientation was **98%**, higher than the average retention rate of 95% during 2014 to 2017.
 - ▶ By the end of 2018, the CSR course (including labor rights, environmental protection, health and safety, and ethical norms) has been offered to a total of 2,893 person-times, totaling 1,447 study hours and a **100%** completion rate.
 - ▶ Our employees were encouraged to go walking in 2018, and there were 26,149 people participating in walking activities, covering a total distance of 68,621 km, which is equivalent to **58 laps** around Taiwan.(40 laps in 2017)

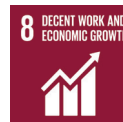
LOHAS Workplace

Management Approach

Corresponding material topics

Employment, Labor/Management Relations, Training and Education, Occupational Health and Safety

Corresponding SDGs



Importance

- Ensure the quality of work and life of the employees, improve the retention rate of outstanding talents to enable steady growth of the company.
- Continue talent cultivation to maintain the core competitiveness of the company.
- Safeguard the legitimate rights and interests of the employees and assist our employees to resolve unreasonable, illegal and any treatment against RBA regulations to provide a legal, reasonable and fair working environment.
- Responsible occupational safety and health management can reduce the labor costs and improve the competitiveness of the company.

Policies

- Winbond continues to provide comprehensive training programs to enhance employee development.
- The level of compensation should be competitive in the same industry to attract external talents and stabilize internal outstanding human resources.
- Individual compensation levels are differentiated by responsibilities and performance to encourage accountability and performance.
- We provide multiple channels for the opinions from the employees and regularly convene labor-management meetings and labor representative selection.
- The main content of the environmental safety and health policy is as follow. Winbond is committed to achieving the highest standards of environmental, safety and health performance, and providing a safe and healthy workplace through respecting and caring for workers as well as consultation and participation of workers. We will continuously improve our ESH performance by reducing work related injury, resource consumption, and pollutants emission. We firmly believe that the concept of safety, health and environmental protection is the key to a sustainable enterprise.

Goals

- To maintain the industrial competitiveness to attract and retain outstanding talents and to conduct annual salary review and adjustment.
- To provide a competitive salary and benefits system to attract more outstanding talent.
- Excellent talent will bring new ideas and thinking for enterprises, enhancing the company's productivity and bringing the stable profit growth to the company.
- Every year, the training programs for different courses are arranged in accordance with the company's strategy, needs survey and resource allocation.
- Every year the training programs are developed, and the annual course start rate of the courses shall reach 80%.
- To reach zero violation and be superior to regulatory requirements.

Units in charge

HR Department, ESH and Risk Management Committee, Quality & ESH Center



5.1 Talent Attraction and Retention

Winbond recognizes that human resources are the most important assets of the Company, and that outstanding performance can only be achieved with outstanding talents. As a result, Winbond provides a comprehensive human resources management system for the recruitment, compensation and benefits as well as talent cultivation.

5.1.1 Employee Profile

Winbond complies with relevant laws and regulations, such as the Act of Gender Equality in Employment, the right to work, and prohibition of discrimination, and also abides by the internationally recognized human rights of labor, including the freedom of association, the right of collective bargaining, caring for vulnerable groups, prohibiting the use of child labor, eliminating all forms of forced labor, eliminating recruitment and employment discrimination. The personnel system (e.g., salary, welfare, assessment, promotion, rewards and punishments, cultivation, job placement, and termination of contract) treats every employee equally, regardless of gender, race, skin color, nationality, social status, language, thoughts, religion, political affiliation, place of origin, place of birth, sexual orientation, age, marital status, pregnancy, blood type, star signs, appearance, facial features, disability, or union membership, so as to achieve equality and fairness in employment, hiring conditions, remuneration, benefits, training, evaluation, and promotion opportunities.

Workforce Structure

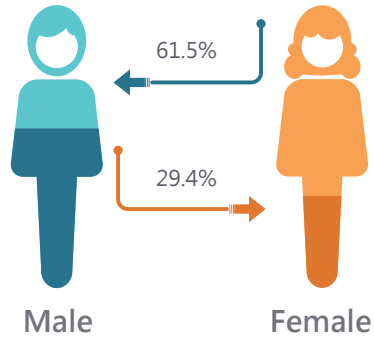
As of December 31, 2018, Winbond employs 3,069 people worldwide, including 2,794 employees at the headquarters and 275 at overseas service bases. The ratio of male to female employees is approximately 2 to 1.

Year		2018			
Category		Headquarter		Global	Total number worldwide
		Regular staff	Temporary staff		
Male	Number	1,888	1	214	2,103
	Ratio (%)	61.5	0.03	7.0	68.53
Female	Number	903	2	61	966
	Ratio (%)	29.4	0.07	2.0	31.47
Total	Number	2,791	3	275	3,069
	Ratio (%)	90.9	0.1	9.0	--

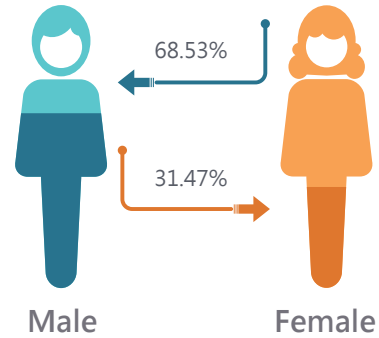
Note: 98.7% of high-level management at headquarters are local workers.



▼ Headquarters



▼ Total number worldwide

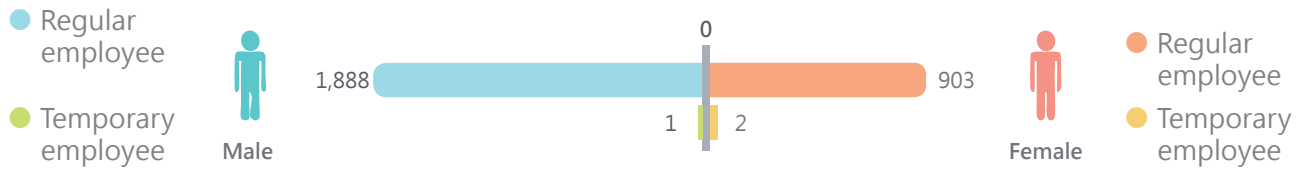


Employment Type

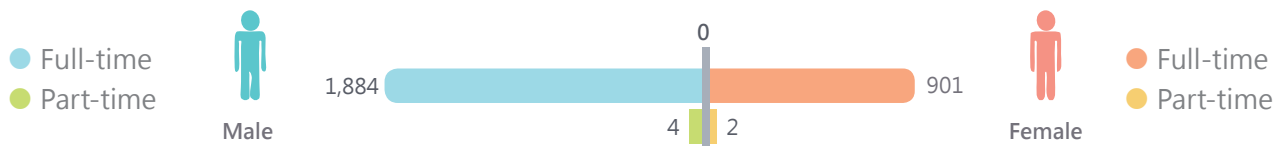
In terms of employment structure at the headquarters, the general staff consists of 2,791 frontline and supportive employees, which includes 3 temporary workers, with 99.89% being long-term stable human resources. When examining the employment type, employees are divided into 2,785 full-time and 6 part-time employees (part-time staff include consultants and regular contracted personnel with a term of 6 months or below). In terms of age distribution, Winbond adheres to domestic and international laws and regulations, and does not employ child labor or those under the age for the completion of compulsory education. 75.78% of our employees in Taiwan are aged between 31 and 50 years old. 84.34% have the bachelor's degree or above.

Year		2018					
Category	Item	Male		Female		Total number	
		No.	Gender ratio	No.	Gender ratio	No.	Ratio
Employee composition	Regular employee	1,888	67.57%	903	32.32%	2,791	99.89%
	Temporary employee	1	0.04%	2	0.07%	3	0.11%
Employment type	Full-time	1,884	67.50%	901	32.28%	2,785	99.79%
	Part-time	4	0.14%	2	0.07%	6	0.21%
Position	Executives	368	13.19%	41	1.47%	409	14.65%
	R&D/Production	1,482	53.10%	365	13.08%	1,847	66.18%
	Administration/sales	38	1.36%	121	4.34%	159	5.70%
	Production support	0	-	376	13.47%	376	13.47%
Age	18-30	355	12.72%	134	4.80%	489	17.52%
	31-50	1,393	49.91%	722	25.87%	2,115	75.78%
	51 and above	140	5.02%	47	1.68%	187	6.70%
Education background	Ph.D	45	1.61%	5	0.18%	50	1.79%
	Master's degree	1,041	37.30%	221	7.92%	1,262	45.22%
	Bachelor's degree	750	26.87%	292	10.46%	1,042	37.33%
	College	48	1.72%	178	6.38%	226	8.10%
	High school and below	4	0.14%	207	7.42%	211	7.56%

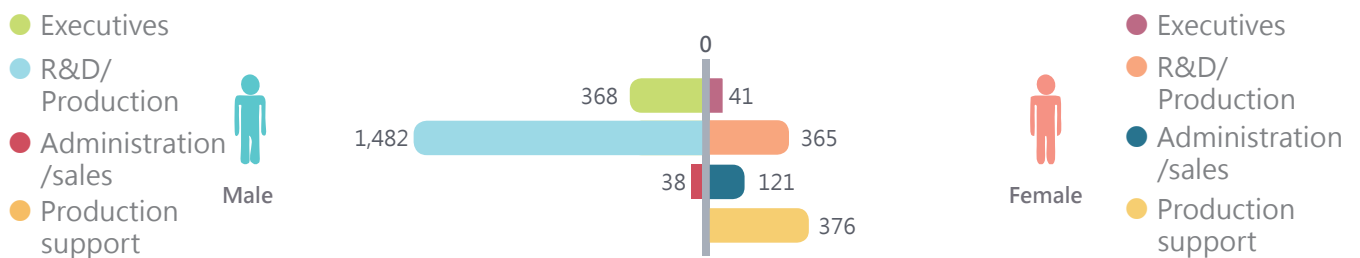
Employee composition



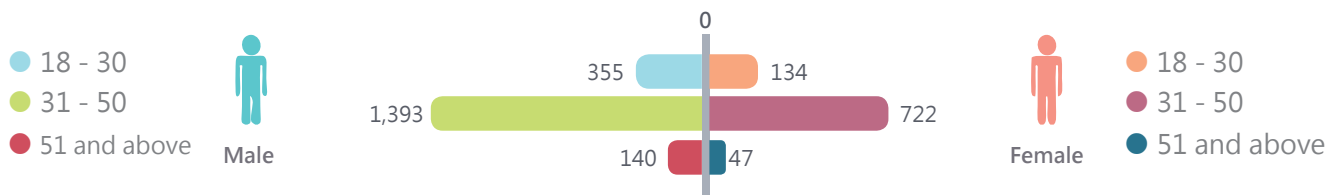
Employment type



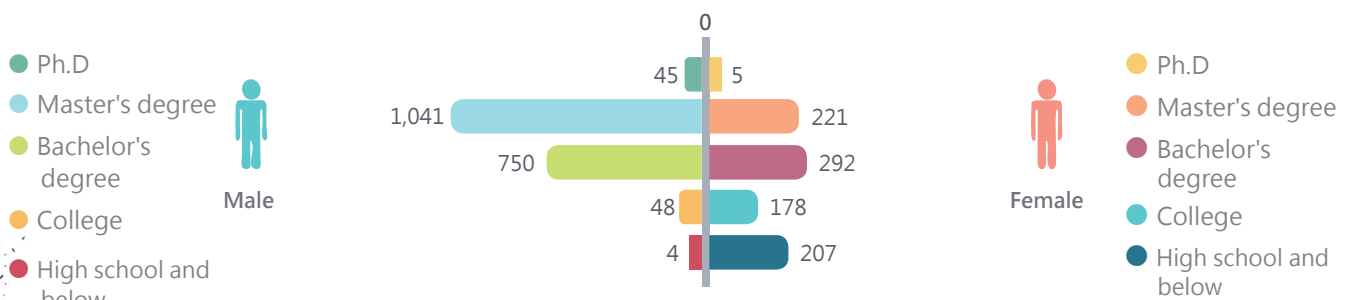
Position



Age



Education background



5.1.2 Recruitment and Retention

Winbond spares no effort to retain talents. We offer a salary and benefits system that exceeds the criteria established by laws and regulations. In addition to reviewing relevant laws and regulations on labor wages and benefits on a quarterly basis, the Company also regularly adjusts the pay and welfare standards in accordance with market conditions so as to safeguard employees' quality of life and attract more talents. We believe that a reasonable turnover may bring new ideas and thinking into our enterprise.

Winbond's average hiring rate was 14.48% and the average turnover rate was 6.16% in 2018. By means of diverse hiring activities such as campus recruitment, R&D alternative service, corporate visits, and summer internship programs, we hired 404 employees in 2018, of which 50% (aged 31 and above) have extensive professional experience, whose joining would rapidly promote the organizational efficiency. It has also reduced the turnover rate by increasing the number of LOHAS leave and ensuring that the employees on leave without pay can return to their original positions.

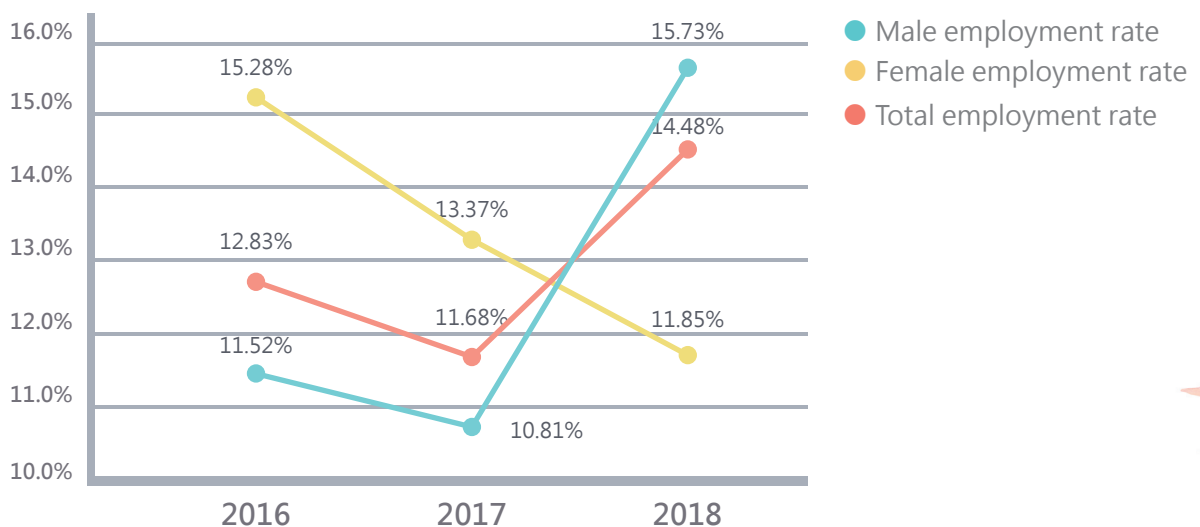
Hire

► Distribution of gender of the newly hired during 2018

Year	Number of new male employees	Employment rate, male	Number of new female employees	Employment rate, female	Total number of new employees	Total employment rate
2016	183	11.52%	129	15.28%	312	12.83%
2017	182	10.81%	117	13.37%	299	11.68%
2018	297	15.73%	107	11.85%	404	14.48%

Note: The rate of new hired= the number of newly hired/the total number of employees as of December 31 of the year.

