



2020

Corporate Social Responsibility Report •

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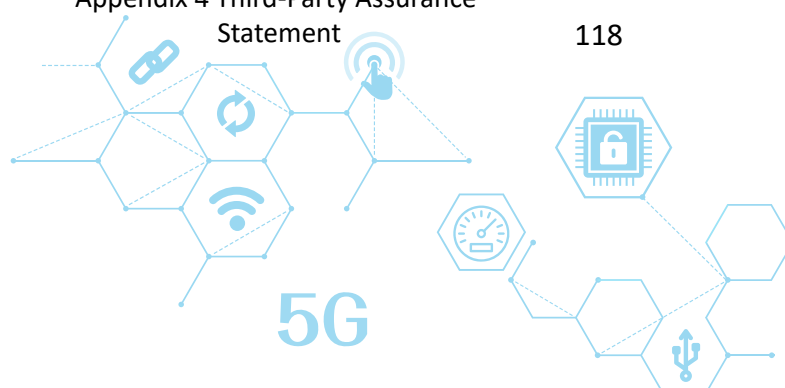
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Message from the Chairman and CEO

COVID-19 pandemic and extreme climate had made 2020 a very difficult year for businesses, corporation and individuals alike. At Winbond, we believe that there are great opportunities amongst challenges. We were able to grasp the opportunities stemming from changes in consumer behavior, results of widespread working from home and the stay-at-home economy. Thanks to the strength of flexible capacity allocation as well as high-quality, diverse product combinations, Winbond's consolidated revenue in 2020 hit a record high.

In keeping with our mission to "Be a Hidden Champion in Providing Sustainable Semiconductors to Enrich Human Life", Winbond is dedicated to improve our ESG (environment, social and governance) performances while achieving financial growth, and provide positive impact to the society and the environment. In 2020, we focused on four areas of sustainability: risk resilience, continuous innovation, low-carbon transformation and talent development.

Risk Resilience

The pandemic and climate change highlighted the fragility of the society and the importance of business resilience. Winbond has established a business continuity management (BCM) system to identify potential risks in business operations, develop systematic response mechanisms, and implement regular trainings and drills. The system will facilitate quicker response and faster recovery from the impact.

As dealing with climate change is a responsibility we need to participate, Winbond adopted the TCFD (Task Force on Climate-related Financial Disclosures) framework in 2021 to evaluate the risks and opportunities associated with climate change. The result will form the basis of our climate action and help to improve our operation resilience.

Product Innovation and Technology Development

As a leading global supplier of semiconductor memory solutions, product innovation and technology development are in the core of Winbond. We have been focusing on the technology, design, manufacture, and services in the areas of Code Storage Flash and Specialty DRAM, and are the only vendor in Taiwan capable of developing both product lines. We continue to develop R&D strategies, aim to achieve technical success, and demonstrate how value is created through product innovation. It has the ability

Our newly released W77Q Secure Flash Memory was selected as a winner of the ASPENCORE World Electronics Achievement Awards 2020, receiving the "Outstanding Product Performance of the Year" award in the Memory category for its design that supports secure storage, secure boot, root-of-trust, and system recovery.

For DRAM, we have developed and introduced a series of HyperRAM™ products with low pin count, compact packaging, and superior energy saving features that deliver the best solution for IoT, smartphones, smart watches, and wearable electronic devices. Winbond's 1Gb LPDDR3 DRAM comes with the unique functions of deep power down and clock stop, which, in perfect combination with low power and high data bandwidth, bring dual benefits of space and energy efficiency. LPDDR3 has been used in many edge AI products and turned in impressive performance. We hope to continuously advance the technological competitiveness of both Winbond and clients through our strong core technology and value-added products.

Low-Carbon Transformation

At Winbond, we have been emphasizing on "Green Semiconductor Technology" for the world, thus, we must do our part in address climate change. We aim to deliver through the reduction of carbon footprint across our products and their application, in order to fulfill our aspiration in achieving carbon neutral by 2050. We are working on improving our energy management and energy efficiency to reduce operational carbon emission. All product designs have been incorporating better energy efficiency and lower energy consumption. We are also rolling out various carbon reduction action plans. To achieve carbon neutral in semiconductor manufacturing process would be a daunting task, but this will not only help our natural environment but also ensure the sustainability of our business.

In 2020, we reduced our carbon emissions by 207,475 tons of CO₂ equivalent, which equates to the same amount of CO₂ captured by 538 Daan Forest Parks in a year. In the future, Winbond will support the government's green energy policy and progressively increase the percentage of renewable energy.

Talent Development

R&D and innovation is the key to Winbond's success, and talent is the fuel to keep the engine running. Winbond offers competitive compensation to attract local and international talents. We provide a variety of benefits and childcare

supports to enable work-life balance, and facilitate professional development. Foreign employees receive additional resources and aids to help them integrate into life in Taiwan. In terms of training and development, we have always introducing new courses on industry and technology trends. In 2020, we added AI, data science and digital transformation courses onto our online learning platform to allow employees to “learn anywhere, any time” and improve their professional skills and competitiveness. Talent cultivation is a crucial part of social responsibility. Winbond will continue to strive to provide employees with a diverse and inclusive work environment.

Facing a wide range of challenges brought by international politico-economic uncertainties, the constantly evolving tech industry, and the ongoing pandemic, Winbond will continue to innovate and strengthen the core competitiveness of our products, as well as endeavor to implement digital transformation to optimize operations, enhance our information security framework to address cyber risks, integrate group resources to achieve operating synergy, and maintain long-term growth momentum.

Looking into the future, the semiconductor and memory markets are expected to grow further as 5G infrastructures are gradually built; the technologies for cloud service, IoT, AI and automated driving are becoming prevalent and mature; and industries related to the contactless economy are on the rise. Winbond will stay abreast of the rhythm and trends of emerging industries and grasp growth opportunities while continuing the efforts to reduce resource consumption in products’ life cycles to exert a positive influence on the development of the environment, society and economy.

Chairman and CEO

鍾文



2020 Awards and Recognition

“Corporate Sustainability Report Platinum Award” and “Top 50 Corporate sustainability Award” from the Taiwan Corporate Sustainability Awards (TCSA)



Ranked No. 10 in patent applications and patents granted for a Taiwanese enterprises in the 2020 Top 100 Patent Rankings organized by the Intellectual Property Office, Ministry of Economic Affairs



The W77Q product was nominated for the 2020 ASPENCORE World Electronics Achievement Awards and won the ASPENCORE **“Outstanding Product Performance of the Year”** award

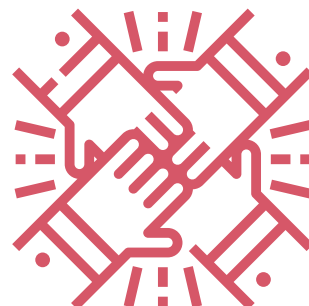


Four Silver Tower awards at the Taiwan Continuous Improvement Awards




Ranked in the **top 6 ~ 20%** in the 7th TWSE Corporate Governance Evaluation

Included as a constituent stock in the TWSE **“Taiwan High Compensation 100 Index”**

Included in **FTSE4Good** Emerging Index and **FTSE4Good** TIP Taiwan ESG Index



Annual Performance Overview

Aspect	Content
 <p>Environment (E)</p>	<ul style="list-style-type: none"> • NT\$373 million were spent on environmental protection facilities, an increase of 5.25% compared to 2019. • The savings or economic benefits of environmental protection programs was NT\$186,112,000. • Total electricity consumption was reduced by 1,071,185 GJ between 2016 and 2020, equivalent to the annual electricity consumption of 85,015 households. • Greenhouse gases were reduced by 207,475 tonnes CO₂e, the equivalent of carbon captured by 538 Da-an Forest Parks. • Reclaimed 10.21 million m³ of water for a total water recovery rate of 81%. • 6,079 tonnes of waste were recycled for a waste recycling rate of 93%. • The average removal rate for volatile organic compounds (VOC) reached 97%. • Introduced the Task Force on Climate-related Financial Disclosures (TCFD) disclosure in response to climate change risks and opportunities.
 <p>Society (S)</p>	<ul style="list-style-type: none"> • NT\$10,537,650,000 spent on employee welfare. • Childcare subsidy NT\$5,000 per month. • 58% of foreign employees have been with the company for more than 5 years. • The learning section now has nearly 240,273 views and over 96% of all Winbond employees are now studying data science. The content has been studied 14,532 times so far. • A total of 93 emergency drills were conducted for fire, chemicals, gas leaks, water leak & electrocution, and other events. • A total of NT\$14,163,000 were invested in social engagement. • 90% of students were satisfied with the Happy Breakfast Project. • 877 employees had contributed NT\$2,976,000 scholarships donations.
 <p>Governance (G)</p>	<ul style="list-style-type: none"> • Winbond granted 502 patents and has accumulated 3,648 patents as of 2020. • W75F Secure Flash Memory product became the only product in the industry to have obtained ISO 26262 ASIL Grade D functional safety certification. • W75F Secure Flash Memory obtained PSA Certified™ Level 2 Ready certification. • Only company from the memory design and manufacturing industry to be enrolled in the Internal Compliance Program (ICP) by MOEA Bureau of Foreign Trade. • Scored the maximum possible 200 points in the Responsible Business Alliance 6.0 Validated Assessment Program (RBA 6.0 VAP). • Obtained ISO 27001:2013 Information Security Management System (ISMS) certification. • 100% of the suppliers have signed the Supplier Ethics and Integrity Policy, Winbond SUPPLIER CODE OF CONDUCT COMMITMENT LETTER, Declaration of Non-use of Restricted Substances, and Contractor Safety, Health, Environment, Education and Training Commitment Letter. • 100% completion rate for information security education and training.

A Worldwide Leading Supplier of Total Memory Solutions

Winbond has earned the trust of global customers through our professional products, technology and support. We now have sites and R&D teams stationed all around the world. As a leader in specialty memory products, we strive to provide customers with service-oriented memory solutions that encompass everything from product design and technology R&D to wafer fabrication, marketing and after-sales support.

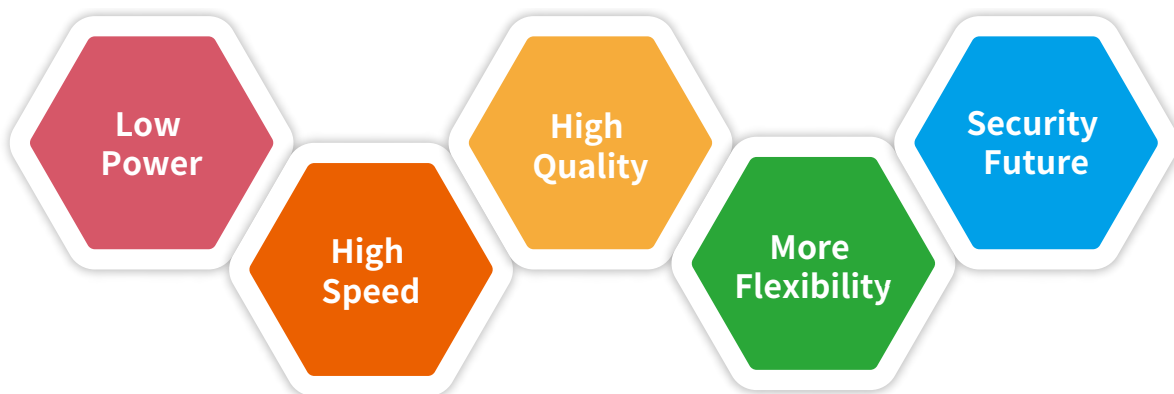
Our electronic products include Code Storage Flash and Specialty DRAM used in a wide range of applications, such as computer processing, network communications, consumer electronics, industrial and automotive electronics. Winbond products are an essential component in many electronic applications and we work with semiconductor companies around the world on the continued development of the industry. We also work actively to make innovative applications into reality. The core philosophy of Winbond is business integrity. We strive to be the trusted partner of world-class customers and are committed to creating a better future.

Independent R&D Capability

Winbond's core business is the specialty memory market. Our global R&D resources are focused on the development of new technologies that can be generated into Intellectual Property (IP) and competitive advantages. We are the only company in Taiwan capable of independent development, design and marketing of DRAM and Flash products.

■ Principles of R&D and Innovation

Winbond concentrates on the development of low-power, high-speed, high-quality, flexible and secure products based on our diverse production technologies. Innovative product design and development is used to increase product values and enhance our long-term competitiveness.



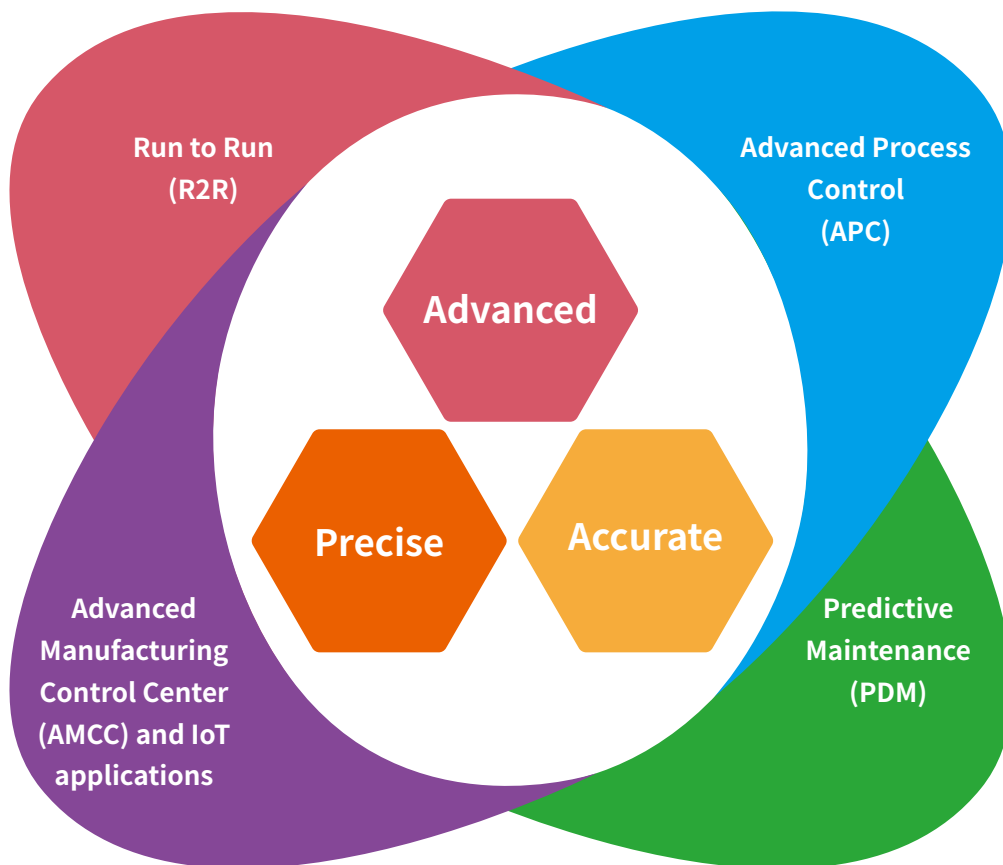
Highly Intelligent and Automated 12" Wafer Fab

Winbond's 12" wafer fab in Central Taiwan Science park is a highly intelligent and automated factory designed for flexible production, agile service, and stable delivery. The advanced production processes, high precision manufacturing equipment and strict quality control satisfy the quality requirements of world-class customers.

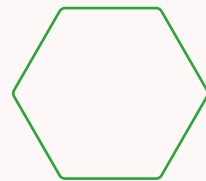
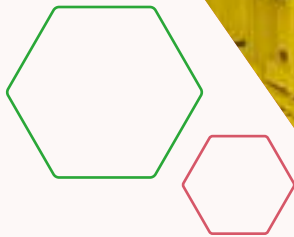


Advanced Semiconductor Technology

Advanced semiconductor technologies at the Winbond 12" fab include Run to Run (R2R), Advanced Process Control (APC), Predictive Maintenance (PDM), Advanced Manufacturing Control Center (AMCC). Internet-of-Things (IoT) technology have also been introduced, so that machines and systems can be able to communicate with each other for further optimize production efficiency and quality consistency.



The smart factory is based on an internally developed system. A professional big data team analyzes the massive amounts of data generated every day based on the needs of the semiconductor industry. The team includes statistical experts for data analysis, IT experts for data visualization and modeling, while the engineering team works with the industry, government and universities to develop specialized analytical tools and a self-diagnostic system. Remote control is used for rapid error detection and loss prevention. Continuous learning and evolution are employed at the factory to make smart production even smarter.



The goal of Winbond's smart fab is zero defect and extreme quality. Our current focus is on the introduction of Industry 4.0 and meeting the exacting product specifications of world-class customers.

Advanced Hardware and Strict Environment, Safety and Health Management

The back-up generator and uninterruptible power supply systems at Winbond's 12" fab can meet 80% of the factory's power requirements. The large 30,000-tonne water tank also helps to ensure continuity of production. The fab itself is located at 160 meters above the sea level, so it is immune to flooding and tsunamis. The building is withstand MMI 9 earthquakes that have a 1 in 500 chance of happening. All possible production safety measures were taken to improve business resilience as part of our business continuity plan and crisis management.

Winbond has obtained a number of quality and ESH management system certifications in pursuit of excellence and zero-defects. We were the first memory vendor in Taiwan to obtain ISO 26262 certification for automotive functional safety.

Winbond is continuing to develop green technologies with lower energy consumption and carbon emissions. We work with customers to develop green products with an emphasis on environmental sustainability. The energy-efficiency and environmental synergies from smart, automated production and optimized system operations help protect the Earth's environment and fulfill our social responsibility.



In order to become the Worldwide Leading Supplier of Total Memory Solutions , we insist four key points

- ▶ Occupational Safety & Health
- ▶ LOHAS Workplace
- ▶ Caring for Society
- ▶ Environmental Sustainability

Be a hidden champion in providing sustainable semiconductors to enrich human life

Winbond, we deliver

To view the rest of the article or video, please visit the Winbond website



Embedded the learning passion into Employees' DNA

Winbond is committed to build a workplace culture of passionate learning. We convey the concept of learning and thinking from top-down. Senior executives regularly published articles through intranet, e-mail, Electronic Direct Mail (EDM) , online courses, and cultural sections, shared how to practice learning in daily work or life.

Spread Passionate Learning through Senior Executive Sharing Their Idea

Problem Solving and Enthusiasm of Learning

Author : Deputy Chief Technology Officer



The COVID-19 virus was the global elephant in the room in 2020. Fall and winter is approaching but people remain concerned about a second wave. Despite their concerns, many people, companies and countries are nevertheless doing their best to adapt to a new way of life

Enthusiasm of Learning is the Core Spirit of a Learning Organization

Author : Assistant Manager



"Those who do not learn from history are doomed to repeat it." People today can study history to experience the past and see the results of the actions that people took. We should think carefully while reading to avoid making the same mistakes or find clues in history...

Effective Execution of Innovation

Author : Assistant Manager



A successful company must actively invest in innovation if it wants to maintain its industry position or leadership. For example, Kodak, the well-known camera film-maker, tried to get into the digital camera market but failed due to a lack of innovation

Fusion of Corporate Culture

Author : Vice President



Nuvoton acquired Panasonic's semiconductor business in September 2020 and became Nuvoton Technology Corporation Japan (NTCJ) to grow the company and due to their shared corporate philosophies. All the publicly available information suggest that the merger will have a major impact on the entire group...

Promotion of Corporate Culture and its Everyday Practice through the Cultural Section

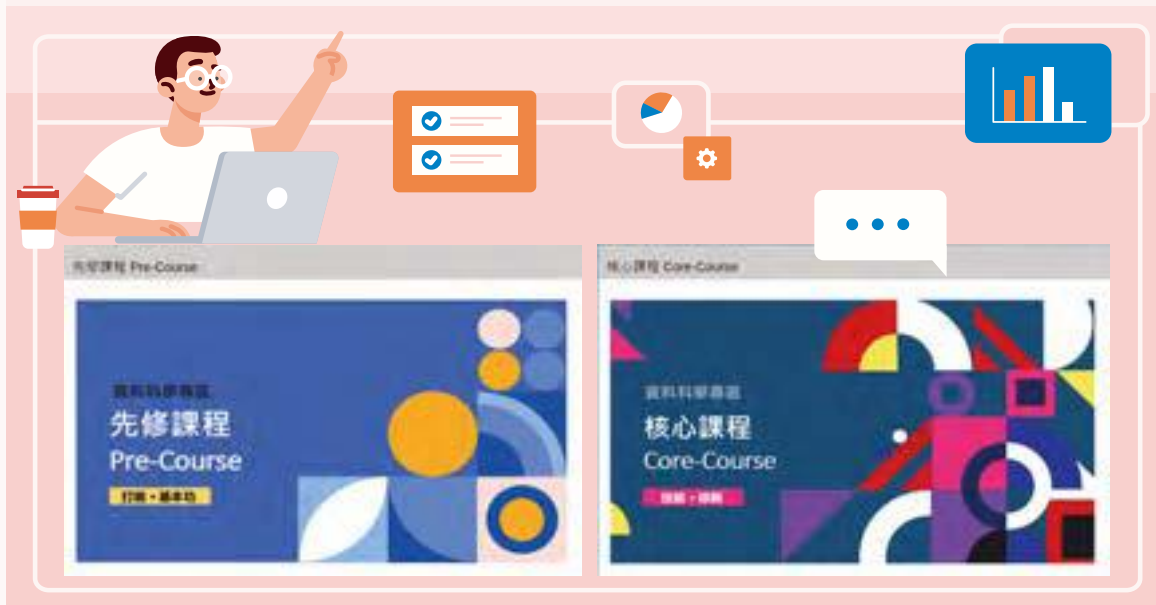


Courses of Diverse Trends

In response to the changes in the international and industry trends, Winbond has incorporated artificial intelligence, data science and digital transformation to our course. The courses help employees learn and absorb new knowledge in variety fields, and to help them develop basic concepts and technical skills about AI and digital transformation, and encourage them think about how to apply into their work.

Data Science Section:

The data science section provides an organized collection of learning resources with graded courses that employees can select based on their own ability and work requirements. Through these courses, employees can improve their data science proficiency at any time and place.

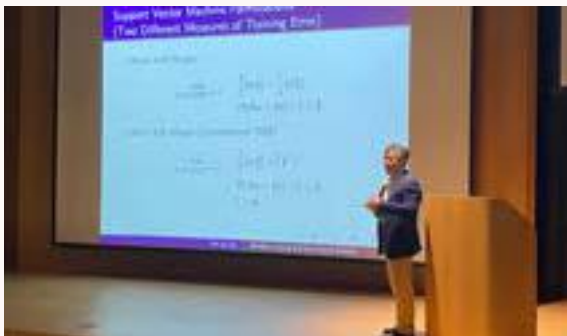


Learning management system has nearly 240,273 views and over 96% of all Winbond employees are now studying data science. The content has been studied 14,532 times so far.

Guest Lecturer:

A series of "Digital Transformation" seminars was held, inviting elites from various fields to share their experiences in promoting digital transformation. The seminars provide insights and application possibilities for managers to promote digital transformation, and able lead employees to plan digital transformation and move towards a smart enterprise.

- National Chiao Tung University (NCTU) was invited to host the data science seminars in 2020. The seminars gave employees an introduction to AI concepts, the data analysis process, and real-world applications.