▼ The number of new employees in the past three years (by gender)

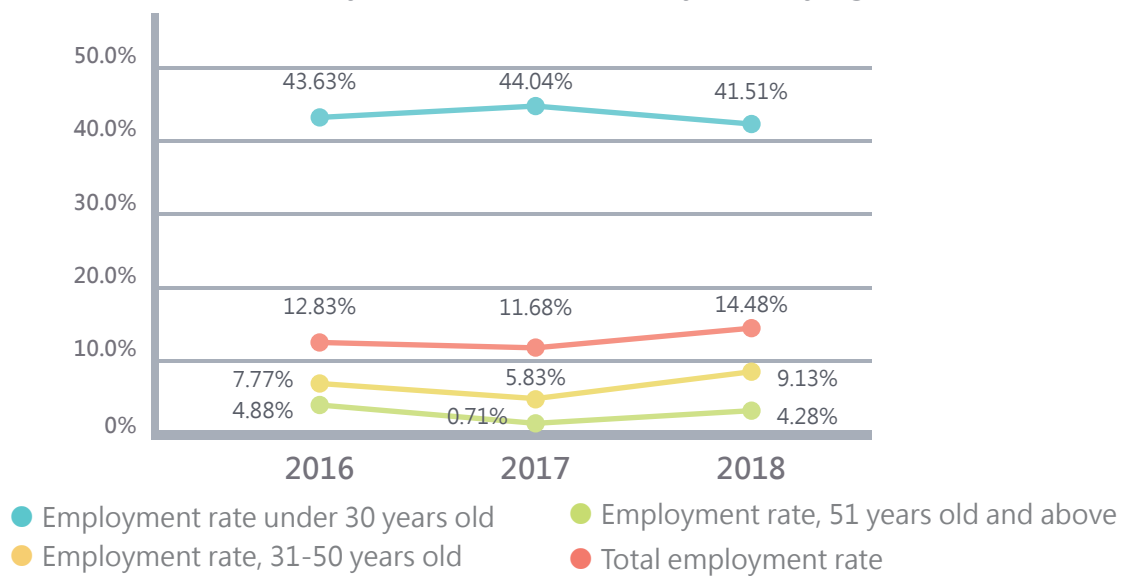


► Distribution of age of the newly hired during 2018

	Number of new employees under 30 years old	Employment rate under 30 years old	Number of new employees aged 31-50 years old	Employment rate at 31-50 years old
2016	154	43.63%	152	7.77%
2017	181	44.04%	117	5.83%
2018	203	41.51%	193	9.13%
	Number of new employees aged 51 years old and above	Employment rate at 51 years old and above	Total number of new employees	Total employment rate
2016	6	4.88%	312	12.83%
2017	1	0.71%	299	11.68%
2018	8	4.28%	404	14.48%

Note: The rate of newly hired=the number of newly hired/the total number of employees as of December 31 of the year.

▼ The number of new employees in the past three years (by age)



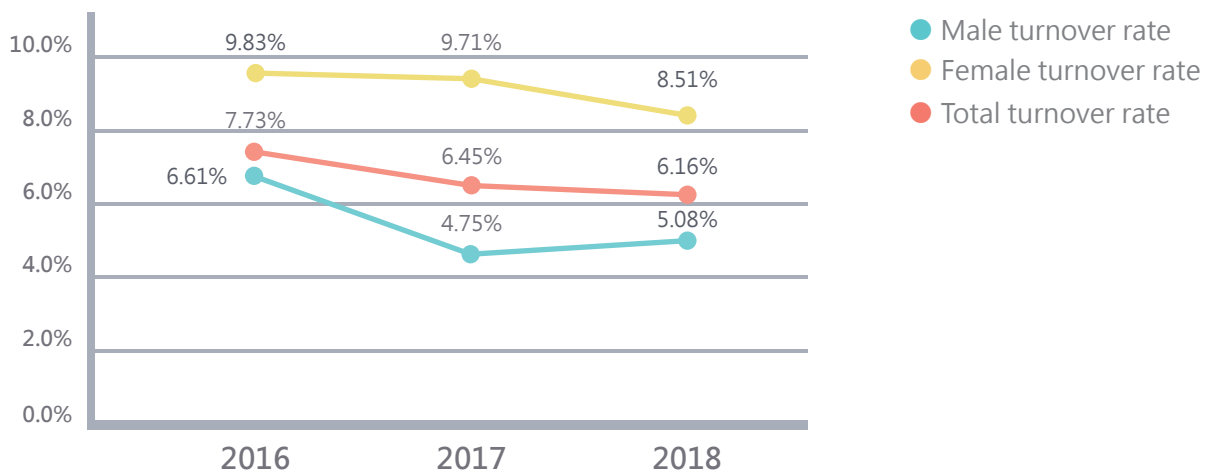
Staff Turnover

- The number of retired/resigned employees in the past three years - by gender

Gender \ Year	Male		Female		Total	
	Number	Ratio	Number	Ratio	Number	Ratio
2016	105	6.61%	83	9.83%	188	7.73%
2017	80	4.75%	85	9.71%	165	6.45%
2018	95	5.08%	77	8.51%	172	6.16%

Note: turnover rate= the number of dismissals/the number of employees as of December 31 of the year.

- ▼ The number of retired/resigned employees in the past three years (by gender)

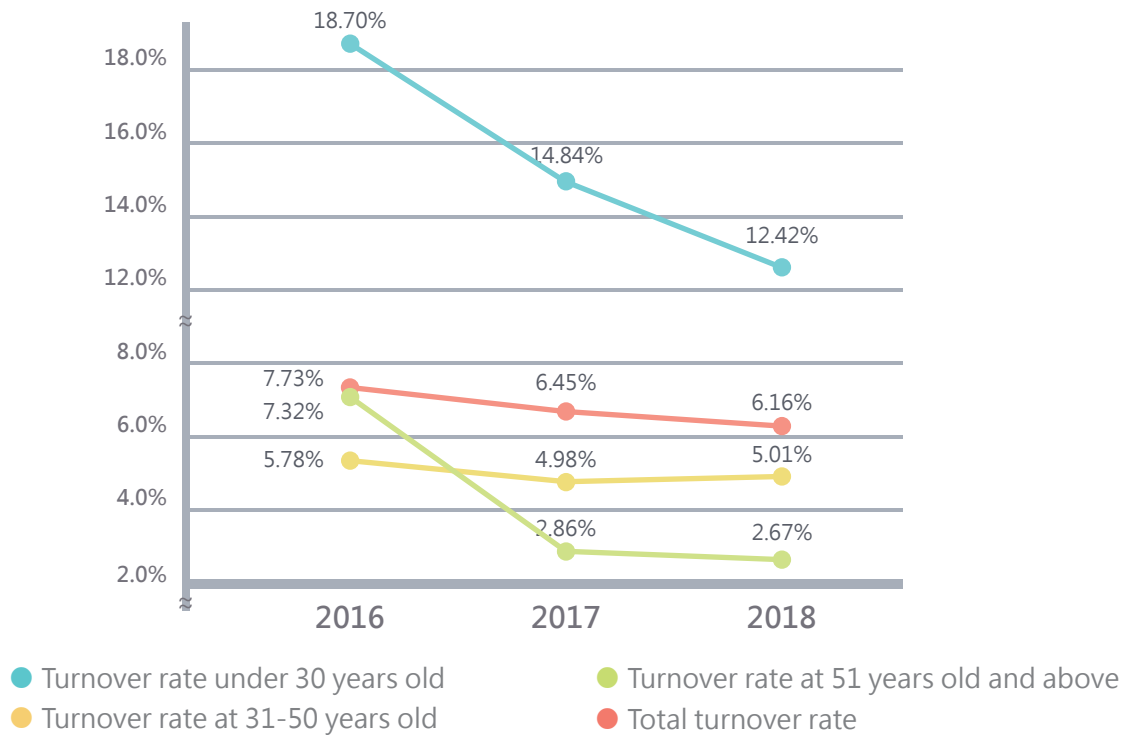


- The number of retired/resigned employees in the past three years (by age)

Year	Number of retired/resigned employees under 30 years old	Turnover rate under 30 years old	Number of retired/resigned employees aged 31-50 years old	Turnover rate at 31-50 years old	Number of retired/resigned employees aged 51 years old and above	Turnover rate at 51 years old and above	Total number of retired/resigned employees	Total turnover rate
2016	66	18.70%	113	5.78%	9	7.32%	188	7.73%
2017	61	14.84%	100	4.98%	4	2.86%	165	6.45%
2018	61	12.42%	106	5.01%	5	2.67%	172	6.16%

Note: Turnover rate= the number of dismissals (including the retired)/the number of employees as of December 31 of the year.

▼ The number of retired/resigned employees in the past three years (by age)



Hiring of Employees with Disabilities

During recent years, Winbond has been an active employer for individuals with mental or physical disabilities. With assistance from governmental employment counseling agencies, we have steadily increased the employment in this category. As of December 31, 2018, we have hired 20 staff members with disability, all of whom are placed on actual job duties, and the number of employees with physical and mental disability hired is 21 after being weighted by the degree of disability, making it 6 employees short based on the required employment quota as prescribed in Article 38 of the People with Disabilities Rights Protection Act, which was mainly due to the fact that the conditions on the resumes did not meet the job requirements. The difference subsidies of NTD 138,600 was paid to the Disabled Employment Funds for insufficient hire of people with disabilities as prescribed.

All employees with disability are employees who are actually involved in the company's business. The conditions of these employees are analyzed prior to their employment so that specific arrangements could be made for them with respect to the working environment and equipment they work with, thus assisting them to fit in more easily.

Gender Number and ratio	Male		Female		Total number of employees
	Number	Ratio	Number	Ratio	
Employees hired	15	75%	5	25%	20
Weighted by the degree of disability	15	71%	6	29%	21

Prohibition of Child Labor

Winbond is home to talents with the core value of "Conduct business with integrity and ethical behavior, Accountable team work, Enthusiasm of learning, Aggressively innovate, Sustainable contribution". In addition to complying with domestic and international labor regulations and the Responsible Business Alliance (RBA), we place great emphasis on employees' rights and wellbeing. No individuals under the age upon the completion of the compulsory education can be hired. We comply with laws with respect to related protective measures of employees. If the fact of misuse of child labor is found, it may be reported to the Company spontaneously through various complaint channels within the Company. The HR Department shall adopt the following procedures to provide appropriate assistance to such employees before terminating the employment according to the Labor Standards Act.

1. Analyze and ask the reason for such employees to work here and give appropriate help and remediation.
2. Notify the parents of such employees and send them to their hometown, parents or guardians and inform the caregivers about the legal requirements and related regulations.
3. Ensure the health of such employees in accordance with the "Health Management Practices".
4. Encourage such employees to return to school to complete their studies and provide financial assistance to those in need.
5. Depending on the family's financial situation to provide suitable job vacancies for suitable family members to help them improve the financial situation.
6. Review the process and identify the cause of the fault and improve accordingly.



5.2 Employee Benefits and Rights

Winbond spares no efforts to retain talents and offers a salary and benefit system that surpasses the requirements as stipulated by law. Aside from reviewing relevant laws and regulations on labor wages and benefits on a quarterly basis, the Company adjusts its pay and benefit standards in accordance with market conditions in the industry so as to safeguard the employees' quality of life and attract more talents to join us.

Winbond provides a competitive salary and benefit system, diversified opportunities for learning and growth, as well as a LOHAS-enabling working environment that allows everyone to pursue their dreams and fulfill their life goals with passion.

5.2.1 Compensation and Performance Management

To attract top talents, Winbond offers the most competitive salary and an immediate bonus system to share employees' operational successes instantly. Bonuses and employee dividends are distributed based on employees' performance and fulfillment of organizational goals.

In 2018, Winbond raised the basic monthly salary standard for inexperienced employees to 1.4-1.8 times the minimum salary required by law. Additionally, performance-based salary adjustment and bonuses were also practiced. Every employee at Winbond receives equal opportunity for salary, benefit, assessment, and promotion, regardless of gender, race, color, religion, political affiliation, sexual orientation, age, marital status, pregnancy, disability, blood type, star signs or union membership. The annual salary of employees with the highest salary of the Company in Taiwan divided by the median annual salary of employees is about 21 times. In 2018, the salary increase ratio increased by about 5.51 times the amount of median salary compared to 2017.

Ratio of staff standard salary to local minimum salary

Frontline employees ^(Note 1)	1.4 times
Supportive employees ^(Note 2)	1.8 times

Note 1: Calculated using the basic monthly salary of an inexperienced worker.

Note 2: Calculated using the basic monthly salary of an inexperienced worker who has a university degree.

*The standard salary does not vary by gender



Item	2017	2018
Full-time employees in non-managerial positions	2,450	2,631
Total salary of full-time employees in non-managerial positions (NTD)	3,782,009,000	4,614,619,000
Average salary of full-time employees in non-managerial positions (NTD)	1,544,000	1,754,000

Ratio of average male salary to average female salary

There is no difference in the basic salary of the male and female basic level employees in the Company. The remuneration is offered to our employees in accordance with their positions, education background and experience.

Type of employee	Female	Male
Senior managers (Note 3)	1.0	1.0
Middle managers (Note 4)	1.0	1.0
Non-managers	1.0	1.1



Note 3: Executives above division level

Note 4: Department and section level executives

Bonuses



Winbond Star Prize

Significant contributors (individuals or teams) of the Company whose work demonstrates Winbond's corporate culture (Conduct business with integrity and ethical behavior, Accountable team work, Enthusiasm of learning, Aggressively innovate, Sustainable contribution) are commended on a quarterly basis.



Special bonuses

Employees with outstanding performance in regular work or in specific projects are rewarded immediately.



Operating performance bonuses

Operational achievements are celebrated with employees on a quarterly basis according to operational performance.



Employee's compensation

Each year, the Company's profit sharing the amount of profit shared with employees is based on company business status, regulations and individual contribution and performance.



Incentives and bonuses

Team-building activities are organized regularly to enhance morale of the staff and maintain a good working atmosphere.



Patent bonuses

Employees are encouraged to engage in inventions with respect to product design, manufacturing, testing, application, and marketing to promote patent creation.

Performance Management

Winbond's performance management system is designed for the supervisors to ensure that all staff work toward the same performance objectives. It also helps the supervisors to learn every individual's performance so as to provide them with assistance to develop competency. In this way, the overall competitiveness and organizational productivity are also improved.

Newly hired staff are assessed during the probation period. The employees' personal feedback and supervisory evaluation results are used at an early stage to determine whether the newly hired are qualified. Regarding performance management, performance goals are set at the beginning of the year, which are checked every six months for progression through the performance review system. Additionally, mid-year and year-end assessments are performed to appraise the performance of the employees. The evaluation results are used as a reference for bonus, promotion, and performance counseling. In 2018, 100% of the frontline and supportive staff received performance appraisal.

5.2.2 Employees' Benefits

Winbond is home for every employee here. Winbond provides comprehensive and high-level benefits to cater for the needs of the employees and their family. In addition to statutory benefits such as labor insurance, national health insurance, and pension funds, we also provide group insurance and childcare subsidies which exceed the average standards in the industry.

The employees' benefits include salary, bonuses on three festivals, special bonus, performance bonus, pension and others. The total expenditure on employees' benefits was NT\$9,368,963 thousand dollars (including those of the subsidiaries) in 2018, which included NT\$8,947,267 thousand dollars for the benefits (Note 1) of short-term employee, and NT\$ 421,696 thousand dollars for the benefits after retirement.

▼ Proportion of benefits

Percentage of short-term, long-term benefits and retired benefits divided based on the payment period.



Note 1: Short-term employee benefits refer to the benefits payable at the end of the current period upon employees' completion of a 12-month service (excluding termination benefits).

Group Insurance

In addition to labor insurance and health insurance as stipulated by law, employees at Winbond also receive comprehensive group medical insurance covering life insurance, accident insurance, hospital medical insurance and cancer insurance, not only to protect employees, but also to protect their spouses and children. Additionally, self-financed group insurance schemes are also available for the employees themselves, their spouses, children and parents. Such schemes may provide additional coverage to make up the deficiency of regular labor insurance and health insurance so that our employees can feel more at ease when working.

Minimum Notice Periods Regarding Operational Changes

If there are major operational changes, the Company will give specific explanation to employees through the labor-management meetings. When making a severance, the Company shall give the following notice periods as prescribed in the Labor Standard Act:

1. Where a worker has worked continuously for more than three months but less than one year, the notice shall be given ten days in advance.
2. Where a worker has worked continuously for more than one year but less than three years, the notice shall be given twenty days in advance.
3. Where a worker has worked continuously for more than three years, the notice shall be given thirty days in advance.

Pension Plan

In accordance with the local law, Winbond provides either the "old" or the "new" retirement pension plan for every full-time employee. For employees who apply to the old pension system of Labor Standards Act, in addition to the prescribed appropriation at 2% of the total monthly salary, the annual quota will also be reviewed annually. If the amount is inadequate to pay pensions calculated for workers retiring in the same year, the employer is required to make up the difference in one appropriation before the end of March the following year and deposit the pension contributions in the Bank of Taiwan in the name of Business Entity Supervisory Committee of Labor Retirement Reserve. The proportion of appropriation is reviewed annually; for the new pension system of Labor Pension Act, Winbond appropriates 6% of the monthly salary into the employees' personal retirement accounts based on the table of monthly contribution wage classification. The employees may, according to his/her wishes, contribute the pension to personal designated account within 6% of the salary according to the table of monthly contribution wage classification.



Leave System

▀ LOHAS Vacation

To enable our employees to achieve work-life balance, Winbond provides LOHAS vacation surpass standards required by the Labor Standards Act. Employees can enjoy seven days of LOHAS leave during their first year (prorated based on duration of employment) instead of waiting a full year before they are entitled to vacations as stipulated in the Labor Standards Act. Winbond also offers a flexible leave system that allows employees to take leave in hourly increments, offering more choices and flexibility. We further encourage employees to take longer vacations from annually leave and share more leisure time with family and friends, fulfilling a healthy work-life balance and adding colors to their lives.

▀ Respect for human rights and equality

At Winbond, all employees are treated equally with respect to leaves, and human rights are respected. Aboriginal employees are entitled to a yearly one-day leave on the day of tribal rituals. Winbond adheres to the Act of Gender Equality in Employment, and all employees may apply for leaves on the basis of menstrual leave, fetal leave, routine prenatal visit, maternity leave, paternity leave, parental leave without pay and family care leave.



Applications for leave on aboriginal rituals and ceremonies

Year	Total number of aboriginal employees	Applications for leave on aboriginal rituals and ceremonies	
		Number	Percentage
2016	4	4	100%
2017	6	3	50%
2018	5	1	20%



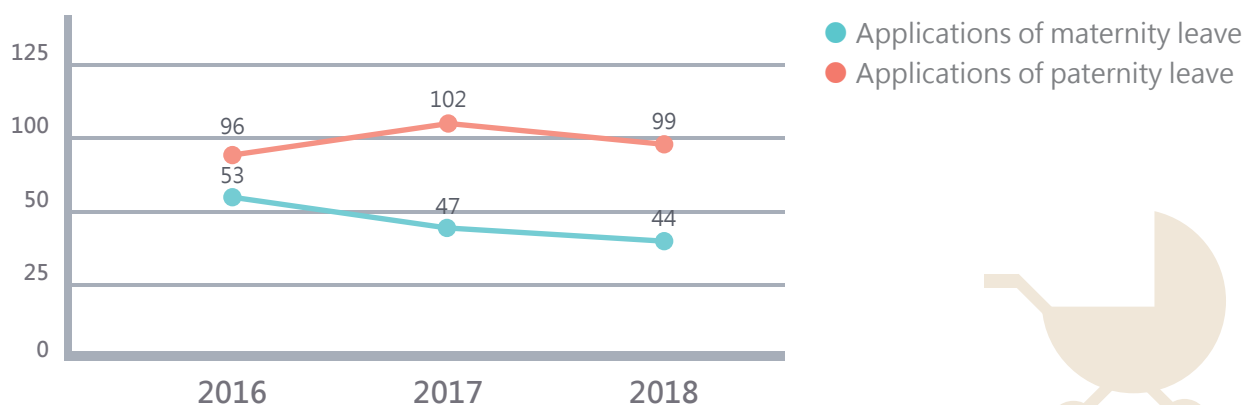
Parental Leave and Reinstatement Rate

We are committed to providing a work environment where employees maintain a mind-body balance. We adhere to the Labor Standards Act and the Gender Equality Act so that we can strike a work-family balance. If the employees have the need to take care of the young children under 3 years old, we will assist them in applying for parental leave. We will help arrange our colleagues to return to their original units and duties after the parental leave. In 2018, 15 employees were on parental leave without pay, while the reinstatement rate after the parental leave was 100%.

Applications of maternity and paternity leave

Year	Total number of employees		Application for maternity leave		Application for paternity leave	
	Female	Male	Number	Percentage	Number	Percentage
2016	790	1,577	53	6.71%	96	6.09%
2017	837	1,678	47	5.62%	102	6.08%
2018	882	1,878	44	4.99%	99	5.27%

Note: The number in the table includes the staff and engineering assistants at the headquarters (the employees on a leave without pay are not included).



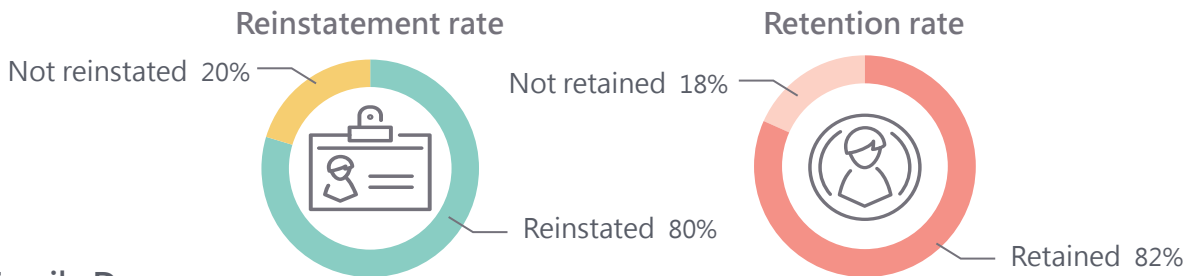
- The number of persons on parental leave and the number of reinstatement during 2018

Type	Male	Female	Total
Number of people eligible for parental leave without pay ^(Note 1)	377	165	542
Number of people applying for parental leave without pay	2	13	15
Expected Reinstatements (A) in 2018	2	8	10
Actual Reinstatements (B) in 2018	2	6	8
Reinstatement rate (B/A)	100%	75%	80%
Number of reinstated employees in 2017 (C)	0	11	11
Number of people working for more than one year after reinstatement (D) ^(Note 2)	0	9	9
Retention rate (D/C)	--	82%	82%

Note 1: The statistics include the employees who applied for maternity leave and paternity leave from Jan. 2, 2015 to Dec. 31, 2018 and are still in service as of Dec. 31, 2018 (including leave without pay).

Note 2: The calculation period started from the effective date of the employees' reinstatement and continued for one year without resigning (as of Dec. 31, 2018).

▼ The number of persons on parental leave and the number of reinstatement during 2018



Family Day

Winbond holds the Family Day every year, which not only enables our employees' family to better understand Winbond, but also shows that Winbond pays attention to the meaning of LOHAS and a healthy family-work balance in the employees' lives. In 2018, the Winbond Family Day Event was held in West Lake Resortopia with the theme of "Winbond Happy Holiday", and the core of this event was to focus on the family time in nature and with diverse leisure facilities to enable our employees to relieve from the pressure at work and also to enhance their relationship with family members, hoping that the employees at Winbond can continue to show the brand new atmosphere full of positivity and vitality.



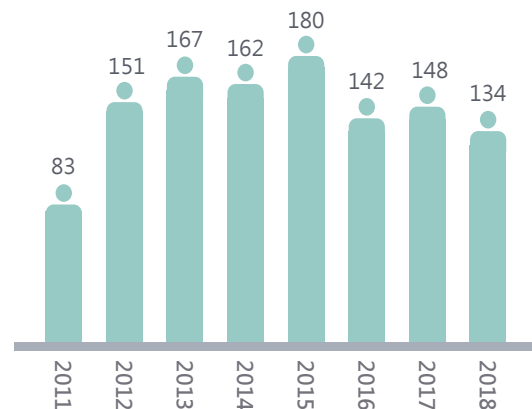
Child-rearing Allowance

To raise childbirth rate in Taiwan, Winbond has implemented a "Child-Rearing Allowance" policy since April 2011. The allowance is NTD 5,000 for each child per month until they reach 4 years old. The employees' childbirth rate has been effectively raised. A total of 1,167 applications have been made for subsidies from 2011 to 2018, which not only helps novice parents reduce the financial burden of parenting, but also enhancing the reinstatement rate and the sense of happiness of our employees.



▼ Number of children receiving allowances

Item	Description
Content of allowance	Sum of allowance: NT\$ 5,000 every month for every new born child Allowance duration: Until the child reaches the age of 4
Implementation	Number of applications: A total of 1,167 applications have received the allowances during 2011 to 2018.



This allowance was originally scheduled to be terminated in March 2016; however, due to the excellent effects in promoting fertility, it was decided to be extended to 2020. By 2018, a total of 95 male and 27 female employees have been granted the subsidy with a total subsidy amounting to NT\$31.68 million. Statistics show that the employees who have received the subsidy have a lower turnover rate than the Company's average, showing that the policy has not only played a positive role in retaining talents, but also earned the Company a reputation as a model enterprise safeguarding employees' well-being.

Childbirth and Marriage Allowance

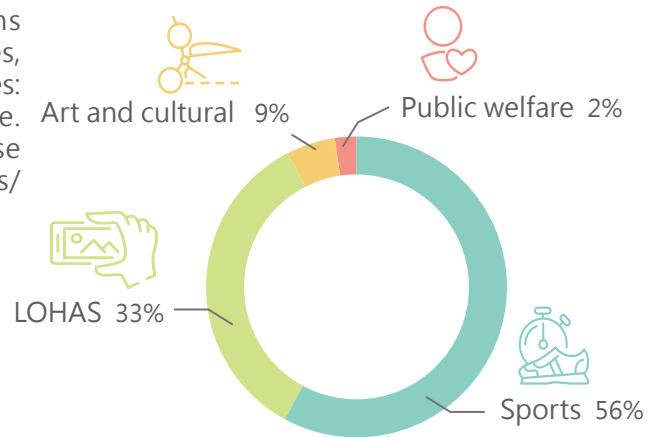
In addition to the Childcare Allowance, Winbond also provides the employees Marriage and Childbirth Allowance. In 2018, a total of 30 male and 12 female employees received marriage subsidies, and 89 male and 21 female employees received maternity benefits, with a total sum of NT\$ 228,000.

Diversified Development of Associations

▀ Associations Overview

Participation in health promotion associations and promotional activities for public interests is encouraged in Winbond. The Company has formulated the "Regulations for Management of Staff Welfare Committee Subsidy" to encourage employees to run associations to enhance emotional communication and improve their physical and mental health and work efficiency.

Currently, there are 46 registered associations and 1,277 members. Based on the nature of activities, these associations can be classified into four categories: sports, LOHAS, art and culture, and public welfare. The number of participations of all activities of these associations is estimated to be 55,620 person-times/year.



Sports associations:

There are 26 sports associations, including balls, cycling, road run, accounting for 56% of the total. Many of the members are high-level executives, whose membership greatly promotes the participation of the whole department. The CTSP site Badminton Association and the Softball Association are frequent winners of the "Central Taiwan Science Park Cup Ball Games."



Art and cultural associations:

It includes the biodiversity association, anime association, and photography club. These associations make use of existing resources of the Company to organize activities, such as holding lectures, annual photography exhibitions, and film appreciation events. Activities under this category attract the highest proportion of family participation.



LOHAS associations:

This is the most diversified category that includes associations for entertainment guides, camping, and board games. Diversified association activities may expand the members' visions and develop their interests.



Public welfare associations:

The Silence Association engages in actions that are beneficial to public welfare to fulfill our responsibility as a corporate citizen. Activities are focused on caring for the underprivileged, social services, environmental sustainability, and so on. Since its establishment in 2010, the association has organized a series of activities including neighborhood cleaning, dream fulfillment project, cleaning of nursery homes, and happy children's breakfast program, just to name a few.



► Photos taken in association activities



Biodiversity Association



Aerobic Rhythm Association



Basketball Association



Paper Clay Association

5.2.3 Communication Channels

Winbond provides multiple, open and transparent channels to promote real-time two-way communications, including the establishment of suggestion boxes, grievance hotlines, grievance mailboxes, sexual harassment handling committee, and different functional communication meetings, such as labor meetings, executive management seminar, staff welfare committee, environmental safety committee, production management meetings, and quality re-education meetings. In addition, employees may also express their views or suggestions through various channels either in their names or anonymously. In addition to providing diverse communication channels, Winbond also collects employees' opinions through focus groups and individual interviews as the reference for the management policies and basis for the improvement of service quality.



Suggestion Box

Suggestion boxes are placed near staff cafeteria and production line lounges to solicit employees' ideas or suggestions with respect to their work and life. By the end of 2018, 3 proposals have been received and processed through the suggestion boxes.



Grievance Hotline

The Company has set a grievance hotline (75234) for employees. In 2018, 2 grievance cases were reported and handled properly. In addition, to build a work environment free from sexual harassment for the protection of the rights of staff and job seekers, Winbond formulated the "Workplace Sexual Harassment Prevention Rules" and established the "Sexual Harassment Appeal Committee" with a dedicated Website for workplace sexual harassment prevention. Up to 2018, no cases of sexual harassment have occurred since the establishment of the rules.



Labor-management meetings

The Company convenes labor-management meetings to achieve instant two-way communication. By periodical re-election of labor representatives, all employees' opinions and suggestions are collected. Meetings are held to address issues such as labor relations coordination, labor-management cooperation, labor conditions and welfare, and work efficiency enhancement through sufficient communications. The conclusions reached in the meetings apply to all staff. During 2018, 8 labor-management meetings and 2 briefings were convened, and a total of 6 problems reported in the meetings were addressed.

Executive management seminar

The purpose of the management seminar is to enable all executives to directly interact with the chairman and the president on issues related to the Company's operation and managerial system. 4 executive management seminars were held during 2018, and these seminars were attended by a total of 1,324 participants.

Plant communication meetings

Plant communication meetings are held twice yearly by plant supervisors to communicate directly with the operational staff regarding managerial or production issues. Additionally, re-education courses related to quality or RBA are also arranged, providing opportunities for departmental supervisors and operational staff to interact and exchange ideas in a face-to-face manner.