For more information about human resources development at Winbond, please refer to [Chapter 5.2](#)

CH1

Sustainability Philosophy - Taking the Lead



The core values of Winbond are “Conduct business with integrity and ethical behavior”, “Accountable team work”, “Enthusiasm of learning”, “Aggressively innovate”, and “Sustainable contribution.” Winbond is continuing to make a positive contribution in the three sustainability aspects of Environment, Society, Governance (ESG) through the investment of our core resources and strengths. We strive to satisfy the needs and expectations of stakeholders to fulfill our commitment to sustainable development.

Material Topics/Themes and Management Approach
Operational Performance

**Material Topic : Operational Performance****Material Topic : Economic Performance**

Item	Management Approach
Policy/Commitment	Pursue sound financial performance through the provision of professional products, technologies and services. Help Winbond exert a positive influence by maintaining continued growth in revenue and profitability, consistently creating even more economic value over a long period of time, and providing feedback to all stakeholders.
Responsibility	In addition to regular sales and Board meetings to discuss the direction of business development, the chairperson can also convene ad hoc conferences on medium and long-term strategies for business development in order to take advantage of future industry trends and business opportunities.
Resources	Seek professional outside advice from accounting firms or the National Taxation Bureau the on financial or taxation risks when necessary.
Communication Channel	The "Stakeholder Section" on the Winbond website provides Reporting Channel for stakeholders to file a complaint.
Specific Actions	Track and report the economic performance on a regular basis. Each unit involve must also make recommendations and solutions.
Mechanism for Evaluating Management Approach	The financial and business situation should be translated into quantified to determine the effectiveness of the management approach and policy. Budgets, company history, and the business situation of our peers are taken into account to revise policy and management approach in the future.
Management Approach Outcome of Assessment	Steady Growth in Business Performance.

1.1 Introduction of Winbond

Corporate Culture and Vision

The corporate culture and core values of Winbond are defined by “Conduct business with integrity and ethical behavior”, “Accountable team work”, “Enthusiasm of learning”, “Aggressively innovate”, and “Sustainable contribution.” All Winbond employees are expected to understand and practice these core values, ideals and behaviors. The Winbond “Business Integrity Best Practice Principles”, “Employee Code of Conduct”, and “Corporate Social Responsibility Management Procedure” require every customer, investor, employee, supplier, and everyone that we come into contact with to be treated with the highest standard of “business integrity” as possible. Our goal is to realize the vision of “be a hidden champion in providing sustainable semiconductors to enrich human life.”

About Winbond

Winbond specializes in the design, manufacture, and sale of memory IC products from product design, research and development, and wafer fabrication to the marketing of brand name products. Core product lines include Code Storage Flash Memory, TrustME® Secure Flash, Specialty DRAM, and Mobile DRAM. Related product applications can be found in the following five fields: autotronics, industrial electronics, communications, computer processing, and consumer electronics. Winbond leveraged the advantages of our technological autonomy and prudent production strategy to build a highly flexible production system that generates synergies from complementary product combinations. We strive to provide our global customers with low-to-medium density specialty memory solutions in order to realize the sustainable development of self-owned brands.

Winbond has now established subsidiaries and support centers in USA, Japan, Israel, China, Hong Kong, Germany. Distributors are being actively developed in each country to expand the depth and breadth of product sales. Strict management of production processes and quality control are used by Winbond for enhanced yield analysis, supply chain management, and customer satisfaction. We have since built up a strong word-of-mouth reputation and obtained certification for international standards such as ISO 9001, ISO 26262, IATF 16949, QC 080000, ISO 14001 and ISO 45001. We were also the first memory IC company in Taiwan to be IO 26262 certified for automotive functional safety.

Winbond now plans to build a second highly smart and automated 12” fab in Kaohsiung. We hope our plentiful production capacity can satisfy the diverse needs of our customers. We will also monitor market developments as well as supply and demand. We will methodically review our production configuration, so that we can make further improvements to the long-term competitiveness of Winbond in the memory IC market. As a leading global supplier of memory IC solutions, innovative R&D and global human resources strategy are very important to Winbond as well. The clustering effect of STSP Kaohsiung park should encourage more semiconductor talent to be attracted to our company and work together with us to provide customers with a full-spectrum of specialty memory solutions.

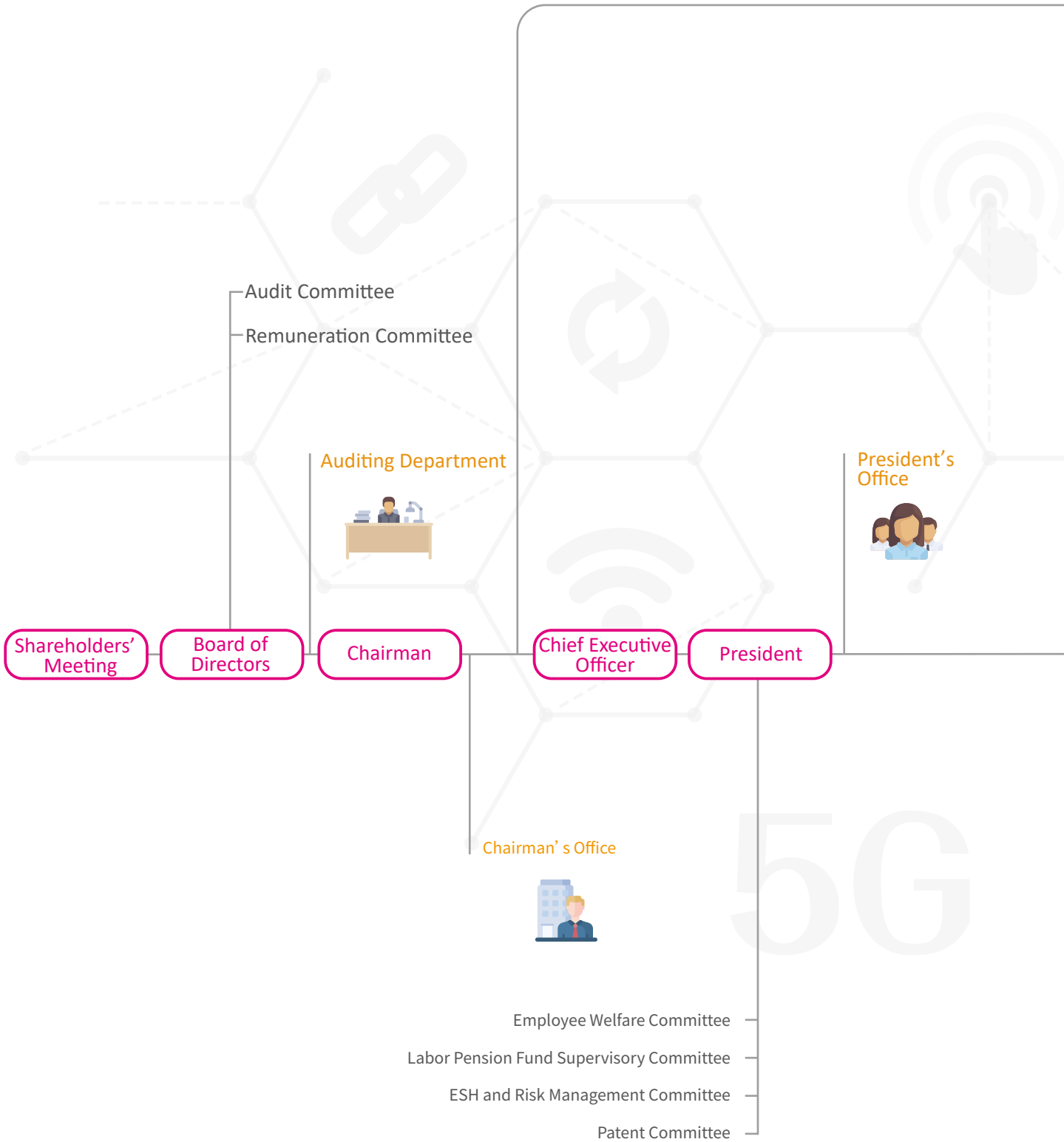


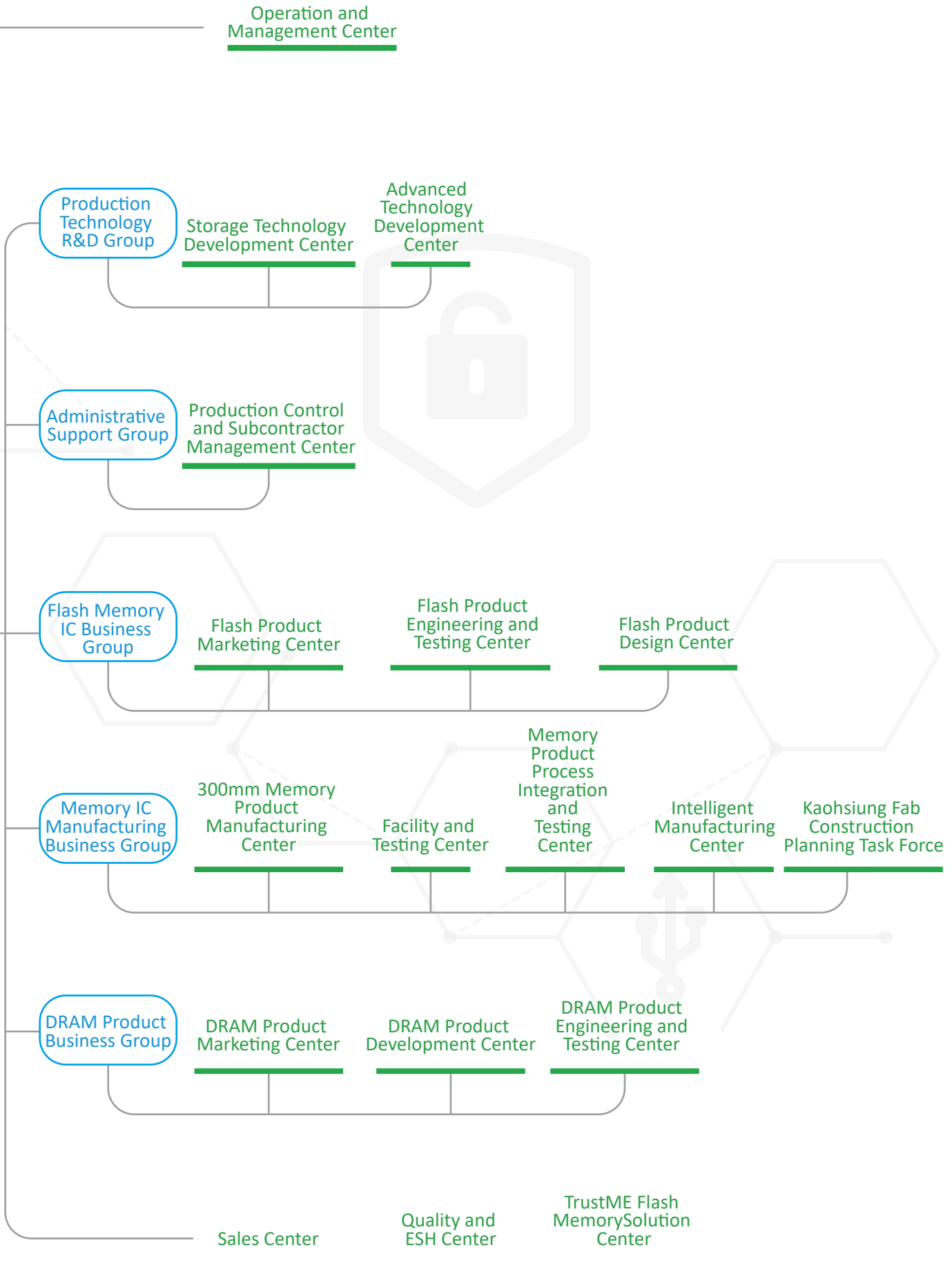
Company Profile

Company Name	WINBOND ELECTRONICS CORPORATION
Global Employees	3,148 people
Capital	NT\$39.8 billion
Data Established	September 29, 1987
Date Listed	October 18, 1995
Key Products and Technologies	Code Storage Flash Memory 、TrustME® Safe Flash Memory, Specialty DRAM and Mobile (DRAM)
Chairman and CEO	Arthur Yu-cheng Chiao
President	Pei-ming Chen (appointed in March, 2020)
Headquarters	No. 8, Keya 1st Rd.,Daya Dist.,Central Taiwan Science Park, Taichung City 42881, Taiwan
Operating Sites	Taiwan, USA, Japan, Israel, China, Hong Kong, Germany, India