Thanks to the complete communication network and mechanism, Winbond is able to maintain a harmonious labor relation. No losses have occurred because of labor disputes since its establishment.

Records of opinions and grievance from the communication channels at Winbond's headquarters in 2018:

Communication Channels	Number of cases received	Number of closed cases	Response rate (%)
Suggestion box	3	3	100%
Grievance hotline/mailbox	2	2	100%
Sexual harassment complaint mechanism	0	0	100%
Labor-management meetings	6	6	100%

5.3 Talent Training

Talents are the most important assets of Winbond. We offer personalized learning courses that integrate the company's vision, business philosophy and cultural values with employees' personal needs, covering four categories of self-development, core consensus, professional skills, and management functions. It is the Company's goal to continuously cultivate employees' competency and promote self-development while aiming at innovative technology.

According to the training development cycle, the annual programs are arranged by analyzing the needs, then the training activities are planned, and the effectiveness of which will be evaluated. The actual implementation rate of the learning courses was 86% in 2018.

Vision

Winbond is dedicated to being an excellent semiconductor company by implementing its advanced design skills and production technologies, and integrating its global employees' innovation and intelligence. Winbond has built up its competitiveness of all its product lines in the industry.

Operating Philosophy

Business Integrity,
Customer Satisfaction,
Embrace Change and
Partnership and Alliance

Culture

Conduct business with
integrity and ethical
behavior, Accountable team
work, Enthusiasm of learning,
Aggressively innovate,
Sustainable contribution

5.3.1 Diversified Employee Training Mechanism

Talent is a key element to Winbond's success. The company provides employees with comprehensive training programs. As part of the organizational strategy, we combine the company's vision, business philosophy, and cultural values into high quality learning courses tailored to each individual's learning needs, providing each employee with opportunities for continuous growth and development.

Winbond's annual training programs are developed on the basis of multiple needs analysis (corporate strategy requirements, executive leadership, and employee skills development), followed by planning and resource allocation of the programs. Training sessions are scheduled to be provided at the appropriate time. The effectiveness of the learning courses is verified through multiple tests such as satisfaction surveys, curriculum quizzes, reflection of work execution and supervisors' observation to ensure that the training objectives are achieved in the support of employees' professional development.



All training and development activities, such as work culture, professional skills, common skills, and executive leadership are integrated with the Company's overall development and employees' individual career plan. In addition to lectures, various types of learning activities (e.g., seminars, games, group competitions) are arranged according to the characteristics of the course to allow a more lively and practical learning experience.



All the training activities emphasizing innovation and quality are carried out to meet customers' needs and contribute to the company's objective of business sustainability.

5.3.2 Management Function

Winbond believes that continuous learning constitutes the cornerstone of innovation. The company provides the staff with a variety of training resources and activities to enhance their professional competency. For the frontline employees, the training is focused on the on-job-training, machine-based training, and corporate culture or strategy campaigns. For the supportive employees, 75,979 hours of training was provided in 2018, attended by 2,412 persons, with an average of 31.5 hours per capita. Winbond adheres to the concept of gender equality and provides professional training to staff at all ranks. However, due to the fact that most female employees are in administrative units, and that the professional knowledge needed can be obtained through on-job-training, male employees, therefore, have slightly more training hours per capita than female ones. An overview of these training programs is outlined below.

New employee Orientation

We provide life coaching, cultural propaganda and the Company's policy introduction so that new employees can fit into the corporate culture rapidly.

Management Competence

We strengthen the management competence based on the Company's development strategy each year. We arrange the basic management skills training for the new managers such as leadership communication, interview skills, performance settings and counseling courses. The training for low-level managers focuses on execution ability and coaching and counseling related management courses. The training for medium-level managers focuses on advanced management competence training, and the one for high-level managers is about sharing the concept and methods of management. The inheritance and improvement of management and leadership of the managers at Winbond is therefore made possible with these training programs.

Professional techniques

Internal Professional Training Committee at Winbond prepares a solid professional training blueprint based on the actual needs. The professional ability enhancement courses are provided according to the staff's different functions of the organization and professional seniority. Through the internal lecturers' professional and technical heritage and sharing and external lecturers' instruction, our employees' professional and technical competence can be developed.

Core Consensus

Based on the company's corporate culture and strategy development, we provide employees with diversified and important training, develop their abilities for innovation, problem solving, and enhancement of their identity toward the corporate culture. Through training activities, the staffs' competence, engagement and cohesion can then be strengthened.

Self-development

In addition to cultivating professional skills and management competence for staff, we also provide a variety of learning channels. Employees can apply for training through various learning channels according to their own needs, such as on-line English courses, in-service training applications, participation in overseas symposiums or seminars. Employees can rely on multiple channels for upgrading their professional skills.



Group	Male			Female			Total		
	Training hours (A)	Number of employees (B)	Hours per person (C)=(A)/(B)	Training hours (D)	Number of employees (E)	Hours per person (F)=(D)/(E)	Training hours(G)=(A)+(D)	Number of employees (H)=(B)+(E)	Hours per person (I)=(G)/(H)
Executives (Note)	18,219	381	47.82	1,255	44	28.52	19,474	425	45.82
Nonexecutives	45,663	1,506	30.32	10,842	481	22.54	56,505	1,987	28.44
Total	63,882	1,887	33.85	12,097	525	23.04	75,979	2,412	31.50

Note: Executives refer to those whose position is higher than the section supervisor; non-executives refer to the training hours of supportive staff.

High Ethical Standards

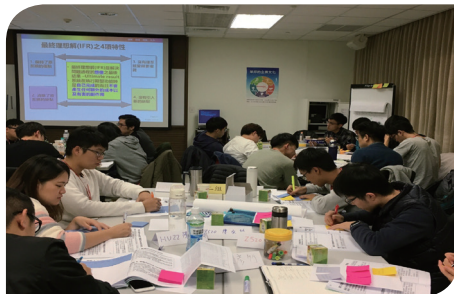
Winbond is committed to the implementation and promotion of its CSR policy and RBA guidelines. In addition to pronouncing its determination of adhering to RBA norms, Winbond also offers assistance to the employees to deepen their understanding of CSR and RBA norms, allowing them to gain an in-depth understanding of international trends, industrial standards, and customer requirements. By the end of 2018, the CSR course (including labor rights, environmental protection, health and safety, and ethical norms) has been offered to a total of 2,893 trainees, with a total of 1,447 training hours and a 100% completion rate.

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5.3.3 Professional Technology

Innovation and Growth

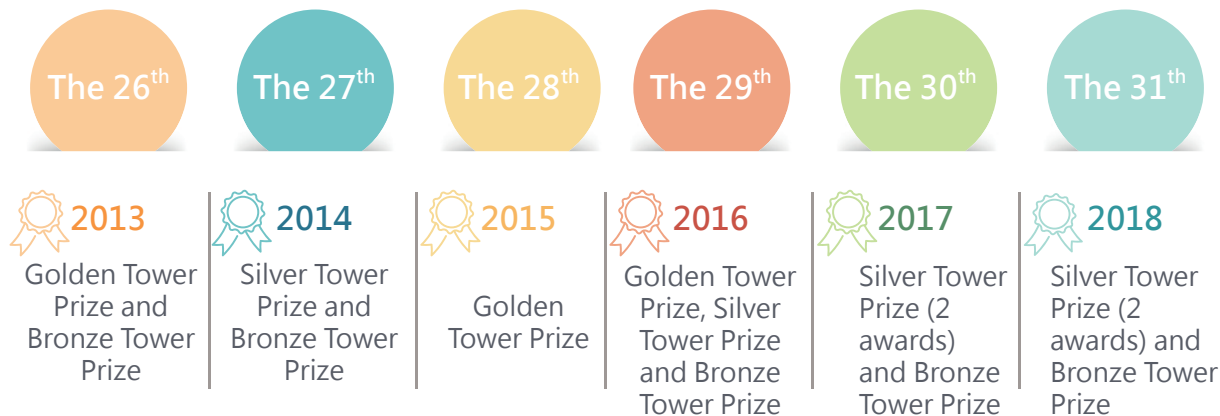
In recent years, innovation has become an indispensable part in the pursuit of a company's business excellence. We continue to promote TRIZ training courses. In 2018, a total of 155 trainees have attended courses related to innovation and invention tools, with a total of 1,079 training hours.



The Pursuit of Quality - the Service Value

Through a continuous improvement process, Winbond strives to establish a corporate culture that features total quality management and "quality first" philosophy. It is committed to becoming a world-class company that provides every product and service to the customers' satisfaction.

To achieve these objectives, Winbond implements foundational and advanced training on quality management every year, and all staff are obliged to take part in the quality and reliability assurance initiative. Every department and individual are responsible for making "zero defect" in their operation. At the same time, Winbond also encourages its employees to participate in the "Taiwan Continuous Improvement Awards" organized by the Ministry of Economic Affairs, in which they can develop a team spirit, strengthen the organization and improve the competitiveness. The competition process is rigorous. Selection among the north, central and south areas should be conducted first to be able to enter on-site review and even to the final announced by the general assembly. The Golden Tower Prize, Silver Tower Prize and Bronze Tower Prize will be awarded according to the total score. From 2013 to 2018, Winbond has won 14 awards in total, including 3 Golden Tower Prizes, 5 Silver Tower Prizes, and 6 Bronze Tower Prizes.



5.3.4 Core Consensus

New Employee Champion Camp

Winbond has launched a two-week training program since the second half of 2016, which aims at helping new employees with work experience of three years or less to quickly fit into the company, learn the skills needed for work, embed cultural DNA in them as cultural seeds, and enhance organizational commitment and willingness of retention. The retention rate of new recruits who attended the orientation was 98%, higher than the average retention rate of 95% during 2014 to 2017.





New Employee Training Courses

Understanding the corporate culture

- Company system / work specification
- Company environment
- Corporate culture
- Corporate strategy
- Company products and the operation of each department

KSA required to learn for work

- Professional skills
- Self-learning ability
- Communication and interpersonal skills
- Problem analysis and solution
- Work plan and execution

Establishing interpersonal networks

- Establish relationships and social support systems
- Relationship with colleagues
- HR partner system

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5.3.5 Self- development

School of Artificial Intelligence

Since the second half of 2017, the "Artificial Intelligence Foundation Course" has been organized at the Institute of Artificial Intelligence to help employees understand more aspects of artificial intelligence and to incorporate cultural factors of "learning enthusiasm" to enhance self-learning ability and organizational productivity. The number of participants in the two sessions reached 3,112, with a total of 9,336 hours of training.

The fields of Artificial Intelligence Foundation Course

Humanities and Social Science

- Philosophy
- Linguistics
- Science, Technology and Society
- Psychology and Neuroscience

Computational Science

- Software and System Innovation
- Algorithm
- Data Science
- Computing System
- Mathematics/ Statistics



Diversified training programs

Each position requires a specific set of professional skills. On-the-job coaching helps the employees to get started more easily; with the learning from experiences in industry-academy cooperation, overseas placement and training, overseas seminars, and specialized counseling and training on major projects, the employees will continuously enhance their professional and technical competence as individuals and as a team.



Winbond's E-Learning System

Winbond's E-learning system provides our employees the best self-training system to learn and grow at any time.

E-learning courses:

Winbond provides newcomers and employees with multiple learning channels for them to learn more about the company' s systems and regulations through online learning. For those who want to improve their abilities, they can arrange their own courses based on their needs, such as professional skills training, language abilities, business management and so on to respond to Winbond' s corporate culture of learning with passion. Digital courses accounted for 60% of the total courses in 2018.

Complete internal/external training record:

Through the digital learning platform, detailed internal and external training records of our employees can be thoroughly kept, including learning satisfaction, assignments, reviews and feedback.



Benefits of the introduction of the e-learning system:

1. Learning Anytime, Anywhere: Our employees can flexibly arrange their own training and the learning pressure can be reduced and the poor absence and poor learning conditions limited by time and space can be avoided.
2. Diffusion Learning: Under the limited resources and participants, more quality courses can be provided to our employees through the digital teaching materials to expand the scope of learning. Take the Basic AI course for example, considering the quality of the course, under the condition of limited trainees, digital teaching materials can be made to provide another learning channel for those who are interested and even for those who miss the course to avoid interruption of learning so as to facilitate knowledge transfer and diffusion for the enhancement of our core competitiveness.
3. Reduction in learning costs: Digital courses can save the commuting time, transportation expenses, costs of printing and time costs for both the lecturers and trainees. Take the new recruits with high demands for training for example, the e-learning system can help our new employees get to know the systems and regulations of the company faster. For newcomers in different departments, digital courses enable the passing on of professional skills and experience to accommodate the needs for a large number of physical courses, which not only saves time, increases efficiency but also reduces costs.

5.4 Occupational Safety & Health and Health Promotion

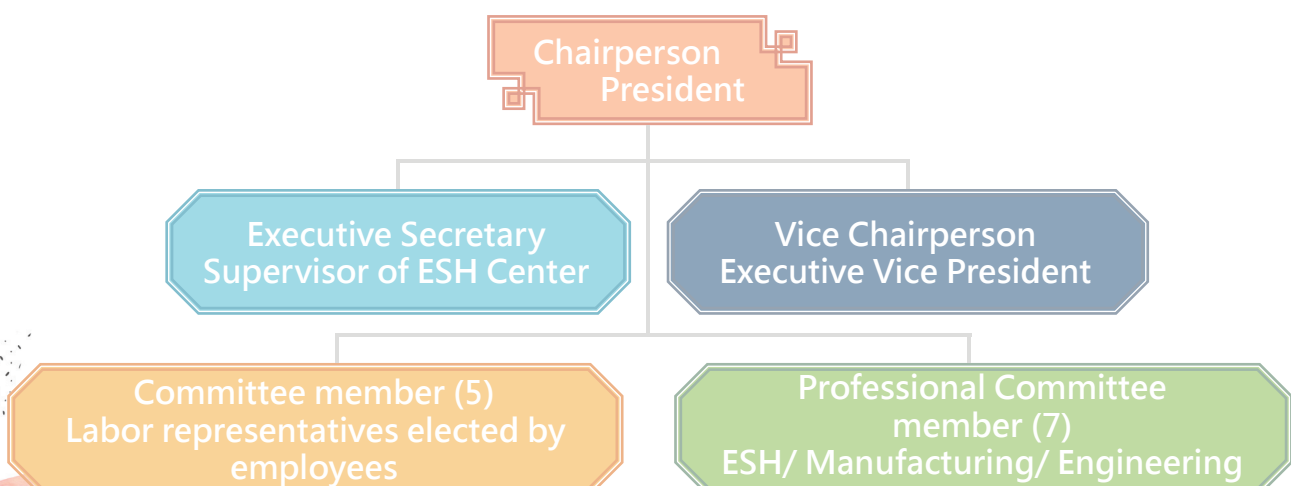
Winbond is committed to achieving the highest standards of environmental, safety and health performance, and providing a safe and healthy workplace through respecting and caring for workers as well as consultation and participation of workers. We will continuously improve occupational safety, eliminate hazards, protect the environment and reduce risks of ESH and property. Besides, health promotion activities are carried out to strengthen cohesion and develop a company culture of health and sustainability. We will implement appropriate management and best practices to prevent injury and property damage. We will continuously improve our ESH performance by reducing work related injury, resource consumption, and pollutants emission. We firmly believe that the concept of safety, health and environmental protection is the key to be a sustainable enterprise.