Winbond Organization Chart





Global Operations

Headquarters - Taiwan

Winbond Electronics Corporation

Headquarters and CTSP Site

- No. 8, Keya 1st Rd.,Daya Dist.,Central Taiwan Science Park, Taichung City 42881, Taiwan
- Tel: +886-4-2521-8168

Zhubei Building:

- Zhubei Building: No.539, Sec. 2, Wenxing Rd., Zhubei City, Hsinchu County 30274, Taiwan
- Tel: +886-3-567-8168

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: +886-2-8177-7168

Winbond Electronics (H.K.) Limited

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

Winbond Technology LTD

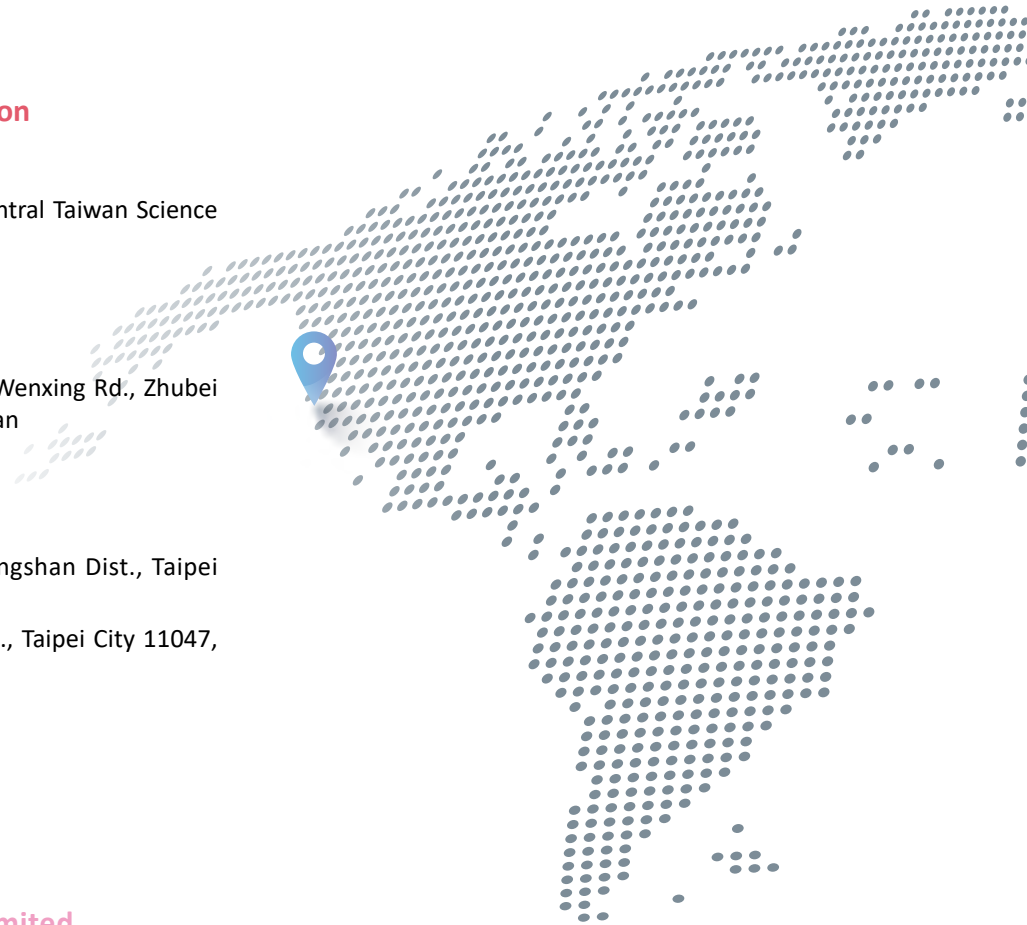
- 1 Abba Eban Ave, Building B, First Floor, Herzliya : 4672519, Israel
- Tel: +972-9-866-0700

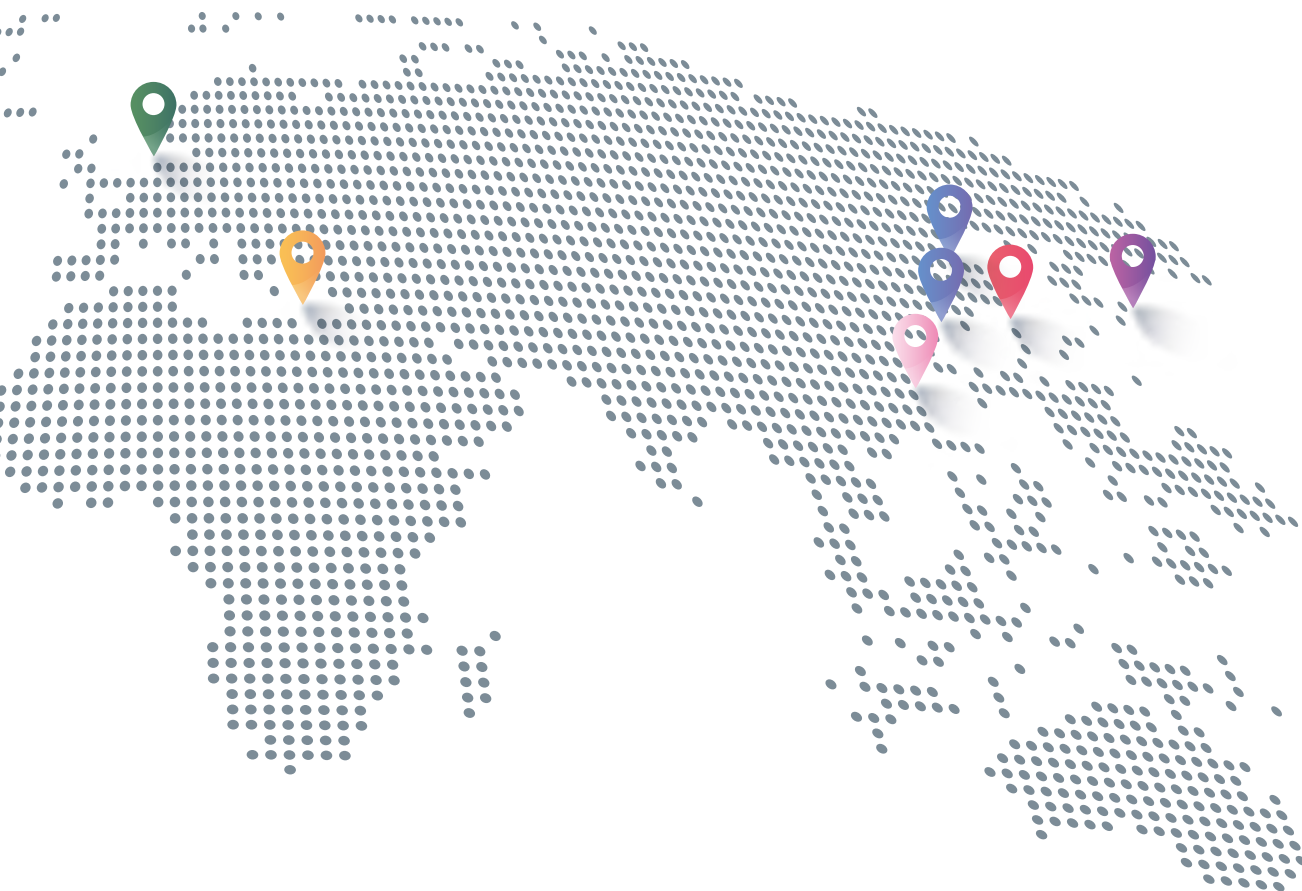
Winbond Electronics (Suzhou) Limited

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- Tel: +86-512-8163-8168

Winbond Electronics (Suzhou) Limited -Shenzhen Branch office

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Winbond Electronics Corporation Japan

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- Tel: +81-45-478-1881

(Winbond Electronics Corporation America)

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

(Winbond Electronics Corporation America-Pleasanton office)

- 5934 Gibraltar Drive, Suite 200, Pleasanton, CA 94588, U.S.A.
- Tel: +1-408-943-6666

Winbond Electronics Germany GmbH

- Pacellistraße 8, 80333 Munich, Germany
- Tel: +49 1590 2999 993

For more information on Winbond and affiliated enterprises [please refer to the annual report.](#)

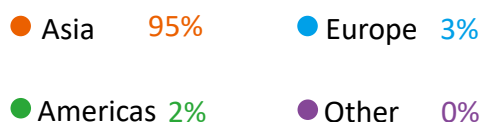
Economic Performance

Winbond reported consolidated revenues of NT\$60.68 billion in 2020, an increase of 24.4% compared to 2019; consolidated net profit after tax was NT\$1.52 billion, earnings per share after tax was NT\$0.33, while total taxes paid reached NT\$160 million and accounted for 0.26% of total revenue. For more information and analysis of financial performance, please refer to the [Winbond 2020 Annual Report](#).

2020 Consolidated Financial Performance (Unit: Millions NTD)

Item	Year		
	2018	2019	2020
Operating Income	51,190	48,771	60,683
Non-Operating Income and Expenditure	468	497	185
Direct Economic Value Generated [A]	51,658	49,268	60,868
Operating Costs	32,039	35,858	43,643
Employee Salary and Benefits Expenditure (Personnel Costs)	9,369	8,623	10,600
Payments to Investors	4,187	4,329	788
Payments to the Government	150	154	123
Community Investment	2	10	10
Direct Economic Value Distributed [A]	45,747	48,974	55,164
Economic Value Retained [A-B]	5,911	294	5,704
Net Profit before Tax	8,395	1,753	1,812
Net Profit after Tax	7,728	1,477	1,519
Earnings (Losses) per Share (NTD)	1.87	0.32	0.33

Revenue Distribution by Product Types and Applications







Product Category	Proportion of 2020 Revenue
Dynamic Random Access Memory (DRAM) Products	28.77
Flash Memory Products	37.49
Logic Products	33.74
Other	-
Product Applications	Proportion of 2020 Revenue
Automotive & Industrial	19%
Communication Electronics	28%
Computers	17%
Consumer Electronics	37%

For more information on Winbond financial performance and sales, please refer to the [2020 annual report](#).

Product Information

Main Products

Link to product information			
Code Storage Flash Memory	TrustME® Secure Flash Memory	Specialty Memory	Mobile Memory
			

Note: Total wafer production was 465 (thousand pcs), while total die production 8,008,902 (thousand pcs)

Product Applications

Link to product applications				
Autotronics	Industrial Electronics	Communications	Computer Processing	Consumer Electronics
				

Membership of External Organizations

Winbond actively participates in activities organized by industry organizations and technology alliances to obtain the latest industry technologies and know-how as well as build a good relationship with our peers.

Participation in Industry Associations

Industry Associations	2020 Participation
Taiwan Electrical and Electronic Manufacturers' Association (TEEMA) TEEMA serves as a bridge between the government and industry. It provides members with a diverse range of services on expanding international trade, promoting international relations, supporting industry development, information services, legal advice, and talent development.	Chairman Arthur Chiao is a strategy consultant to TEEMA.
Taiwan Semiconductor Industry Association (TSIA) TSIA activities are aimed at building consensus on industry development in order to promote cooperation during competition and the sound development of the industry as a whole.	President Pei-ming Chen is a director of TSIA.
The Allied Association for Science Park Industries (ASIP) ASIP serves as a bridge for communication of policies and feedback between the government and industry. It coordinates industry efforts and promote the stable development of science park industries.	Vice President Wen-hua Lu is a supervisor of ASIP.

1.2 Sustainable Development Strategy

Sustainable Development Goals

The release of the United Nations Sustainable Development Goals (SDGs) saw Taiwan release its own SDGs. Winbond immediately began incorporating goals related to our core business into our CSR policy and business approach.

Accomplishments in SDGs Promotion

Corresponding SDGs	2020 Performance Highlights	Future Direction
 <p>1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day.</p>	<p>"Caring for the Disadvantaged" is one of the permanent CSR commitments made by Winbond. We provide volunteers and funding to help disadvantaged groups through tough times. Projects supported by Winbond include volunteering at children's homes, donation of used computers, and fund-raising for academic scholarships.</p>	<p>Continued efforts to increase the extent or expand the scope of corporate philanthropy.</p>
 <p>2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.</p>	<p>Since 2011, Winbond has corporated with non-profit organization foundation to suport the happy breakfast program to Hsinchu, and Taichung elementary schools in remote areas. It was expected to provide schoolchrien with sustainable health and living standards, through the happy breakfast program in the remote areas.</p> <p>Winbond sponsored NT\$ 600,000 to the breakfast program, in year 2020.</p>	<p>Continue to improve the happy breakfast program with teachers and students.</p>
 <p>3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.</p>	<p>Winbond strives to comply with the latest international environment, safety and health standards. We are also committed to providing a healthy working environment that conforms to statutory requirements through respect, caring, as well as mechanisms for worker consultation and participation. In 2020, all 124 workers in special operations underwent health exams. All were classified as category 2 for the purpose of health management and promotion based on the results.</p>	<p>Continued strengthening of health and safety management measures.</p>
 <p>4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.</p>	<p>The Winbond corporate vision, business philosophy and cultural values were combined with training requirement surveys to develop personalized learning and development courses. In 2020, Winbond Taiwan headquarters spent NT\$3.55 million to conduct on average 42 hours of education and training for each employee.</p>	<p>Promotion of employee career roadmaps along with continued enrichment of employee training content and formats.</p>
 <p>5.1 End all forms of discrimination against all women and girls everywhere.</p>	<p>To promote gender equality and employee rights, there is no difference in the base salary of junior male and female employees at Winbond. Compensation is based on employee role, responsibilities, education, experience and other factors. The male to female ratio at Winbond is 1:1 for senior management roles and 1.1:1 for non-management roles.</p>	<p>Continue to monitor international trends in human rights and incorporate them into the sustainable human rights management mechanism at Winbond.</p>
 <p>6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.</p>	<p>Winbond treasures all resources and strives to increase our water recycling rate. In 2020, our factory water recycling rate was 81% while process water recycling rate was 91%.</p>	<p>Continue to assess and promote new water-saving measures.</p>

Corresponding SDGs	2020 Performance Highlights	Future Direction
 <p>7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.</p>	Set up 499kW renewable energy generation facilities. It generated about 420,000 kWh, which had sold back to Taiwan Power Company.	Cooperate with the government's renewable energy policy, and plan the possibility of renewable energy installation.
 <p>8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.</p>	Winbond works actively to create economic value for all stakeholders. Our consolidated revenues in 2020 amounted to NT\$60.68 billion and was 24.4% higher than 2019; consolidated net profit after tax was NT\$1.52 billion and earnings per share after tax was NT\$0.33.	Continue to monitor market changes (including 5G/ AI/ IoT) and improve our financial performance.
 <p>9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.</p>	Winbond seeks to consolidate our competitive advantage through continuous innovation in products and technologies. Winbond is expanding our production capacity and upgrading our production processes to supply customers with green products that use even less power and have lower impacts on the environment. Winbond granted 502 patents and has accumulated 3,648 patents as of 2020.	The short-term goal (2021) is to increase the number of global patents granted by more than 400; the medium-to-long-term goals are to obtain more than 5,700 global patents (by 2025).
 <p>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.</p>	Winbond provides dedicated relocation service for foreign employees in Taiwan, including Taiwanese workforce culture explanation, company facilities introduction, and regular caring. It is to provide the timely assistant by understand the foreign employees' working and living need, which would help foreign employees to mingle into Taiwanese culture. At the end of 2020, 58% foreign employees have worked in Winbond over 5 years.	Continue to promote the corporate philosophy of friendly workplace, which is to make all the employees in Winbond may have Peaceful Work.
 <p>13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.</p>	Winbond is continuing to invest in pollution prevention to reduce the environmental impact of our operations. In 2020, Winbond invested NT\$373 million towards pollution prevention and reduced our greenhouse gas (GHG) emissions by 207,475 tonnes CO ₂ e.	Introduction of TCFD management framework. Continue to implement new energy-saving measures.
 <p>17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.</p>	Winbond believes in the importance of corporate sustainability performance. Regular supplier conferences and sustainability review standards are used to encourage partners to engage in self-improvement too. In 2020, economic, environmental, and social audits of Winbond suppliers/contractors produced a 100% pass rate. Five suppliers including FATC, Greatek, ChipMOS, ASE, and KYEC also passed the RBA VAP audit.	Winbond is working closely with our partners on the promotion of sustainable development topics. Sustainable supplier management will be refined and strengthened even further through sustainability risk evaluations as well written and field audits.

Winbond Sustainability Goals

Item	Sustainability Topic	Short-term (2019 ~ 2020)	Execution of Short-term Goals
1	Corporate Governance and Business Integrity	<ul style="list-style-type: none"> ▶ 100% of directors and workers have completed this training course. 	<ul style="list-style-type: none"> ▶ 100% of directors and workers have completed this training course.
2	Compliance	<ul style="list-style-type: none"> ▶ No material breaches (fines in excess of NT\$1 million). ▶ Regulatory changes are reviewed every quarter to ensure that internal rules are updated in a timely manner for compliance. 	<ul style="list-style-type: none"> ▶ No material breaches (fines in excess of NT\$1 million). ▶ Regulatory changes are reviewed every quarter to ensure that internal rules are updated in a timely manner for compliance.
3	Product and Service Quality	<ul style="list-style-type: none"> ▶ 80% of employees completed the training course on the 5-Why analytical method in 2020. ▶ Maintain a customer satisfaction rating of over 85%. 	<ul style="list-style-type: none"> ▶ 80% of employees completed the training course on the 5-Why analytical method in 2020. ▶ Maintain a customer satisfaction rating of over 85%.
4	Risk Management	<ul style="list-style-type: none"> ▶ GHG emissions per unit of product ≤ 15.1 kgCO₂e/layer. ▶ Energy consumption per unit of product ≤ 82.8 MJ/layer. ▶ Water consumption per unit of product ≤ 150 L/layer. ▶ Fab water recycling rate $\geq 80\%$. ▶ Continue to work with the accounting firm to ensure 0 defects during validation of financial reports and control systems. ▶ A statement on self-assessment of internal controls is to be issued by internal auditors and regular monitoring used to check for defects or regulatory violations. ▶ 100% contractor had completed RBA SQA s supplier self-assessment questionnaire. ▶ Stabilized the supply chain to achieve the goal of 0% material shortage. ▶ 100% of the suppliers agreed to follow Winbond Ethics and Integrity Policy. ▶ Request the supplier and contractors to use legal materials, and do not use the hazardous materials or conflict minerals. 	<ul style="list-style-type: none"> ▶ GHG emissions per unit of product was 13.5 kgCO₂e/layer. ▶ Energy consumption per unit of product was 80.1 MJ/layer. ▶ Water consumption per unit of product was 148 L/layer. ▶ Fab water recycling rate reached 81%. ▶ 0 defects found during validation of financial reports and internal controls. ▶ 100% contractor had completed RBA SQA s supplier self-assessment questionnaire. ▶ Stabilized the supply chain to achieve the goal of 0% material shortage. ▶ 100% of the suppliers agreed to follow Winbond Ethics and Integrity Policy. ▶ Request the supplier and contractors to use legal materials, and do not use the hazardous materials or conflict minerals.
5	Information security and privacy protection	<ul style="list-style-type: none"> ▶ No violation of customer privacy. 	<ul style="list-style-type: none"> ▶ No violation of customer privacy.
6	Occupational health and safety	<ul style="list-style-type: none"> ▶ The key indicators for disabling injury statistics such as FR and SR to be both 0. ▶ Cumulative participation in related exercises $\geq 60,000$ sessions/year. ▶ No violations of occupational safety and health regulations. 	<ul style="list-style-type: none"> ▶ FR was 0.51 and SR was 2. ▶ 41,195 sessions/year. The recreation center and sports classes were suspended due to COVID-19. ▶ No violations of occupational safety and health regulations.
7	Business Performance	<ul style="list-style-type: none"> ▶ Continue to keep track of short-term business performance through these financial indicators. 	<ul style="list-style-type: none"> ▶ Winbond met our revenue goals and satisfied customer requirements despite COVID-19.
8	R&D and Innovation	<ul style="list-style-type: none"> ▶ Grante more than 400 global patents. 	<ul style="list-style-type: none"> ▶ Develop products from marketing. ▶ Obtained 502 patents.

Medium-term (2021 ~ 2023)	Long-term (2024 ~ 2028)
<ul style="list-style-type: none"> ▶ 100% of directors and workers complete ethics training every year. 	<ul style="list-style-type: none"> ▶ 100% of directors and workers complete ethics training every year.
<ul style="list-style-type: none"> ▶ No material breaches (fines in excess of NT\$1 million). ▶ Regulatory changes are reviewed every quarter to ensure that internal rules are updated in a timely manner for compliance. ▶ Develop corporate ethical management practices based on actual requirements to ensure compliance on corporate ethics and government regulations. Adhere to the relevant regulations of the Responsible Business Alliance (RBA) Code of Conduct, review and assess compliance and applicability for the year, and carry out follow-up improvements. ▶ 100% completion rate for annual compliance training on key topics (e.g. anti-trust or export controls) . 	<ul style="list-style-type: none"> ▶ No material breaches (fines in excess of NT\$1 million). ▶ Regulatory changes are reviewed every quarter to ensure that internal rules are updated in a timely manner for compliance. ▶ Develop corporate ethical management practices based on actual requirements to ensure compliance on corporate ethics and government regulations. Adhere to the relevant regulations of the Responsible Business Alliance (RBA) Code of Conduct, review and assess compliance and applicability for the year, and carry out follow-up improvements. ▶ 100% completion rate for compliance training in all fields.
<ul style="list-style-type: none"> ▶ Satisfy the diverse requirements of customers by ensuring stable delivery and the continued introduction of new products. ▶ 100% of employees completed the training course on the 5-Why analytical method . ▶ Complete the promotion of the FMEA method. ▶ Obtain ISO 26262 automotive safety certification for first product in 2022. ▶ 2023 : Kaohsiung fab obtains IATF 16949 and QC 080000 certification. 	<ul style="list-style-type: none"> ▶ Identify and proactively resolve topics of concern to customers to build stable long-term cooperation and become a trusted partner. ▶ Maintain a customer satisfaction rating of over 90%.
<ul style="list-style-type: none"> ▶ GHG emissions per unit of product $\leq 13.5 \text{ kgCO}_2\text{e/layer}$. ▶ Energy consumption per unit of product $\leq 80.1 \text{ MJ/layer}$. ▶ Water consumption per unit of product $\leq 150 \text{ L/layer}$. ▶ Fab water recycling rate $\geq 80\%$. ▶ Continue to work with the accounting firm to ensure 0 defects during validation of financial reports and control systems. ▶ Regularly update the legal knowledge of group companies in each country. ▶ Stabilized the supply chain to achieve the goal of 0% material shortage. ▶ Request the supplier and contractors to use legal materials, and do not use the hazardous materials or conflict minerals. 	<ul style="list-style-type: none"> ▶ Continue to reduce environmental impacts to live in harmony with the ecological environment. ▶ Study international financial and taxation laws, so that appropriate planning and decisions can be made on future expansion of the group organization. ▶ Stabilized the supply chain to achieve the goal of 0% material shortage. ▶ Request the supplier and contractors to use legal materials, and do not use the hazardous materials or conflict minerals.
<ul style="list-style-type: none"> ▶ Continue to upgrade the standard of information security technology. 	<ul style="list-style-type: none"> ▶ Continue to upgrade the standard of information security technology.
<ul style="list-style-type: none"> ▶ The key indicators for disabling injury statistics such as FR and SR to be both 0. ▶ Cumulative participation in related exercises $\geq 48,000$ sessions/year. ▶ No violations of occupational safety and health regulations. 	<ul style="list-style-type: none"> ▶ Zero accidents and zero occupational injuries. Reduce the environmental impacts.
<ul style="list-style-type: none"> ▶ Realize the benefits of the 2020 merger (NTCJ) to generate even more economic value for the company's overall operations. ▶ Kaohsiung fab enters production to increase the company's production and overall performance. 	<ul style="list-style-type: none"> ▶ Be a Hidden Champion in Providing Sustainable Semiconductors to Enrich Human Life.
<ul style="list-style-type: none"> ▶ Continue to improve patent quality and granted rate to increase our intellectual property asset and protect technical research achievements. 	<ul style="list-style-type: none"> ▶ Continue to improve patent quality and granted rate to increase our intellectual property asset and protect technical research achievements.