5.4.1 Safety and Health Management Practices

Winbond's Safety, Health, and Environmental Committee holds meetings to discuss safety, health, and environmental matters on a regular basis. The participants comprise of 15 members including representatives of the management, representatives elected by employees of various units, labor representatives elected by employees through voting, and staff of safety, health, and environmental management. Employee representatives elected by the staff account for one-third (5), enabling sufficient face-to-face communication between employees and the management. Furthermore, a secretary in charge of safety, health and environmental protection is appointed in each department to assist with the counseling and promotion of safety, health, and environment-related business among all staff. The Committee formulates safety, health, and environmental policies. The Company does not have a trade union.

The organization chart of the ESH and Risk Management Committee is as follows:



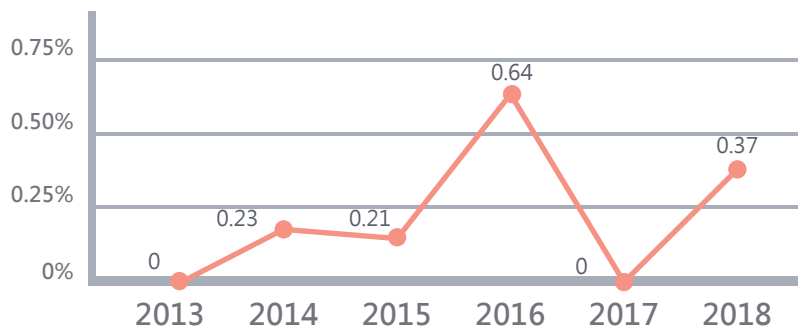
Statistics of Disabling Injury

Based on the critical statistical indicators for disabling injury released by the Ministry of Labor, Winbond's statistical data on occupational accidents are calculated by selecting disabling severity rate (SR, days of disabling severity per million work hours) and disability frequency rate (FR, frequency of disabling severity per million work hours). The statistics does not include off-site traffic accidents. There were two cases of disabling injury in 2018. The SR was 6, and the FR was 0.37. Improvement measures for the injury cases have been proposed to strengthen discipline management, increase the frequency of patrol inspections and supervisory inspection at night.

The number of fatal accidents was 0, and the incidence of occupational diseases was 0. In Taiwan region, the absence rate of the whole company due to diseases (including work-related injuries but excluding menstrual leave) was 0.44%, with the male/ female absence rate being 0.37%/0.6% respectively.

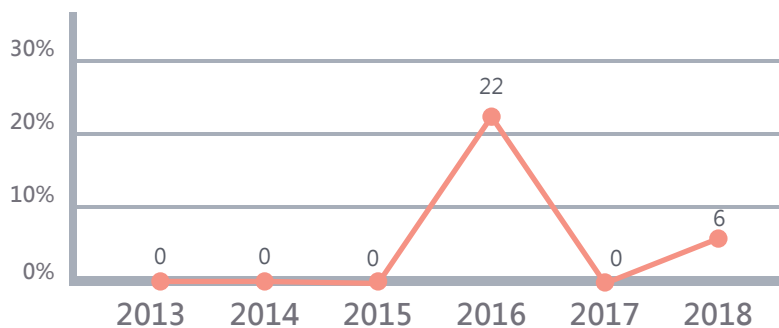
In 2018, there was 0 case of disabling injury with our contractors, with the SR and the FR both being 0.

▼ Disability frequency rate



● Disability frequency rate (Frequency of disabling severity per million work hours / per million work hours)

▼ Disabling severity rate



● Disabling severity rate (Days of disabling severity per million work hours / per million work hours)

ESH Training

Gender	Male		Female		Total	
Employee	Man-time	Hours of training	Man-time	Hours of training	Man-time	Hours of training
Executives (Note)	1,245	1,460	150	144	1,395	1,604
Non-executives	5,144	7,851	2,486	3,119	7,630	10,970

Note: Executives refer to section level executives and above but does not include the position of factory supervisor and department level executive or above.

Occupational Safety and Health Management System

Winbond has been certified by the Occupational Health and Safety Management Systems (OHSAS18001) and the Taiwan Occupational Safety and Health Management System (CNS15506). Internal audits are performed every six months, and external audits by international verification companies are performed annually to ensure proper functions of the system. Among them, the conversion verification of the Occupational Safety and Health System, ISO 45001, is scheduled to be completed in 2019. Winbond strictly complies with laws and regulations concerning safety and health, and implements safety and health management, including safety and health risk assessment, formulation and implementation of safety and health operational requirements, and holding safety and health training and drills.

Winbond has won numerous governmental awards on safety and health, including the "Friendly Workplace Certification" by the Ministry of Labor, the "Health Promotion Badge" issued by the Ministry of Health and Welfare, the "Excellence in Control of Operational Environmental Exposure to Hazardous Substance" and "Excellence in safety of hazardous materials use/ procurement management and high-risk operations management" issued by the Central Taiwan Science Park Management Bureau.

Winbond is actively engaged in the construction and implementation of environmental management system and safety and health management system. With respect to hardware security control, Winbond requires its vendors to provide a SEMI S2 evaluation report that is verified by third-party agencies to ensure safety requirements of the machine are met prior to procurement. A series of safety control measures are taken when the machine is delivered to the plant. Additionally, to ensure safety during installation, an Equipment Sign-Off program is performed to check whether the safety facilities are functioning properly, and whether the built-in firefighting facilities and other safety and environment-related facilities and signs have been completed before putting the machine into operation.

Hazardous Substances Management

To ensure we provide the products that can meet the international environmental laws and the client demands of green products, Winbond has established internal "Hazardous Substances Control Regulations" and set up a cross-departmental hazardous substances management group in Winbond to control the processes from design, purchasing, manufacturing to shipping. Winbond also requests all our vendors and suppliers to incorporate green product requirements into management and ultimately provide Hazardous Substance Free (HSF) products that meet customers' requirements. Winbond is engaged in R&D, procurement, production, operations and services in accordance with the following principles to reduce the impacts of the Company's operations on the natural environment and humans :



1. Reduce the resources and energy consumption of products and services.
2. Reduce emissions of pollutants, toxic substances and wastes and dispose of waste properly.
3. Improve the recyclability and reuse of raw materials or products.
4. Maximize the sustainable use of renewable resources.
5. Extend the durability of the products.
6. Increase the effectiveness of products and services.

The HSF policy is that the Company is committed to complying with applicable regulatory and customer' s requirements by applying Hazardous Substance Free (HSF) concept in all aspects of product design, procurement and manufacturing. The representatives of HSPM holds a management review meeting every year to review and discuss policies, objectives, regulations, relevant audit results and management performance to continuously improve the effectiveness of the Hazardous Substance Process Management System.

5.4.2 Emergency Response Measures

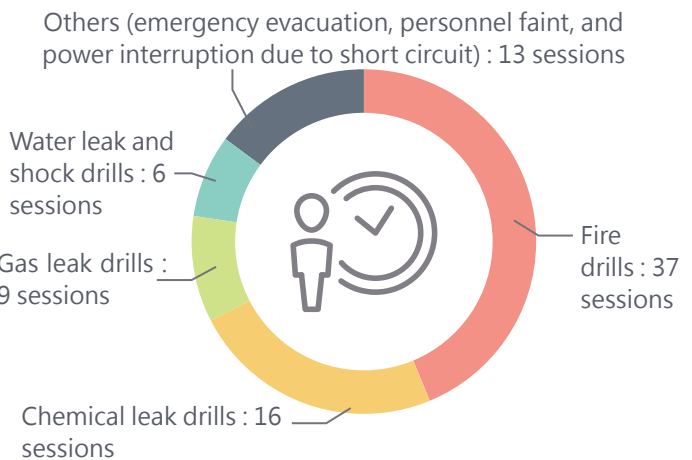
Winbond has formulated an emergency response procedure for internal and external emergencies such as accidents and natural disasters. Based on the procedure, individual units may form their own plans for emergency response, emergency handling teams, drills, and training to minimize personal injury, property damage, and production disruption that may result from various emergencies.

Risk category	Risk identification	Strategic measures/actions
Operational risk	(1) Fire (2) Power interruption (3) Leakage of chemicals (4) Air pollution / abnormal discharge of waste water	(1) Design and build fire protection system according to international standards (NFPA, FM) and domestic firefighting laws, including fire alarm system, automated fire extinguishing systems, and fire compartment. (2) Emergency generators and uninterruptible power supply (UPS) system are supplied. (3) Design and construct plant facilities following international industrial standards and purchase machines that meet international standards (SEMI-S2, FM4910). (4) 24-hour monitoring system for air pollution / wastewater treatment facilities.
Natural disaster	(1) Earthquake (2) Water shortage	(1) Grade 7 Aseismic design for plants and equipment (2) Spare pool
Regulatory risk	Occupational Safety and Health Act, Fire Services Act, Environmental Protection Act	(1) Regularly enforce compliance checks (2) Identify the impact of new regulations and take corresponding measures (3) Conduct regular testing and reporting required by laws and regulations



Emergency response drills in 2018

Item	Total sessions
Fire drills	37
Chemical leak drills	16
Gas leak drills	9
Water leak and shock drills	6
Others (emergency evacuation, personnel faint, and power interruption due to short circuit)	13
Total	81



Winbond has established the content and plans of contingency process for potential emergency and abnormal conditions that may occur in each region and regularly implements emergency response drills to avoid expansion of disaster and improve the response capability of the plants.



Other Measures

1. Drill: We organized the "2018 Chemical Disaster Relief Observation Drill in Central Taiwan Science Park".
2. Co-organizer: We co-organized the 2018 Children' s Painting Series Activities for the Month of ESH in Central Taiwan Science Park.
3. Participation in advocacy sessions: We participated in 27 advocacy sessions held by Central Taiwan Science Park and Environmental Protection Agency of Taichung City Government.
4. 24-hour monitoring of the operating conditions of air pollution and wastewater treatment equipment and the quality of discharged water.
5. Regular implementation of environmental testing of air pollution, perimeter noise, waste water, groundwater, and rain.

5.4.3 Health Promotion

In Winbond, we are devoted to creating a balanced work environment to enable all of our employees to enjoy their work and life. From the viewpoint of health, LOHAS and public welfare, we planned to promote various systems and activities that will help our employees develop a balanced life among health, family and work.

Winbond believes that a high quality and stress-free workplace will bring vitality and happiness to our employees and thereby contributing to their growth. We comply with the laws and regulations regarding the protective measures for female employees and employees under 18 years old. Outstanding employees are provided with generous pay and benefits and opportunities for promotion. We offer a wide range of professional courses, training courses on physical and mental growth, language communication training as well as various communication meetings to foster talents who can implement the corporate values of "Conduct business with integrity and ethical behavior, Accountable team work, Enthusiasm of learning, Aggressively innovate, Sustainable contribution" so that our employees may grow together with the Company in a joyful atmosphere filled with positive energy.

Health Examinations

Winbond offers every employee an annual quality, meaningful health examination and special health examination for those involved in tasks with special health hazards, exceeding the standards required by laws and regulations with the employee's consent. Additionally, a series of regular health check-ups are arranged, including abdominal echo, female breast and pelvic sonogram, pap smear, ophthalmology examination, and physical fitness test. From the perspective of preventive medicine, early screening and preventive measures are beneficial for the promotion of comprehensive health management and promotion.

Winbond complies with the regulations and arranges special health examinations for employees who are particularly engaged in hazardous operations in accordance with the Labor Health Protection Regulations. In 2018, a total of 133 employees received special health examinations. The results were all under Healthcare Management (Level 2). The Healthcare management and promotion measures were divided into different levels in accordance with the law.



Annual health examination



Abdominal echo

Winbond regularly arranges practicing physicians and nurses who are qualified for labor health promotion services and safety professionals to visit the working sites for observing and evaluating potential health risks from a medical point of view for further improvement. This is part of the efforts to provide employees with a safe and secure work environment, reducing risks of occupation-related diseases.

Good Occupational Healthcare

CPR & AED First Aid Training for All Employees

Regarding first aid, Winbond not only has more qualified first-aid personnel than is required, but also arranges first aid training for the medical staff of the Emergency Response Team on a regular basis so that they can perform first aid without delay. In recent years, all-staff CPR and AED trainings have been conducted so every employee could master the most useful techniques. By the end of 2018, a total of 2,113 staff members have received the training.



Advocacy of Illegal Infringement Prevention in the Workplace – Supervisor Training



In terms of unlawful infringement prevention in the workplace, management practices are set up and training and education is conducted in the workplace so that employees can understand the precautionary measures and the procedures for grievance and reporting within the Company. From the grassroots level to the senior executives, 491 people have completed management level education and training courses. We also advocate the precautionary measures to all employees.

Identification of and Dealing with Employees' Problems– Supervisor Training

In order to enhance the supervisors' perception ability of common problems of employees and for supervisors to assist employees in dealing with their problems, related education and training for the identification of employees' problems, dealing with the problems and care for the employees was held. As of 2018, a total of 422 people have completed the management-level training courses.



Excellent Health Management

Maternal Health Management:

In addition to the protective measures for maternal health required by law, Winbond further provides mothers with the following extra maternity care.

1. One on one health counseling is provided. Every mother receives a pregnancy gift and pregnancy card, which allows them to understand Winbond's welfare policies and application methods.
2. A cozy and comfortable noon-break room is provided for these mothers-to-be to take a rest. Additionally, pregnant women are provided with exclusive parking space to help them alleviate discomfort during pregnancy.
3. A cozy and comfortable breastfeeding room is provided. Winbond won the "Fine Breastfeeding Rooms" in Taichung City's Annual workplace Excellence Award" in 2013.



Breastfeeding Room



Noon-break Room

▣ Prevention of overload:

For high-risk groups of cardiovascular diseases, the health management unit keeps track of the health conditions of the employees. Nurses who have received caregiving training are available to provide listening services. If necessary, they can provide referral services for professional counselors and psychologists, or even provide other relevant resources.

▣ Health management of metabolic syndrome:

Winbond provides flexible re-examinations and follow-up tests, free health consultation with a specialist doctor, and nursing care services on a regular basis. In addition, we provide customized classes of weight loss, and substantial incentives are provided for Winbond's employees to be healthier!!

▣ Health management of abnormal liver dysfunctions:

In Taiwan, hepatitis and liver cancer are the two major causes for health risks among labors. In Winbond, the conditions of employees with a high liver function index is regularly tracked by nurses, and health consultation is also provided by specialist physicians.

Health Promotion Activities

To promote a body-mind balance, sports venues are built for the convenience of the employees to exercise. Winbond's leisure center provides a wide variety of sports and recreational facilities including gymnasium, basketball courts, badminton courts, volleyball courts, table tennis courts, billiard courts, children's reading room, and a variety of books, magazines, as well as audiovisual lounges.



Leisure center-aerobic exercise



Tendon-stretching course

To encourage employees to maintain a habit of regular exercise, Winbond not only provides free tendon stretching courses but also offers incentives to promote walking activities. In 2018, a massive calorie collection event was launched. The aim of this even was to help everyone form a habit of exercising to maintain good body figure and health through peer power. The accumulated calories consumed through exercise exceeded 10 million. This calorie collection event continues in 2019.



Release the Stress and Gain the Positive Energy

As far as recreational facilities are concerned, Winbond provides KTV rooms, massage lounges, and video game rooms for the employees to soothe their mind and body.