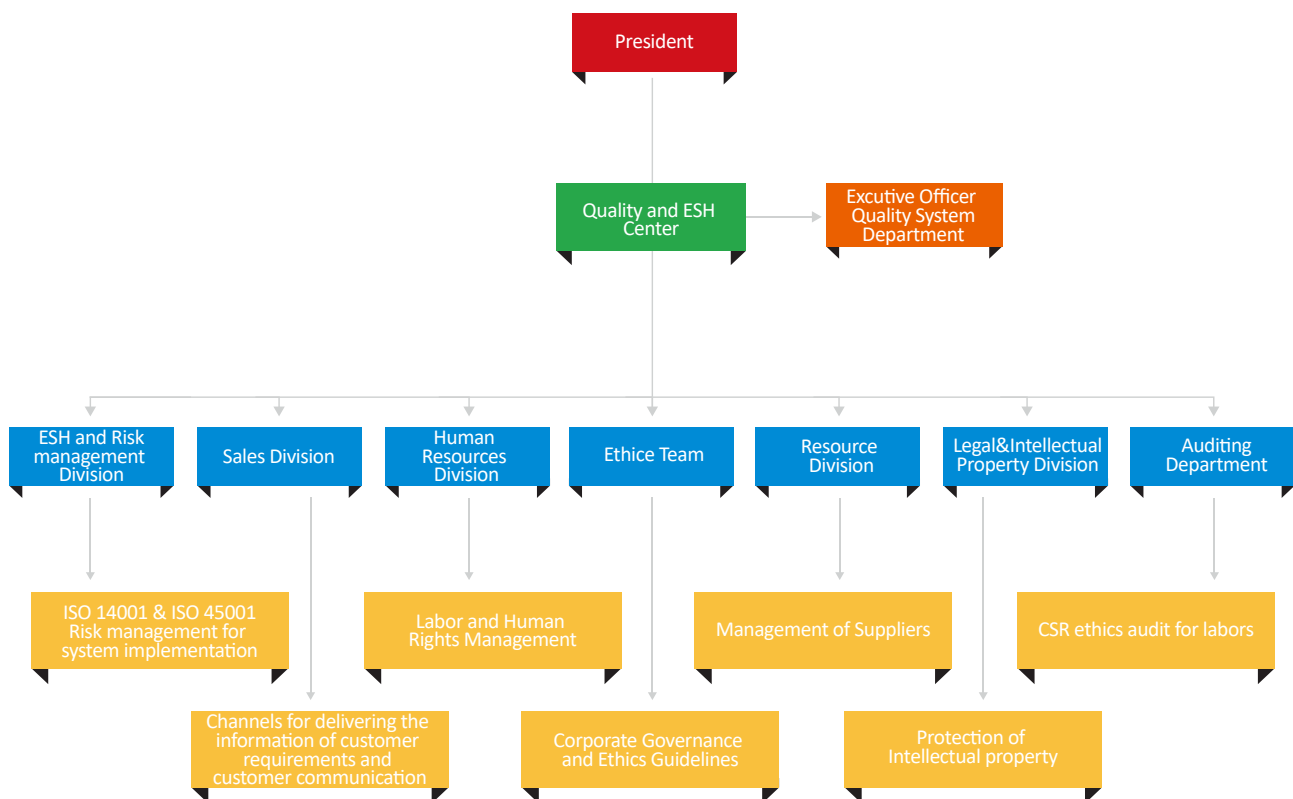
Corporate Social Responsibility Policy

Winbond strongly believes that all business management activities must take CSR into consideration. Enhancement of employee training and the company's internal controls ensure compliance on corporate ethics and government laws. We also strive for improvements in quality management and environmental protection, place a strong emphasis on social welfare, and maintain positive communications with stakeholders.

Winbond incorporated the Responsible Business Alliance (RBA) Code of Conduct and UN SDGs into our "CSR Policy" and "CSR Best Practice Principles." The policy and principles were approved during the 20th meeting of the 9th Board (January 24, 2014), and the 5th meeting of the 10th Board (December 18, 2014). The President's Office is responsible for the proposal and execution of CSR policy, system, related management approach and action plans. Regular reports must also be made to the Board of Directors. Winbond hopes that all business partners can support and adhere to the requirements of CSR. The goal of sustainable development can then be realized by promoting economic, environmental and social progress through the joint fulfillment of CSR.

Corporate Social Responsibility Implementation Committee

The "Winbond Corporate Social Responsibility (CSR) Implementation Committee" was established in 2015. The Committee is made up of the five following mission units: Quality and EHS Product Sales, Human Resources, Ethics, and Administration & Subcontractor. The President is the chair of the Committee. The teams meet regularly to research, discuss and manage the three main aspects of sustainability: environment, society, and governance. A management and review meeting (most recent meeting was on January 26, 2021) would be held every year to update the top management on the implementation of the CSR management system and suggestions for improvement. CSR performance for the current year and the work plan for the following year are submitted by the President to a Board meeting in the 4th quarter of each year (most recent meeting was on November 12, 2020). Amendments are made based on the directors' feedback to make CSR a part of the Company's decision-making processes.



Responsible Business Alliance (RBA)

The Responsible Business Alliance Code of Conduct (RBA CoC) was previously the Electronic Industry Citizenship Coalition (EICC). It offers a set of guidelines for the electronics or electronics-oriented industries and their supply chains on ensuring the safety of their work environments, workers are treated with respect and dignity, business activities are environmentally friendly, and conducted in an ethical manner.

In September 2020, Winbond passed the biennial RBA 6.0 validation program with the maximum possible score of 200 and was given a platinum rating. The requirements of RBA CoC are now incorporated into the CSR Management Procedure for all Winbond employees to follow. Winbond is also an active advocate on labor rights, health and safety, environmental protection, and code of ethics. We believe in working together to fulfill our responsibility as a corporate citizen and adherence to the best practice on business integrity.

RBA Code of Conduct

Aspect	Topic	
 Labor	Freely Chosen Employment Young Workers Working Hours Wages and Benefits	Humane Treatment Non-Discrimination Freedom of Association
 Health and Safety	Occupational Safety Emergency Preparedness Occupational Injury and Illness Industrial Hygiene	Physically Demanding Work Machine Safeguarding Sanitation, Food, and Housing Health and Safety Communication
 Environment	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
 Ethics	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
 Management Systems	Company Commitment Management Accountability and Responsibility Legal and Customer Requirements Risk Assessment and Risk Management Improvement Objectives Training	Communication Worker Feedback, Participation and Grievance Audits and Assessments Corrective Action Process Documentation and Records Supplier Responsibility

1.3 Materiality Analysis and Stakeholder Engagement

Winbond is continuing to communicate with stakeholders in a transparent and open manner to identify all sustainability topics of concern and incorporate them into our corporate sustainability blueprint. Winbond conducts a systematic assessment of sustainability topics through surveys based on the GRI Standards, Sustainability Accounting Standards Board (SASB) standards, market trends and industry characteristics. The distribution and recovery of these surveys are used to collect stakeholder feedback. Sustainability topics are also taken into consideration when assessing operational impacts and risks. Material topics can then be identified and given priority in our treatment and response.

Stakeholder and Material Topic Assessment Process

Step	1. Identify Stakeholders	2. Compile Topics of Concern	3. Assess Impact of Topic	4. Confirm Material Topics	5. Examine
Processes	A stakeholder identification survey is filled out by the heads of each Winbond department to establish the relevance of each stakeholder to the company and identify material stakeholders.	Based on the outcomes of stakeholder identification, surveys or interviews are conducted to determine the topics of concern and analyze the level of concern.	Winbond Senior management then analyze the the impact on corporate operations and effect on risk assessment for each sustainability topic to confirm how each topic impacts on the company.	The topics of concern to stakeholders and impact on Winbond are used to construct a material topic matrix based on the assessed outcome for each topic. The matrix is then used to determine their materiality.	Once the material topics have been identified, they are examined to ensure that they match the requirements for sustainability context and completeness.
Quantified Performance	7 Types of Stakeholders Identified.	273 Valid Survey Responses.	Input from 5 Senior Executives.	8 Material Topics Identified.	Meet 100% of the sustainability and completeness requirements in this topic.

1.3.1 Stakeholder Communication and Response

The relevance and precedence of stakeholders are identified by Winbond using the five principles of the AA1000 Stakeholder Engagement Standard (SES) 2015. These include Dependency, Responsibility, Influence, Tension, and Diverse Perspectives.

Stakeholder analysis is carried out by Winbond every year to effectively track and manage the effectiveness of our sustainability strategy. In 2020, meetings were held by Winbond for each department to re-examine and confirm the importance of each stakeholder. The 7 groups ranked in decreasing order of importance were government agencies, customers, employees, investors/shareholders, the media, suppliers/contractors, and community groups.

Stakeholder Communications and Outcomes

Stakeholder	Importance of Stakeholder to Winbond	Topics of Concern	Communication Channel and Frequency	2020 Communication Outcome
Government Agencies	Government agencies are concerned with Winbond's regulatory compliance on environment, society and governance (ESG) matters. Its influence on industry development and policy implementation makes it a material stakeholder.	<ul style="list-style-type: none"> Compliance Corporate Governance and Business Integrity Occupational health and safety Waste Management Risk Management 	<ul style="list-style-type: none"> Official document (ad hoc) Hearings/ Regulatory conferences / Policy information sessions (ad hoc) Inspections by competent authority (ad hoc) CSR questionnaire (annually) 	<ul style="list-style-type: none"> Took part in 35 meetings with environmental, safety and health authorities. 26 on-site audits and inspections were conducted by environmental, safety and health authorities. Certified by the Internal Compliance Program (ICP) of the MOEA Bureau of Foreign Trade.
Customers	Customers are the main source of the economic value created by Winbond. They are primarily concerned with the ESG performance of Winbond operations.	<ul style="list-style-type: none"> Corporate Governance and Business Integrity Risk Management Product and Service Quality Compliance Information Security and Privacy Protection 	<ul style="list-style-type: none"> Corporate website, telephone, and e-mail (immediate) Questionnaire response (immediate) Sales meetings (regular) Technical seminars (ad hoc) Customer audit (ad hoc) CSR questionnaire (annually) Customer satisfaction survey (annually) 	<ul style="list-style-type: none"> Customer satisfaction reached 90% in 2020. Participation in Electronica Germany trade show in Munich held once every two years. Hosted the WinTech 2021 event to join our customers in dissecting future market trends as well as reveal the latest products and advanced technologies.