We have invited experts and scholars to give lectures or speeches on topics such as spiritual inspiration, parenting, and public welfare actions. In 2018, a total of 273 participants attended the lectures and speeches. To improve the employees' abilities to adapt themselves to the pressure and enhance their combat force at work, special lectures on workplace endurance to all staff was provided.

As of 2018, the total of 805 employees completed the training. In cooperation with a professional Employee Assistance Programs Service Center, Winbond offers its staff free and complete counseling services with respect to the employees' work life, family, interpersonal relationship, physical and mental health, mental illness, financial issues and legal consulting.

新專線 心服務

諮詢專線
08**-0**-6**

- 服務時間：週一至週五 09：00～19：00
- 服務地點：同仁可選擇於公司內會議室 或 與督導提供之地點
- E-mail信箱：eap@newmind.com.tw
- 員工協助服務方案

● 員工協助服務方案：與「新思維企業管理整合諮詢有限公司」合作，為所有同仁提供諮詢服務。您可以選擇電話或面談等方式與顧問諮詢，每次以60分鐘計，每人每年至多三次服務，費用由公司負擔，請同仁珍惜資源善用之。
服務室地址：

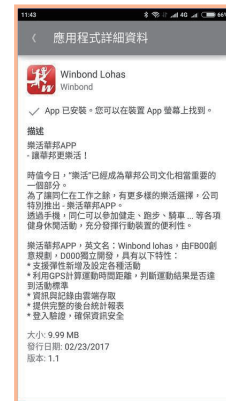
Winbond LOHAS APP

Winbond LOHAS brings more happiness and joy to life!

The term, LOHAS, has become an important part in Winbond's corporate culture. To enable our employees to have more choices for LOHAS lifestyle, we launched an App named Winbond LOHAS to encourage our employees to keep regular exercise and to invite more people to join us for the sake of a healthy and strong body. Our employees are encouraged to walk everywhere to accumulate the mileage of exercise. This App is popular and has obtained enthusiastic response among our employees.

In 2018, new function of famous spot check-in was added to encourage people to go out to not only enjoy the beauty of Taiwan but also enhance their physical strength.

Statistics show that in 2018, there were 26,149 people participating in walking activities, covering a total distance of 68,621 km, which is equivalent to 58 laps around Taiwan.





6. Participation in Public Welfare to Spread Selfless Love

6.1 Charity Events

6.2 Helping the Underprivileged

6.3 Caring for Children and Teenagers

➤ In 2018, the accumulated number of people served was **234** and the accumulative service hours was **419 hours**.

➤ In 2018, a total of **71 computers** were donated to help underprivileged children in Nantou, Taichung, Tainan and Penghu.

➤ In 2018, a total of **NTD 2.5 million** was raised from 803 employees, providing 625 children a whole year of support.

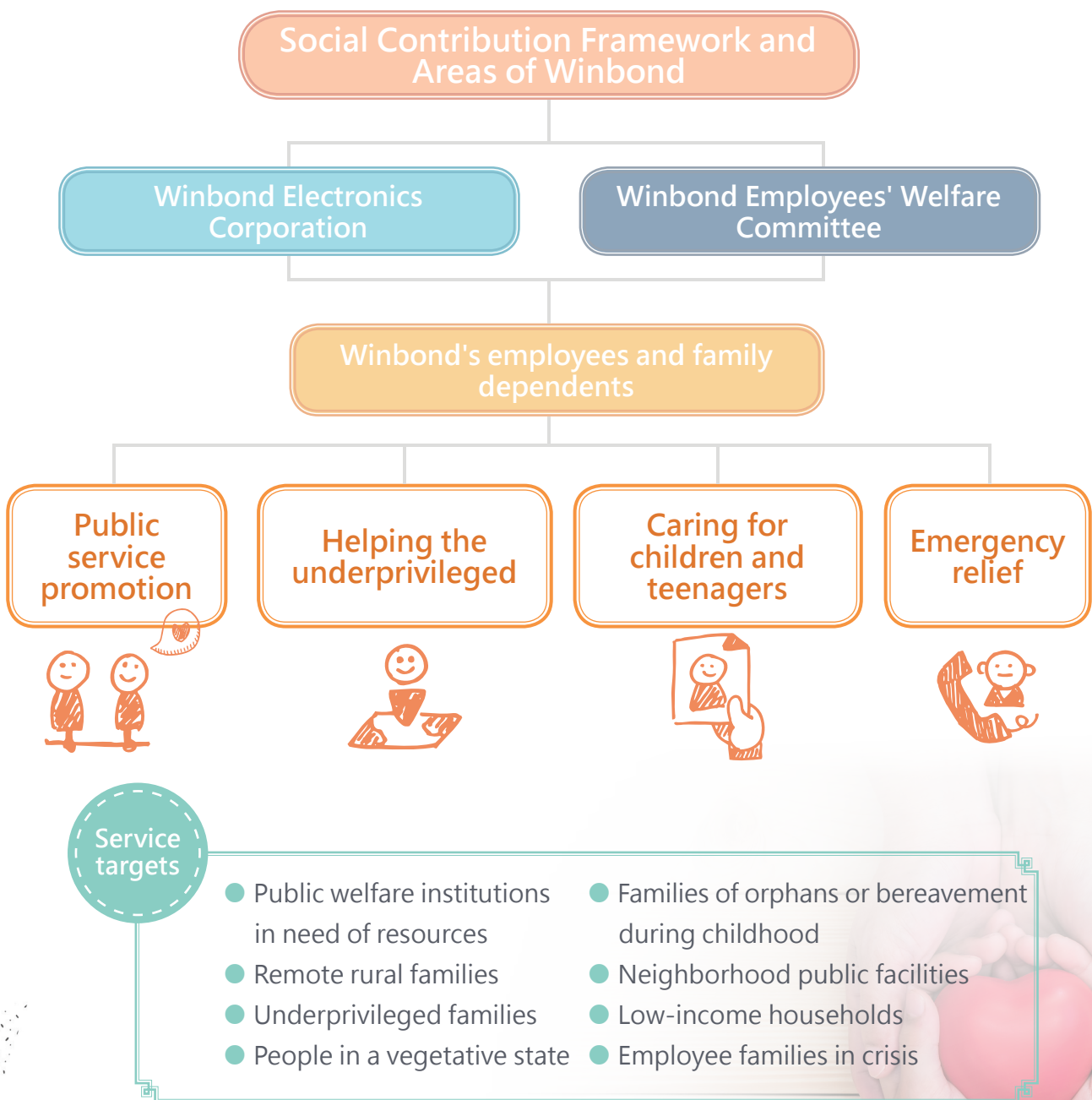
➤ In 2018, Winbond continued to sponsor **NTD 0.7 million** as the funds for breakfast, paying attention to the schoolchildren's health.



- A total of **2,875** Christmas gifts were collected and distributed to the underprivileged children in 2018.
- During 2018, there were more than **1,683 volunteers and 3,437 hours** of volunteer service.
- During 2018, 389 employees responded with actions of blood donation, of which, **637** batches of blood (490 batches during 2017) were donated.

"Caring for the underprivileged, emphasizing environmental sustainability, and being socially responsible" is Winbond's long-term commitment to the society. Adhering to this ideology, Winbond capitalizes on internal resources and the staff's enthusiasm to carry out social welfare practices on areas of "caring for children and teenagers" "helping the underprivileged," "public service promotion," "emergency relief" and "academic sponsorship" to implement care for the communities and thereby enhancing the employees' cohesion while conveying the importance of giving back to society, setting an example of fulfilling corporate social responsibility.

Under the Winbond employee welfare committee system, Silence Association, a self-organized association comprised of Winbond employees, was formed in 2010. Currently, the Silence Association has 50 members, including all levels of staff from senior managers to grassroots workers, as well as employees' relatives and friends. Keeping a low profile (as the name suggests), the association silently contributes to the community through various activities. By synergizing employees' efforts, Winbond could act as a united one, and make itself a model company in the fulfillment of corporate social responsibility.



6.1 Charity Events

Cultural Welfare

Winbond encourages the development of artistic activities and spares no efforts in the promotion of arts and cultural activities. It is hoped that through the combination of technology, culture and art, the concept of quality artistic life can be infused into practical actions, enriching the recreation of the humanistic spirit. In 2018, we sponsored the play, *The Eternal Coffee Time*, organized by Hannstar Cultural and Educational Foundation, aiming at supporting the cultural creation of young people through the subscription of tickets. Through sponsoring excellent performance, Winbond also indirectly promotes the positive value of the family.

The Eternal Coffee Time



Sponsorship of Academic Symposiums and Technical Forums

The International Symposium on VLSI Technology, Systems and Applications (VLSI-TSA) is an international technical conference for accelerating the upgrading of Taiwan's electronic information industry and strengthening international exchange of science and technology. Being an enthusiastic sponsor for the symposium, Winbond persistently looks forward to creating new opportunities for technological exchanges in the integrated circuit industry. In addition, we also regularly sponsor a large-scale seminar for papers on scientific management organized by Chinese Society for Management of Technology (CSMOT). Through this seminar, Winbond actively participates in cooperation, communication and exchanges among academic, industrial, research institutions and government agencies.



Public Welfare Lectures

Winbond sponsors Miss Shin-Ling Shen, a young activist of public welfare, for her lecture tours entitled "LOVE, Happy, and LOHAS Lifestyle" delivered to campuses and social welfare institutions. Her lectures aim to inspire children on how to "fish," and on how to create more opportunities for themselves by transforming the existing conditions to their own advantages. The lectures are designed to spread the charity of knowledge, which is encapsulated in one word or one concept, in order to bring the children a lifetime change by planting seedlings of hope into children's heart. One of the campus public welfare lectures sponsored by Winbond and its employees in 2016 was completed in 2018, participated by a total of 550 teachers and students. The aim is to inspire children to turn their movement into public welfare actions through the charity of knowledge.

Blood Donation

Each year, Winbond motivates its staff to be happy blood donors and to show how much emphasis they put on life with practical actions. During 2018, 389 employees responded with actions of blood donation, of which, 637 batches of blood were donated.



6.2 Helping the Underprivileged

Services to Children's Homes

The Silence Association established in 2010 has 50 volunteer members providing services to children's homes, including all levels of staff from senior managers to grassroots workers, as well as employees' relatives and friends. During weekends or holidays, members of the association engage in services such as cleaning, collecting/donating invoices, and providing funds for replacement of damaged facilities. So far, the Silence Association has provided 72 person/times and 216 hours of service to the children's homes, which not only helped solve the difficulty of shortage of manpower in the children's homes but also reduced their costs and expenses.



Second-hand computer donation

In order to make up for the shortage of educational resources in schools and nurseries in remote areas, Winbond is actively engaged in second-hand computer donation programs to promote the basic needs for digital work and improve the capability of using information technology through concrete actions, working on narrowing the digital gap between urban and rural areas and promoting the concept of environmental protection. By the end of 2018, we have donated a total of 71 computers to

various organizations, among which, 31 were donated to Taiwan Fund for Children and Families to assist poor children in Nantou, Taichung, Tainan and Penghu while the other 40 were donated to Menmen Culture Foundation to help the underprivileged.

Fundraising for scholarship

According to statistics of Taiwan Fund for Children and Families, the number of primary school children applying for scholarship in Taiwan is about 14,000. About 700 of them lack constant donation of NTD 2,000 per semester, and the annual demand is approximately NTD 2.8 million. To help supplement educational resources for underprivileged schoolchildren to have stable school attendance, Winbond and Taiwan Fund for Children and Families cooperated to organize the "Fundraising for Scholarships for Underprivileged Children" and invited the employees to respond to this meaningful event. From the president to the grassroots employees, employees at all levels actively participated in this event. In 2018, a total of NTD 2.5 million was raised from 803 employees, providing 625 children a whole year of support.



謝叔叔阿姨給我
2000元獎學金讓我可以
繳交學費也可以讓
媽媽減輕一些壓力
我一定會更努力的讀書
不會辜負叔叔阿姨
的心意

祝：新年快樂

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6.3 Caring for Children and Teenagers

Breakfast Program for Schoolchildren in Remote Areas

Starting from 2011, Winbond has launched a breakfast supply program for schoolchildren in remote areas. Donators voluntarily pledge for their donation of breakfast packages, which are delivered to primary school students in rural areas of Hsinchu and Taichung regions through the assistance of non-profit organizations. We hope to maintain the basic needs for children's living and health by providing rural schools with breakfast resources and care to help children build a strong body and mind to explore the world. In 2018, Winbond continued to sponsor NTD 0.7 million as the funds for breakfast, paying attention to the schoolchildren's health. We also sent staff to understand the effectiveness of this service plan as a follow-up evaluation of this sponsorship program.



Volunteer tutoring services

Since the beginning of 2010, Winbond's Silence Association has provided services for cleaning the environment and repairing facilities in the nurseries. Since September 2015, in Taichung Guang-Yin Nursery and Nantou NTRAH, we helped the provision of additional long-term volunteer tutoring to teach the children with poor learning efficiency to learn and read. For the children whose learning situation is fair, they focus on strengthening the basic knowledge of the various subjects. In addition, interactive activities allow students to broaden their horizons by meeting the teachers from different industries and backgrounds. In 2018, there were 162 volunteers providing 203 hours of service hours. Up to 2018, there were more than 1,683 person-times providing a total of 3,437 hours of volunteer service in nurseries, tutoring, in indigenous areas and so on.



Christmas Dream Fulfillment

According to statistics from the Eden Foundation, there are 180,000 students from remote or poverty-stricken areas in Taiwan. Recognizing the need of these students, Winbond, the Taiwan Fund for Children and Families (TFCF), and Action Cultural & Educational Foundation, along with 20 companies in the Hsinchu Science Park, launched a "Passing on love from Hsinchu Science Park" program to fulfill the wishes of the children in rural areas and the disabled. The activity has been held for 14 years. A total of 2,875 Christmas gifts were collected and distributed to the underprivileged children in 2018.

Every year, the Dream Fulfillment Programs were enthusiastically responded to by our employees. At the beginning of the event, all gifts were pledged in a very short time. We create Christmas miracles every year. In 2018, we have fulfilled the dreams of a total of 890 underprivileged children. It is obvious that Winbond is committed to public welfare promotion and the spirit is deeply rooted in the hearts of employees.



Subscription of TFCF Caring Dolls

Our employees responded enthusiastically to the subscription to be the supporters of children in need. In 2018, the fund raised through the subscription totaled NTD 47,300.

Movie Appreciation for Children in the Nursery Homes

Since 2010, Winbond has invited the children in the nursery homes to enjoy movies in the cinema both during summer and winter vacations and hope that such experience would allow the orphans or single-parent children to feel the warmth from the society while learning to appreciate the artistic values conveyed in the form of movies. In 2018, a total of 340 children from children's homes enjoyed the movie appreciation.



Family Day with Children from Children's Homes

Winbond has been holding Winbond Family Day for 8 consecutive years since 2011. To continue the spirit of public welfare and care for the society as well as to set an example to encourage more companies to join us, we regularly invite institutions such as Taichung Christian Herald Children's Home and St. Francis Xavier Home for Children and Juvenile to set up stalls in our Garden Party. The proceeds are directly given to these institutions. We hope that through the Family Day event, our employees and their families can jointly spread love and hope to every corner in the world, which is also a great opportunity to educate our next generation, making Winbond Family Day more meaningful. As of 2018, Winbond has invited 760 children from the institutions to join in this event.



Employee Emergency Relief

Behind every employee, there stands a family, and every family is a building block of social stability. In the spirit of mutual help and friendship, Winbond provides assistance to any employee or his/her dependents who are going through a difficult time because of emergency situations such as disabling injury, death, accidents, or any other circumstances that seriously impact normal livelihood of the family. To alleviate their financial burden, Winbond offers employee emergency relief programs and emergency loans to ensure the employees' normal life and work can be maintained.



Winbond's Charitable Activities

Winbond continues its long-term care for the underprivileged children and juveniles. In 2018, we focused on the "Little Saplings Program" to continue our care for those underprivileged and provide them with support for their growth, just like the sunshine, air, and water that the saplings need to grow. We hope these little saplings can also make contributions to the society when they grow up to pass on the good deeds in the society.



In the "2018 Little Saplings Program", we initiated the schemes of "Support for the Skills of Children in Children's Homes" and "Volunteer Services in Aboriginal Communities":

■ Support for the Skills of Children in Children's Homes :

The disadvantaged children are more likely to fall behind others in school studies due to their family factors in childhood, leading to frustration in learning and lack of confidence. Therefore, helping them to develop other skills and expertise may also bring opportunities for them to learn with more passion and for self-affirmation. In 2018, Winbond initiated the donation of approximately NTD 97,000 to support the regular carpentry and Taiko courses that Taichung Christian Herald Children's Home provided in the skill course series. A total of 29 sessions were organized, with 295 trainees in total. According to the assessment of their learning status, more than 80% of these children were ranked "good" or better. After visiting the children's home and seeing their finished products in the Achievement Exhibition, we can see that these children improved a lot in these courses.

We will continue providing relevant courses in 2019, hoping to help these children improve their concentration, patience, and spirit of teamwork.

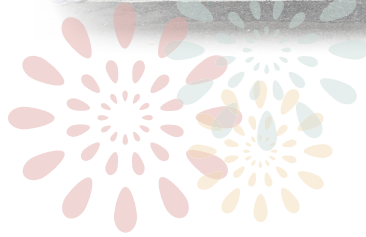


■ Volunteer Services in Aboriginal Communities :

All the little saplings are from the families in the communities. Through the cooperation with public welfare groups, we help with the construction in remote communities or plant organic crops to provide assistance to the disadvantaged families as well as boost industrial development in remote areas. Further, through public welfare services in remote tribes, our employees not only help TFCF in the development of aboriginal

communities but also jointly fulfill Winbond's corporate social responsibility. We initiated this scheme in 2018, and Winbond sponsored the full amount of the public welfare activities, assisting the construction and tourism in the aboriginal communities. The scheme was divided into two sessions, with a total of 37 participants, and the amount of donation was approximately NTD 76,000.

We got good feedback from our employees. They were happy to have an opportunity to get to know the daily life and culture in the tribes. Our employees experienced in person the lack of resources and some social issues in the tribes and at the same time felt the enthusiasm and hard work of social workers. All participants enjoyed this activity and spent a meaningful weekend together.



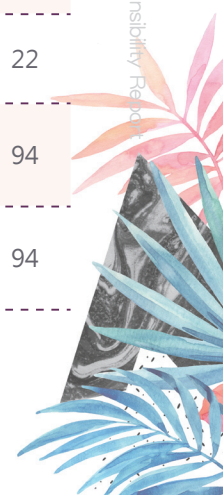
7. Appendix

Appendix I : Global Reporting Initiative (GRI) Index

The following content has been verified by an independent third-party and the result is published in the independent assurance report in Appendix IV.

GRI Category/ Material Aspects	No.	GRI Index	Chapter and Section	Page
1. Organizational Profile				
GRI102 General disclosure : Core	102-1	Name of the organization	1.1 About Winbond	18
	102-2	Activities, brands, products, and services	3.2 Product Application	52
	102-3	Location of headquarters	1.1 About Winbond	18
	102-4	Location of operations	1.1 About Winbond	18
	102-5	Ownership and legal form	1.1 About Winbond	18
	102-6	Markets served	1.1 About Winbond	18
	102-7	Scale of the organization	1.1 About Winbond	18
	102-8	Information on employees and other workers	5.1.1 Employee Profile	86
	102-9	Supply chain	3.6 Sustainable Management of the Supply Chain	62
	102-10	Significant changes to the organization and its supply chain	1.1 About Winbond	18
	102-11	Precautionary Principle or approach	2.4.3 Information Security Risk Management 5.4.2 Emergency Response Measures	44 115
	102-12	External initiatives	About this Report	2
	102-13	Membership of associations	1.1 About Winbond	18
2. Strategy				
GRI102 General disclosure : Core	102-14	Statement from senior decision-maker	Message from the Chairman and CEO	4
GRI102 General disclosure : Comprehensive	102-15	Key impacts, risks, and opportunities	Message from the Chairman and CEO	4
3. Ethics and Integrity				
GRI102 General disclosure : Core	102-16	Values, principles, standards, and norms of behavior	1.1 About Winbond 2.3 Integrity Management	18 40
GRI102 General disclosure : Comprehensive	102-17	Mechanisms for advice and concerns about ethics	1.3 Stakeholder Communication 5.2.3 Communication Channels	23 102

GRI Category/ Material Aspects	No.	GRI Index	Chapter and Section	Page
4. Governance				
GRI102 General disclosure 2016 : Core	102-18	Governance structure	2.1.1 Board of Directors	35
	102-19	Delegating authority	1.2 Sustainable Development Strategies	22
	102-20	Executive-level responsibility for economic, environmental, and social topics	1.2 Sustainable Development Strategies	22
	102-22	Composition of the highest governance body and its committees	2.1.2 Remuneration Committee	37
	102-24	Nominating and selecting the highest governance body	2.1.1 Board of Directors	35
	102-25	Conflicts of interest	2.1.1 Board of Directors	35
	102-26	Role of highest governance body in setting purpose, values, and strategy	Message from the Chairman and CEO	4
	102-27	Collective knowledge of highest governance body	2.1.1 Board of Directors	35
	102-28	Evaluating the highest governance body's performance	1.2 Sustainable Development Strategies	22
	102-29	Identifying and managing economic, environmental, and social impacts	1.2 Sustainable Development Strategies	22
GRI102 General disclosure : Comprehensive	102-30	Effectiveness of risk management processes	1.2 Sustainable Development Strategies	22
	102-31	Review of economic, environmental, and social topics	1.2 Sustainable Development Strategies	22
	102-32	Highest governance body's role in sustainability reporting	1.2 Sustainable Development Strategies	22
	102-33	Communicating critical concerns	1.2 Sustainable Development Strategies	22
	102-34	Nature and total number of critical concerns	1.2 Sustainable Development Strategies	22
	102-38	Annual total compensation ratio	5.2.1 Compensation and Performance Management	94
	102-39	Percentage increase in annual total compensation ratio	5.2.1 Compensation and Performance Management	94



GRI Category/ Material Aspects	No.	GRI Index	Chapter and Section	Page
5. Stakeholder Engagement				
GRI102 General disclosure : Core	102-40	List of stakeholder groups	1.3 Stakeholder Communication	23
	102-41	Collective bargaining agreements	No labor union has been established at Winbond	
	102-42	Identifying and selecting stakeholders	1.3 Stakeholder Communication	23
	102-43	Approach to stakeholder engagement	1.3 Stakeholder Communication	23
	102-44	Key topics and concerns raised	1.3 Stakeholder Communication	23
6. Report Profile				
GRI102 General disclosure : Core	102-45	Entities included in the consolidated financial statements	1.1 About Winbond	18
	102-46	Defining report content and topic Boundaries	1.3 Stakeholder Communication	23
	102-47	List of material topics	1.3 Stakeholder Communication	23
	102-48	Restatements of information	About this Report	2
	102-49	Changes in reporting	1.4 Management of Material Topics	23
	102-50	Reporting period	About this Report	2
	102-51	Date of most recent report	About this Report	2
	102-52	Reporting cycle	About this Report	2
	102-53	Contact point for questions regarding the report	About this Report	2
	102-54	Claims of reporting in accordance with the GRI Standards	About this Report	2
	102-55	GRI content index	About this Report	2
	102-56	External assurance	About this Report	2
Topic-specific disclosure: 200 series (Economic topics)				
* Economic performance				



GRI Category/ Material Aspects	No.	GRI Index	Chapter and Section	Page
GRI 103 Management approach of Economic Performance	103-1	Explanation of the material topic and its Boundary	2. Management of Winbond- Integrity Management 1.2 Sustainable Development Strategies	32 22
	103-2	The management approach and its components	2. Management of Winbond- Integrity Management 1.2 Sustainable Development Strategies	32 22
	103-3	Evaluation of the management approach	2. Management of Winbond- Integrity Management 1.2 Sustainable Development Strategies	32 22
GRI 201 Disclosure of Economic Performance 2016	201-1	Direct economic value generated and distributed	2.2 Operational Performance	38
	201-3	Defined benefit plan obligations and other retirement plans	5.2.2 Employees' Benefits	96
	201-4	Financial assistance received from government	No relational allowance in 2018	
Market Presence				
GRI 202 Disclosure of Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	5.2.1 Compensation and Performance Management	94
	202-2	Proportion of senior management hired from the local community	5.1.1 Employee Profile	86
Indirect Economic Impacts				
GRI 203 Disclosure of Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	6. Participation in Public Welfare to Spread Selfless Love	128
Procurement Practices				
GRI 204 Disclosure of Procurement Practices 2016	204-1	Proportion of spending on local suppliers	3.6 Sustainable Management of the Supply Chain	62
Anti-corruption				
GRI 205 Disclosure of Anti- corruption 2016	205-2	Communication and training about anticorruption policies and procedures	2.3 Integrity Management	40
	205-3	Confirmed incidents of corruption and actions taken	2.3 Integrity Management	40



GRI Category/ Material Aspects	No.	GRI Index	Chapter and Section	Page
*Anti-competitive Behavior				
GRI 103 Management approach of Anti- competitive Behavior	103-1	Explanation of the material topic and its Boundary	2. Management of Winbond- Integrity Management 1.2 Sustainable Development Strategies	32 22
	103-2	The management approach and its components	2. Management of Winbond- Integrity Management 1.2 Sustainable Development Strategies	32 22
	103-3	Evaluation of the management approach	2. Management of Winbond- Integrity Management 1.2 Sustainable Development Strategies	32 22
GRI 206 Disclosure of Anti-competitive Behavior 2016	206-1	Legal actions for anti- competitive behavior, anti-trust, and monopoly practices	2.3 Integrity Management	40
Topic-specific disclosure: 300 series (Environmental topics)				
Materials				
GRI 301 Disclosure of Materials 2016	301-1	Materials used by weight or volume	4.1 Reduction through Process Control	71
	301-2	Recycled input materials used	Based on product characteristics, we can not used that are recycled input materials	
	301-3	Reclaimed products and their packaging materials	We do not recycle sold products and the packaging materials of products.	
* Energy				
GRI 103 Management approach of Energy	103-1	Explanation of the material topic and its Boundary	4. Green Winbond- Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
	103-2	The management approach and its components	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
	103-3	Evaluation of the management approach	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22



GRI Category/ Material Aspects	No.	GRI Index	Chapter and Section	Page
GRI 302 Disclosure of Energy 2016	302-1	Energy consumption within the organization	4.2.1 Energy Management	71
	302-3	Energy intensity	4.2.1 Energy Management	71
	302-4	Reduction of energy consumption	4.2.1 Energy Management	71
* Water				
GRI 103 Management approach of Water	103-1	Explanation of the material topic and its Boundary	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
	103-2	The management approach and its components	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
	103-3	Evaluation of the management approach	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
GRI 303 Disclosure of Water 2016	303-1	Water withdrawal by source	4.2.2 Water Resources Management	75
	303-2	Water sources significantly affected by withdrawal of water	4.2.2 Water Resources Management	75
	303-3	Water recycled and reused	4.2.2 Water Resources Management	75
Emissions				
GRI 305 Disclosure of Emissions 2016	305-1	Direct (Scope 1) GHG emissions	4.3 Greenhouse Gas Inventory	77
	305-2	Energy indirect (Scope 2) GHG emissions	4.3 Greenhouse Gas Inventory	77
	305-4	GHG emissions intensity	4.3 Greenhouse Gas Inventory	77
	305-5	Reduction of GHG emissions	4.3 Greenhouse Gas Inventory	77
	305-6	Emissions of ozone-depleting substances (ODS)	Our company do not use ozone-depleting gases.	
	305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	4.4.1 Air Pollution Control	80



GRI Category/ Material Aspects	No.	GRI Index	Chapter and Section	Page
Effluents and Waste				
GRI 306 Disclosure of Effluents and Waste 2016	306-1	Water discharge by quality and destination	4.4.2 Water Pollution Control	81
	306-2	Waste by type and disposal method	4.4.3 Waste Management	82
	306-3	Significant spills	4.4.2 Water Pollution Control	81
	306-4	Transport of hazardous waste	4.4.3 Waste Management	82
	306-5	Water bodies affected by water discharges and/or runoff	4.4.2 Water Pollution Control	81
* Environmental Compliance				
GRI 103 Management approach of Environmental Compliance	103-1	Explanation of the material topic and its Boundary	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
	103-2	The management approach and its components	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
	103-3	Evaluation of the management approach	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
GRI 307 Disclosure of Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
Supplier Environmental Assessment				
GRI 308 Disclosure of Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	3.6.1 Supplier Audit	63
	308-2	Negative environmental impacts in the supply chain and actions taken	3.6.1 Supplier Audit	63
Topic-specific disclosure: 400 series (Social topics)				

GRI Category/ Material Aspects	No.	GRI Index	Chapter and Section	Page
* Employment				
GRI 103 Management approach of Employment	103-1	Explanation of the material topic and its Boundary	5. LOHAS at Winbond- A Friendly Workplace 1.2 Sustainable Development Strategies	88 22
	103-2	The management approach and its components	5. LOHAS at Winbond- A Friendly Workplace 1.2 Sustainable Development Strategies	88 22
	103-3	Evaluation of the management approach	5. LOHAS at Winbond- A Friendly Workplace 1.2 Sustainable Development Strategies	88 22
GRI 401 Disclosure of Employment 2016	401-1	New employee hires and employee turnover	5.1.2 Recruitment and Retention	93
	401-2	Benefits provided to fulltime employees that are not provided to temporary or part-time employees	5.2.2 Employees' Benefits	100
	401-3	Parental leave	5.2.2 Employees' Benefits	100
* Labor/Management Relations				
GRI 103 Management approach of Labor/ Management Relations	103-1	Explanation of the material topic and its Boundary	5. LOHAS at Winbond- A Friendly Workplace 1.2 Sustainable Development Strategies	88 22
	103-2	The management approach and its components	5. LOHAS at Winbond- A Friendly Workplace 1.2 Sustainable Development Strategies	88 22
	103-3	Evaluation of the management approach	5. LOHAS at Winbond- A Friendly Workplace 1.2 Sustainable Development Strategies	88 22
GRI 402 Disclosure of Labor/ Management Relations 2016	402-1	Minimum notice periods regarding operational changes	5.2.2 Employees' Benefits	100