Stakeholder	Importance of Stakeholder to Winbond	Topics of Concern	Communication Channel and Frequency	2020 Communication Outcome
Employees	Employees are one of Winbond's most important assets. They are a key stakeholder in our continued breakthroughs and innovations.	<ul style="list-style-type: none"> Compliance Corporate Governance and Business Integrity Occupational health and safety Human Rights and Equality Information Security and Privacy Protection 	<ul style="list-style-type: none"> 75234 Employee Complaints Hotline (on demand) "Care" Employee Suggestion Box Care (on demand) Sexual Harassment Complaints Committee (on demand) Health consultation (on demand) Health promotion activities (ad hoc) Survey on health, stress, and aches (annual) Employee Welfare Committee (ad hoc) Employer-employee meetings and Town Hall meetings (quarterly) Functional communication meetings (regularly) Internal Bulletin Board (ad hoc) Company philosophy articles on the employee homepage (weekly) Monthly labor safety meetings (monthly) Site Environmental, Safety and Health Committee (quarterly) Hosting of environmental, safety and health Training (regularly) Launch conference for new performance system CSR questionnaire (annually) 	<ul style="list-style-type: none"> 2 cases of internal complaints in total 26 cases received through suggestion box (both physical and electronic) 0 sexual harassment cases 4 employer-employee meetings (Zhubei and CTSP) including 0 case reports and 4 everyday issues 4 executive management conferences were held. The sessions were attended by 1,703 people for an attendance rate of 76%
Shareholders/Investors	Shareholders/Investors are Winbonds' main source of capital. They are mainly concerned with Winbond's operating performance and sustainable development.	<ul style="list-style-type: none"> Business Performance Corporate Governance and Business Integrity Risk Management Compliance R&D and Innovation 	<ul style="list-style-type: none"> Telephone, and e-mail (immediate) Corporate website (ad hoc) Market Observation Post System (ad hoc) Institutional investor conferences (half-yearly, or ad hoc if there are special circumstances) One-to-one meetings with institutional investors (10 ~ 20 sessions/quarterly) Shareholders' Meeting (annually) CSR questionnaire (annually) 	<ul style="list-style-type: none"> 12 disclosures of revenues Hosted 1 general shareholders' meeting Hosted 2 institutional investor conferences 4 disclosure of financial reports
The Media	The media serves as a bridge between Winbond and stakeholders. Providing the media with timely access to information released by Winbond that means they can assist Winbond with the disclosure of positive sustainability information.	<ul style="list-style-type: none"> Business Performance R&D and Innovation Corporate Governance and Business Integrity Talent Recruitment and Development Salary, Benefits and Employee Care 	<ul style="list-style-type: none"> Telephone, and e-mail (immediate) Press release (regularly) Media interviews (annually) CSR questionnaire (annually) 	<ul style="list-style-type: none"> 20 telephone and e-mail communications Provided 30 press releases Provided the company's operating report 2 times 1 press interview
Suppliers/Contractors	Suppliers/Contractors supply the materials and services needed by Winbond's production operations. They help maintain the continuity and sustainability of Winbond operations. Therefore, they are the important stakeholders and partners of the sustainable development.	<ul style="list-style-type: none"> Compliance Corporate Governance and Business Integrity Product and Service Quality Occupational health and safety Information Security and Privacy Protection 	<ul style="list-style-type: none"> External complaints channel (immediate) Winbond Ethics and Integrity Policy (half-yearly) Key Supplier Evaluation (regularly) Key Supplier Quality Meeting (monthly, quarterly) Contractor Coordination Meeting (monthly) Supplier audit (annually) CSR questionnaire (annually) 	<ul style="list-style-type: none"> 0 cases of supplier complaints 100% commitment rate on Supplier Code of Conduct and RBA CoC 100% commitment rate on Declaration of Non-use of Conflict Minerals by key suppliers Carried out Supplier CSR and Hazardous Substance Frere (HSF) audits 100% pass rate for supplier audits on economic, environmental and social performance, and supplier assessments against sustainability standards.
Community	Their proximity to Winbond's operating locations means they bear the brunt of the impact from our operations. Their welfare is therefore of the greatest importance to Winbond.	<ul style="list-style-type: none"> Human Rights and Equality Salary, Benefits and Employee Care Occupational health and safety Compliance Corporate Governance and Business Integrity 	<ul style="list-style-type: none"> Volunteer service (at least once every quarter) Collaborative projects and visits (ad hoc) 	<ul style="list-style-type: none"> 1 visit to children's home exhibition 1 visit to remote rural elementary school 1 visit to Winbond by the Taiwan Fund for Children and Families

Grievance Mechanism

Winbond is committed that all business management activities must concurrently take into account of corporate social responsibility, to ensure compliance with corporate ethics, government's laws and regulations, while upholding ethical operation in all business endeavors. In addition to the Reporting Channel for stakeholders on the website, Winbond also provides hotline and mailbox. The internal and external individuals may file a complaint or report anonymously or non-anonymously, if employees violate the conducts, unfair business activities, bribery or illegitimate interests, fraud, coercion, etc.

Winbond upholds the principle of confidentiality and protection for complaint cases and handles the cases with fair and proper treatment. Winbond should not lead the complainant case to dismissal, job transfer, or any actions that affect the work of the employee; the employee who files the complaint shall not be discriminated or intimidated by other employees. All stakeholders including staff members are encouraged to file complaints against unlawful conducts.

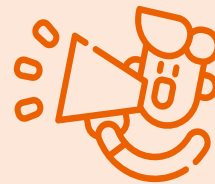
Reporting Channel

Winbond Electronics official stakeholders Communication channel

Hotline: +886-4-2521-3579

Mailbox: internal_audit@winbond.com

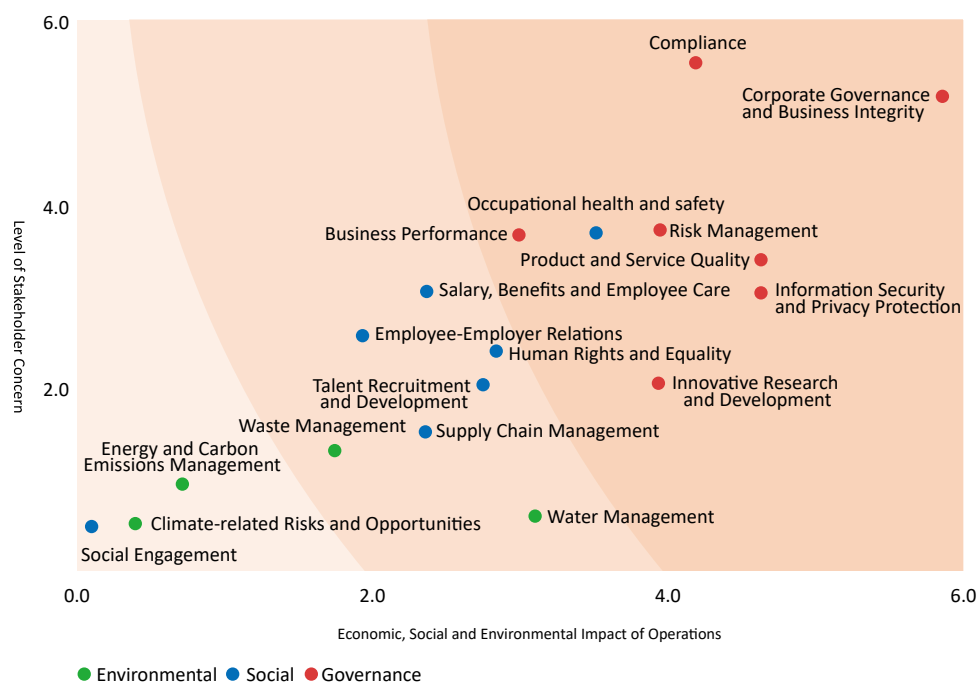
[Winbond website Reporting Channel](#)



1.3.2 Identification of Sustainability Topics

Sustainability topics are analyzed and collated by the Winbond CSR Implementation Committee based on three main aspects: economic, environment, and society. References include the Winbond corporate culture and business philosophy, RBA Code of Conduct, as well as the definitions and categories set out in the GRI Standards published by the Global Reporting Initiative (GR).

In 2020, Winbond used online and printed questionnaire surveys based on the outcomes of stakeholder identification to investigate the topics of stakeholder concern. A total of 273 valid responses were collected. Each topic's short, medium and long-term financial and non-financial impact on Winbond as well as the risks involved were assessed by 5 senior executives. The assessment found that there were 8 material topics for Winbond in 2020, including Corporate Governance and Business Integrity, Compliance, Product and Service Quality, Information Security and Privacy Protection, Occupational Health and Safety, Risk Management, Business Performance, and R&D and Innovation. Information Security and Data Protection was a new addition this year that reflected increased stakeholder concerns with the management of information technology in response to advances in technology.



Material Topics and Material Themes

Material Topics	GRI Material Topics/ Self-defined Topics	Material Issues Implications for Winbond	Scope of Impact to Value Chain			Corresponding Section
			Winbond	Customers	Supply Chain	
Corporate Governance and Business Integrity	GRI-205 Anti-corruption	Integrity is emphasized by Winbond in our external dealings with customers. Internally, we expect employees to practice self-discipline as well as company rules and government regulations. A sound corporate governance culture is cultivated to reinforce Winbond values and protect the interests of stakeholders.	●	▲	▲	CH2.1 Corporate Governance CH2.3 Transparency and Integrity
	GRI-206 Anti-competitive Behavior					
Compliance	GRI-307 Environmental Compliance	Winbond embraces “business integrity” as our top integrity standard for managing all business processes. We continue to review our own activities with the highest integrity standard, in order to establish our reputation as a trustworthy and respectful company.	●	▲		CH2 Integrity and Stability CH3 Vision and Value CH4 Green Environment CH5 Harmony and Cooperation
	GRI-419 Socioeconomic Compliance					
Product and Service Quality	GR-417 Marketing and Labeling	Winbond provides proper labeling and instruction guides for our products and services. We earn the trust of our stakeholders and enhance business reputation through ensuring compliance and protecting customer rights.	●	●		CH3.2 Quality Management
Risk Management	Risk Management (Self-defined Topic)	Preventive management for disaster risks is embraced by Winbond to mitigate the business impact of the external environment and internal company topics. We also pursue sustainable development through rigorous risk engineering as well as enforcement of safety guidelines and standards.	●	▲	▲	CH2.4 Risk Management
Information Security and Privacy Protection	GRI-418 Customer Privacy	Winbond values customer privacy and our customer information is heavily protected by rules and regulations of EU General Data Protection Regulation (GDPR). All business information exchanged between Winbond and our customers, including correspondence and data, are tightly controlled by internal company systems for total peace of mind.	●	▲	▲	CH2.5 Information Security Management
	Information Security (Self-defined Topic)					
Occupational health and safety	GRI-403 Occupational Health and Safety	Winbond strives to comply with the most updated international environment, safety and health standards. We are also committed to fulfilling our social responsibility as a world-class company by providing a healthy working environment that conforms to statutory requirements through respect, caring, as well as mechanisms for worker consultation and participation.	●	▲	▲	CH5.4 Occupational Health and Safety
Business Performance	GRI-201 Economic Performance	Winbond continues to pursue operational stability and profit growth. We supply global customers with the full range of low to medium-density specialty memory product solutions. Winbond aims to increase our competitiveness and improve our market position in order to become a sustainable self-owned brand.	●	▲	▲	CH1.1 Introduction to Winbond
R&D and Innovation	Innovative R&D (Self-defined topic)	Winbond continues to concentrate our resources in competitive markets. In response to trends in sustainability, advanced semiconductor design and technologies are now being applied to develop innovative products and services that create economic value for Winbond and respond to environmental changes/market requirements in a timely manner.	●	●	▲	CH3.1 R&D and Innovation

Note:

- : Direct impact; ▲ : Indirect impact through commercial relationship
- There was no change to topic Boundaries in 2020
- Key changes in 2020 included the addition of GRI 205-2 Communication and training about anti-corruption policies and procedures, information security (self-defined topic), and R&D innovation (self-defined topic) as material topics; GRI 403 Occupational health and safety (2018) was also updated to the latest version.