GRI Category/ Material Aspects	No.	GRI Index	Chapter and Section	Page
* Occupational Health and Safety				
GRI 103 Management approach of Occupational Health and Safety	103-1	Explanation of the material topic and its Boundary	5. LOHAS at Winbond- A Friendly Workplace 1.2 Sustainable Development Strategies	88 22
	103-2	The management approach and its components	5. LOHAS at Winbond- A Friendly Workplace 1.2 Sustainable Development Strategies	88 22
	103-3	Evaluation of the management approach	5. LOHAS at Winbond- A Friendly Workplace 1.2 Sustainable Development Strategies	88 22
GRI 403 Disclosure of Occupational Health and Safety 2016	403-1	Workers representation in formal joint management worker health and safety committees	5.4.1 Safety and Health Management Practices 1.2 Sustainable Development Strategies	116 22
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	5.4.1 Safety and Health Management Practices 1.2 Sustainable Development Strategies	116 22
	403-4	Health and safety topics covered in formal agreements with trade unions	5.4.1 Safety and Health Management Practices	116
* Training and Education				
GRI 103 Management approach of Training and Education	103-1	Explanation of the material topic and its Boundary	5. LOHAS at Winbond- A Friendly Workplace 1.2 Sustainable Development Strategies	88 22
	103-2	The management approach and its components	5. LOHAS at Winbond- A Friendly Workplace 1.2 Sustainable Development Strategies	88 22
	103-3	Evaluation of the management approach	5. LOHAS at Winbond- A Friendly Workplace 1.2 Sustainable Development Strategies	88 22
GRI 404 Disclosure of Training and Education 2016	404-1	Average hours of training per year per employee	5.3.2 Management Function	110

GRI Category/ Material Aspects	No.	GRI Index	Chapter and Section	Page
GRI 404 Disclosure of Training and Education 2016	404-2	Programs for upgrading employee skills and transition assistance programs	5.3 Talent Training	108
	404-3	Percentage of employees receiving regular performance and career development reviews	5.3.1 Diversified Employee Training Mechanism	109
Diversity and Equal Opportunity				
GRI 405 Disclosure of Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	5.1.1 Employee Profile	90
	405-2	Ratio of basic salary and remuneration of women to men	5.2.1 Compensation and Performance Management	98
Non-discrimination				
GRI 406 Disclosure of Non- discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	2.3 Integrity Management	40
Freedom of Association and Collective Bargaining				
GRI 407 Disclosure of Freedom of Association and Collective Bargaining 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	3.6.2 Supplier Management	64
Child Labor				
GRI 408 Disclosure of Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	5.1.2 Recruitment and Retention	93
Forced or Compulsory Labor				
GRI 409 Disclosure of Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	2.3 Integrity Management	40
Security Practices				
GRI 410 Disclosure of Security Practices 2016	410-1	Security personnel trained in human rights policies or procedures	3.6.2 Supplier Management	64



GRI Category/ Material Aspects	No.	GRI Index	Chapter and Section	Page
Rights of Indigenous Peoples				
GRI 411 Disclosure of Rights of Indigenous Peoples 2016	411-1	Incidents of violations involving rights of indigenous peoples	2.3 Integrity Management	40
Local Communities				
GRI 413 Disclosure of Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	5.4.2 Emergency Response Measures	119
	413-2	Operations with significant actual and potential negative impacts on local communities	5.4.2 Emergency Response Measures	119
Supplier Social Assessment				
GRI 414 Disclosure of Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	3.6.2 Supplier Management	64
	414-2	Negative social impacts in the supply chain and actions taken	3.6.1 Supplier Audit	63
* Customer Health and Safety				
GRI 103 Management approach of Customer Health and Safety	103-1	Explanation of the material topic and its Boundary	3. Innovative Winbond- R&D and Growth 1.2 Sustainable Development Strategies	48 22
	103-2	The management approach and its components	3. Innovative Winbond- R&D and Growth 1.2 Sustainable Development Strategies	48 22
	103-3	Evaluation of the management approach	3. Innovative Winbond- R&D and Growth 1.2 Sustainable Development Strategies	48 22
GRI 416 Disclosure of Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	3.3 Green Products	57
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	3.3 Green Products	57

GRI Category/ Material Aspects	No.	GRI Index	Chapter and Section	Page
Marketing and Labeling				
GRI 417 Disclosure of Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	3.2 Product Application	52
	417-2	Incidents of non-compliance concerning product and service information and labeling	3.2 Product Application	52
* Customer Privacy				
GRI 103 Management approach of Customer Privacy	103-1	Explanation of the material topic and its Boundary	3. Innovative Winbond- R&D and Growth 1.2 Sustainable Development Strategies	48 22
	103-2	The management approach and its components	3. Innovative Winbond- R&D and Growth 1.2 Sustainable Development Strategies	48 22
	103-3	Evaluation of the management approach	3. Innovative Winbond- R&D and Growth 1.2 Sustainable Development Strategies	48 22
GRI 418 Disclosure of Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	3.4 Customer Privacy and Satisfaction	59
* Socioeconomic Compliance				
GRI 103 Management approach of Socioeconomic Compliance	103-1	Explanation of the material topic and its Boundary	2. Management of Winbond- Integrity Management 1.2 Sustainable Development Strategies	32 22
	103-2	The management approach and its components	2. Management of Winbond- Integrity Management 1.2 Sustainable Development Strategies	32 22
	103-3	Evaluation of the management approach	2. Management of Winbond- Integrity Management 1.2 Sustainable Development Strategies	32 22
GRI 419 Disclosure of Socioeconomic Compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area	2.3 Integrity Management	40



GRI Category/ Material Aspects	No.	GRI Index	Chapter and Section	Page
Topic				
* Air Emissions of NO _x , SO _x , VOCs and PM				
GRI 103 Management approach of Air Emissions of NO _x , SO _x , VOCs and PM	103-1	Explanation of the material topic and its Boundary	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
	103-2	The management approach and its components	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
	103-3	Evaluation of the management approach	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
* GHG emission				
GRI 103 Management approach of GHG emission	103-1	Explanation of the material topic and its Boundary	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
	103-2	The management approach and its components	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
	103-3	Evaluation of the management approach	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22



GRI Category/ Material Aspects	No.	GRI Index	Chapter and Section	Page
* Waste				
GRI 103 Management approach of Waste	103-1	Explanation of the material topic and its Boundary	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
	103-2	The management approach and its components	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
	103-3	Evaluation of the management approach	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
* Effluents				
GRI 103 Management approach of Effluents	103-1	Explanation of the material topic and its Boundary	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
	103-2	The management approach and its components	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
	103-3	Evaluation of the management approach	4. Green Winbond-Safeguarding the Environment 1.2 Sustainable Development Strategies	68 22
* Patent				
GRI 103 Management approach of Patent	103-1	Explanation of the material topic and its Boundary	3. Innovative Winbond- R&D and Growth 1.2 Sustainable Development Strategies	48 22
	103-2	The management approach and its components	3. Innovative Winbond- R&D and Growth 1.2 Sustainable Development Strategies	48 22
	103-3	Evaluation of the management approach	3. Innovative Winbond- R&D and Growth 1.2 Sustainable Development Strategies	48 22



Appendix II : Sustainable Development Goals (SDGs) Index

Item	Sustainable Development Goals	Chapter and section	page
 Goal 3	<p>Ensuring healthy lives and promoting the well-being at all ages is essential to sustainable development.</p> <p>▲ Targets</p> <p>3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.</p>	5. LOHAS at Winbond-A Friendly Workplace	88
 Goal 4	<p>Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.</p> <p>▲ Targets</p> <p>4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.</p> <p>4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.</p>	5. LOHAS at Winbond-A Friendly Workplace	88
 Goal 6	<p>Ensure availability and sustainable management of water and sanitation for all.</p> <p>▲ Targets</p> <p>6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.</p>	4. Green Winbond-Safeguarding the Environment	68
 Goal 7	<p>Ensure access to affordable, reliable, sustainable and modern energy for all.</p> <p>▲ Targets</p> <p>7.1 By 2030, ensure universal access to affordable, reliable and modern energy services.</p>	4. Green Winbond-Safeguarding the Environment	68

Item	Sustainable Development Goals	Chapter and section	page
 <p>Goal 8</p>	<p>Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.</p> <p>▲ Targets</p> <p>8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.</p> <p>8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms.</p>	<p>2. Management of Winbond- Integrity Management</p> <p>5. LOHAS at Winbond- A Friendly Workplace</p>	<p>32</p> <p>88</p>
 <p>Goal 12</p>	<p>Ensure sustainable consumption and production patterns.</p> <p>▲ Targets</p> <p>12.2 By 2030, achieve the sustainable management and efficient use of natural resources.</p> <p>12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.</p>	<p>3. Innovative Winbond- R&D and Growth</p>	<p>48</p>
 <p>Goal 16</p>	<p>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.</p> <p>▲ Targets</p> <p>16.5 Substantially reduce corruption and bribery in all their forms.</p>	<p>2. Management of Winbond- Integrity Management</p> <p>3. Innovative Winbond- R&D and Growth</p> <p>4. Green Winbond- Safeguarding the Environment</p>	<p>32</p> <p>48</p> <p>68</p>



Appendix III : United Nations' Global Compact Index

Item	Article	Chapter and section	page
1. Human Rights			
1	Businesses should support and respect the protection of internationally proclaimed human rights.	3.6.2 Supplier Management	64
2	Make sure that they are not complicit in human rights abuses.	5.3 Talent Training	104
2. Labor			
3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	5.3 Talent Training	104
4	The elimination of all forms of forced and compulsory labor.	2.3 Integrity Management	40
5	The effective abolition of child labor.	5.1.2 Recruitment and Retention	89
6	The elimination of discrimination in respect of employment and occupation.	5.1 Talent Attraction and Retention	86
3. Environment			
7	Businesses should support a precautionary approach to environmental challenges.	4. Green Winbond-Safeguarding the Environment	64
8	Undertake initiatives to promote greater environmental responsibility.	4. Green Winbond-Safeguarding the Environment	64
9	Encourage the development and diffusion of environmentally friendly technologies.	3.3 Green Products	57
4. Anti-Corruption			
10	Businesses should work against corruption in all its forms, including extortion and bribery.	2.3 Integrity Management	40



Appendix IV : Independent Third Party Assurance Statement

INDEPENDENT ASSURANCE OPINION STATEMENT

Winbond Electronics Corp. 2018 Corporate Social Responsibility Report

The British Standards Institution is independent to Winbond Electronics Corp. (hereafter referred to as Winbond in this statement) and has no financial interest in the operation of Winbond other than for the assessment and verification of the sustainability statements contained in this report.

This independent assurance opinion statement has been prepared for the stakeholders of Winbond only for the purposes of assuring its statements relating to its corporate social responsibility (CSR), more particularly described in the Scope below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the independent assurance opinion statement may be read.

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by Winbond. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate.

Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to Winbond only.

Scope

The scope of engagement agreed upon with Winbond includes the followings:

1. The assurance scope is consistent with the description of Winbond Electronics Corp. 2018 Corporate Social Responsibility Report.
2. The evaluation of the nature and extent of the Winbond's adherence to AA1000 AccountAbility Principles (2018) in this report as conducted in accordance with type 1 of AA1000 Assurance Standard (2008) with 2018 Addendum assurance engagement and therefore, the information/data disclosed in the report is not verified through the verification process.

This statement was prepared in English and translated into Chinese for reference only.

Opinion Statement

We conclude that the Winbond 2018 Corporate Social Responsibility Report provides a fair view of the Winbond CSR programmes and performances during 2018. The CSR report subject to assurance is free from material misstatement based upon testing within the limitations of the scope of the assurance, the information and data provided by the Winbond and the sample taken. We believe that the 2018 economic, social and environmental performance information are fairly represented. The CSR performance information disclosed in the report demonstrate Winbond's efforts recognized by its stakeholders.

Our work was carried out by a team of CSR report assurors in accordance with the AA1000AS (2008) with 2018 Addendum. We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that Winbond's description of their approach to AA1000AS (2008) with 2018 Addendum and their self-declaration in accordance with GRI Standards: Core option were fairly stated.

Methodology

Our work was designed to gather evidence on which to base our conclusion. We undertook the following activities:

- a top level review of issues raised by external parties that could be relevant to Winbond's policies to provide a check on the appropriateness of statements made in the report.
- discussion with managers on approach to stakeholder engagement. However, we had no direct contact with external stakeholders.
- 11 interviews with staffs involved in sustainability management, report preparation and provision of report information were carried out.
- review of key organizational developments.
- review of the findings of internal audits.
- review of supporting evidence for claims made in the reports.
- an assessment of the organization's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness and Impact as described in the AA1000AP (2018).

Conclusions

A detailed review against the Inclusivity, Materiality, Responsiveness and Impact of AA1000AP (2018) and GRI Standards is set out below:

Inclusivity

This report has reflected a fact that Winbond has continually sought the engagement of its stakeholders and established material sustainability topics, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. There are fair reporting and disclosures for economic, social and environmental information in this report, so that appropriate planning and target-setting can be supported. In our professional opinion the report covers the Winbond's inclusivity issues.

Materiality

Winbond has established relative procedure in organization level, as the issues which were identified by all departments have been prioritized according to the extent of impact and applicable criterion for sustainable development of organization. Therefore, material issues were completely analyzed and the relative information of sustainable development was disclosed to enable its stakeholders to make informed judgments about the organization's management and performance. In our professional opinion the report covers the Winbond's material issues.

Responsiveness

Winbond has implemented the practice to respond to the expectations and perceptions of its stakeholders. An Ethical Policy for Winbond is developed and continually provides the opportunity to further enhance Winbond's responsiveness to stakeholder concerns. Topics that stakeholder concern about have been responded timely. In our professional opinion the report covers the Winbond's responsiveness issues. However, the future report should be further enhanced by the following areas:

- Encouraging to work towards a type 2 of AA1000AS (2008) with 2018 Addendum engagement with a view to providing the reliability of sustainability performance information that stakeholder concerns.

Impact

Winbond has identified and fairly represented impacts that were measured and disclosed in probably balanced and effective way. Winbond has established processes to monitor, measure, evaluate and manage impacts that lead to more effective decision-making and results-based management within the organization. In our professional opinion the report covers the Winbond's impact issues.

GRI Sustainability Reporting Standards (GRI Standards)

Winbond provided us with their self-declaration of in accordance with GRI Standards: Core option (For each material topic covered by a topic-specific GRI Standard, comply with all reporting requirements for at least one topic-specific disclosure). Based on our review, we confirm that social responsibility and sustainable development disclosures with reference to GRI Standards' disclosures are reported, partially reported or omitted. In our professional opinion the self-declaration covers the Winbond's social responsibility and sustainability topics.

Assurance level

The moderate level assurance provided is in accordance with AA1000AS (2008) with 2018 Addendum in our review, as defined by the scope and methodology described in this statement.

Responsibility

The CSR report is the responsibility of the Winbond's chairman as declared in his responsibility letter. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

Competency and Independence

The assurance team was composed of Lead auditors experienced in relevant sectors, and trained in a range of sustainability, environmental and social standards including AA1000AS, ISO 14001, ISO 45001, ISO 14064 and ISO 9001. BSI is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

For and on behalf of BSI:



Peter Pu
Managing Director BSI Taiwan
2019-06-11



AA1000
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The illustration features a vibrant, abstract background with a large, textured orange and pink cloud-like shape at the top. To the right, there are stylized tropical leaves in shades of green, pink, and blue, some with dotted patterns. In the lower left, a family is depicted: a man in an orange shirt and dark pants is lifting a young boy in an orange shirt and dark pants into the air. A woman in a teal top and purple skirt is holding a young girl in a pink top. The overall style is modern and artistic, with a mix of watercolor-like textures and flat colors.

winbond

We Deliver

<http://www.winbond.com>