CH2

Integrity and Stability



Winbond has adopted “business integrity” as our top standard for corporate ethics in every aspect of our operations including all managers and employees. We have also expanded this to include all Winbond stakeholders. Thanks to the efforts of all employees, Winbond has been consistently ranked in the top 20%, since the first Corporate Governance Evaluation was held. Winbond will continue to embrace the corporate culture founded on business integrity to establish our trustworthy and reputable company reputation.

Material Topics/Themes and Management Approach

Corporate Governance and Business Ethics, Legal Compliance, Risk Management, Information Security and Personal Privacy Protection



Material Topic: Corporate Governance and Business Ethics.

Material Themes: Anti-corruption, Anti-competition Behavior

Item	Management Approach
Policy/ Commitment	<ul style="list-style-type: none"> Winbond adheres strictly to the principles of fair competition. Product sales are also conducted in a legal and proper manner. Integrity is emphasized in our external dealings with customers. Internally, we expect employees to practice self-discipline, follow internal company rules, and adhere to domestic laws in order to establish a sound corporate governance and risk management mechanism.
Responsibility	<ul style="list-style-type: none"> Winbond has set up communication channel with measures have also been put to place to keep complaints confidential and secure. Company managers may not re-assign or otherwise discriminate against employees for making a complaint; nor may company personnel of any grade discriminate, coerce or target employees for making a complaint. The process is governed by the "Winbond Internal Complaints Rules."
Resources	<ul style="list-style-type: none"> Business-related training courses are regularly organized by the Human Resources (HR) Department.
Communication Channel	<ul style="list-style-type: none"> Winbond has set up a 75234 employee feedback hotline. An "Internal Complaints Form" can also be submitted in writing or by e-mail to the "Employee Suggestion and Feedback Box" set up by the HR Department or implementing unit. To protect employees and jobseekers from sexual harassment in the workplace, a "Sexual Harassment Complaints Committee" is appointed to handle sexual harassment cases under the Gender Equality in Employment Act. Winbond has established the "Ethical Management Violation Handling Instruction". The internal and <u>external individuals may also file a complaint or report anonymously or non-anonymously</u>, if employees have any illegal behaviors, unfair business activities, bribery or illegitimate interests, fraud, coercion, etc.
Specific Actions	<ul style="list-style-type: none"> The online course on "Employee Code of Ethics" would be delivered every year. The course covers "business integrity" (prevention of insider trading; fair trade, advertising and competition; confidentiality, and prevention of retaliation) and "Corporate Social Responsibility."
Mechanism for Evaluating Management Approach	<ul style="list-style-type: none"> Target management meetings are regularly convened to review current progress and take any necessary management measures to further enhance management performance. Annual Corporate Governance Evaluation.
Management Methodology Approach Assessment	<ul style="list-style-type: none"> Winbond was ranked in the top 6-20% by the 2020 Corporate Governance Evaluation. No violations of laws and regulations on corporate governance and business integrity.



Material Topic : Legal Compliance



Material Theme : Socioeconomic Compliance

Item	Management Methodology
Policy/Commitment	<ul style="list-style-type: none"> Compliance with domestic and international regulations in every field and at every level is important to Winbond. It is also the fundamental principle in the management of all company operations. We are continuing to hold ourselves to the highest standards on the basis that compliance must come before profit.
Responsibility	<ul style="list-style-type: none"> Each unit is responsible for regulatory compliance in their respective fields. Legal Affairs assist with legal questions or provide legal advice.
Resources	<ul style="list-style-type: none"> We consult with external professionals or authorities, such as accounting firms or the TWSE, when necessary.
Communication Channel	<ul style="list-style-type: none"> Legal Affairs assist with the legal questions or provide legal advice.
Specific Actions	<ul style="list-style-type: none"> We offered physical or online compliance courses to strengthen compliance awareness among employees. We regularly review and take stock of domestic and overseas regulatory changes. Internal company rules or procedures are also reviewed to see if any corresponding additions or amendments are needed. Suitable candidates (including the management) for socioeconomic compliance training were determined through discussions between Winbond's Legal and HR departments. Physical or online courses were then conducted by Legal Affairs to strengthen compliance awareness among employees.
Mechanism for Evaluating Management Approach	<ul style="list-style-type: none"> The completion rate for physical and online compliance courses in each field are tracked by Winbond. The business execution of competent units is also checked to ensure compliance with the latest regulations. The violations, resolutions, corrective actions and number of cases in each field (including the ESG aspects) during the year are tracked by Winbond.
Outcome of Management Approach Assessment	<ul style="list-style-type: none"> Accomplishment of annual goals.



Material Topic : Risk Management



Material Theme : Risk Management

Item	Management Methodology
Policy/Commitment	<ul style="list-style-type: none"> Proactive preventions and effective responses are implemented for risk prevention. The reduction of financial corruption and compliance risks serve to validate public information such as financial statements and annual reports. They also provide useful information for decision-making by investors, supervision by regulators, and the audit quality of CPAs, and contribute to the sustainability of the capital market.
Responsibility	<ul style="list-style-type: none"> The units are responsible for management of infringement risks include preemptive prevention by the product design, R&D and intellectual property units, while sales and Legal Affairs are responsible for responding to incidents and customer support. ESH and Risk Management Office are responsible for the assessment and prevention of environmental and occupational safety and health risks.
Resources	<ul style="list-style-type: none"> Accounting personnel and officers undertake regular education and training. They also consult with third parties such as accounting firms and the National Tax Administration to ensure that our practices comply with current legislation. Environment-related resources consist of investment in hardware facilities such as energy-saving upgrades and the purchase/upgrading of pollution prevention/treatment facilities.
Communication Channel	<ul style="list-style-type: none"> Issues can be raised through employee representatives taking part in the site ESH and Risk Management Committees.
Specific Actions	<ul style="list-style-type: none"> R&D department works closely with IP department during product design and development for patent search, analysis and research. Licensing, design around and other techniques are employed if necessary to avoid IP infringement. The ISO 14001 management system has been introduced to effectively manage environmental topics and develop improvement plans.
Mechanism for Evaluating Management Approach	<ul style="list-style-type: none"> Statutory audits are regularly conducted by CPAs to check for any deficiencies. Internal controls undergo regular internal audits to ensure their proper operation and risk reduction. A PDCA validity assessment of the environmental management system is conducted every 6 months in accordance with Winbond's "Internal Audit Procedure for ESH System." External verification by third-party is also conducted every year.
Outcome of Management Approach Assessment	<ul style="list-style-type: none"> There were no violations of environmental or economic regulations in 2020.



Material Topic : Information Security and Personal Privacy Protection




Material Theme : Information Security and Privacy Protection

Item	Management Methodology
Policy/Commitment	<ul style="list-style-type: none"> Winbond has policies, management systems and preventive mechanisms on information security and customer privacy in place to reduce operating risks. Suppliers are also required to cooperate with our information security policy as part of our continued efforts to refine and strengthen our information security capabilities.
Responsibility	<ul style="list-style-type: none"> Purchasing department is responsible for confirming that suppliers are complying with Winbond's information security policy. Information Security department is responsible for maintaining information security at Winbond and establishing a reporting mechanism for information security incidents.
Resources	<ul style="list-style-type: none"> Information security training is provided to employees on a regular basis to improve their information security awareness.
Communication Channel	<ul style="list-style-type: none"> A reporting procedure for information security incidents has been put into place. The appropriate response is activated once an incident is reported by front-line personnel.
Specific Actions	<ul style="list-style-type: none"> Winbond continues to communicate information security information to employees through training and internal bulletins every year to ensure that the information security policy is being properly followed. A data protection exercise is also held every 6 months by switching to the backup system for read/write testing.
Mechanism for Evaluating Management Approach	<ul style="list-style-type: none"> Regular scanning of the company's internal vulnerabilities.
Outcome of Management Approach Assessment	<ul style="list-style-type: none"> There were no information security incidents that had a serious impact on company operations.

2.1 Corporate Governance

2.1.1 Composition of Board of Directors

Members of the 12th Winbond Board of Directors		
All 11 directors have extensive industry experience		For more information about the members of the Winbond Board of Directors, please scan the QR CODE
4 independent directors (36% of the Board)	2 female directors (18% of the full board)	
The directors undertook on average 11.7 hours of education and training in 2020		





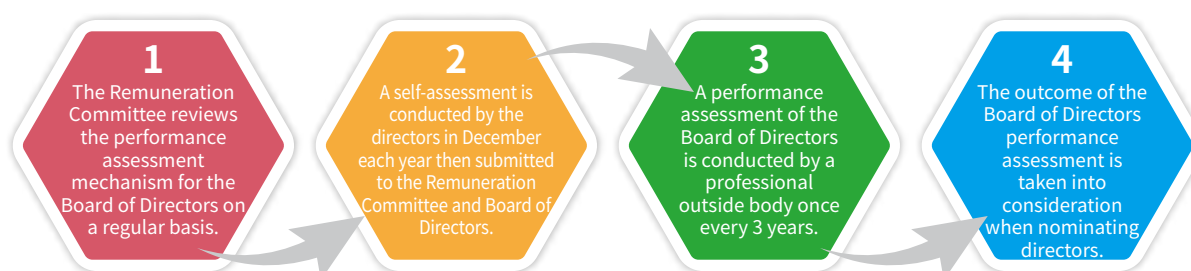
The Board of Directors is the top governance unit at Winbond. A strategy meeting is convened by every quarter for the management team to brief the Board on the company's business and financial situation. If there is a major discrepancy then the Board also ensures that an analytical review is carried out by the managers to update the business plan and annual budget in a timely manner, strengthen communication between the management team and the Board, and work together to enhance the transparency of Winbond's business information. Institutional investor conferences are convened every 6 months for disclosure of the company's business and financial situation. All related information is disclosed on the Market Observation Post System website and Winbond website.

For more information on number of Board meetings, attendance rate and continuing education for directors, please refer to the [2020 Annual Report](#).

Directors' Remuneration and Assessment of Board Performance

Under the Winbond "Rules for Remuneration of Directors and Performance Assessment of the Board of Directors", a self-assessment is conducted by the directors in December every year on the performance of the Board as a whole, the performance of individual Board members, and the performance of functional committees. The outcomes of the assessments are compiled by the administrative unit of the Board then submitted to the Remuneration Committee and Board. The information is used to formulate a board performance improvement plan for the following year to continue the corporate governance performance of Winbond. Outcome of the 2020 performance assessments for the Board as a whole: Future emphasis will be on optimization of the corporate risk management mechanism, increased communication and interaction with the CPA, and the continued provision of multi-faceted development courses in order to enhance the decision-making ability of Board members. The outcomes of the 2020 assessment were submitted to the Remuneration Committee and the Board of Directors on March 16, 2021.

Board of Directors Performance Assessment Process



For more information on the outcome of the Board of Directors performance assessment, please refer to the [2020 Annual Report](#).

2.1.2 Remuneration Committee

The Remuneration Committee was established by Winbond in 2011. The Committee is responsible for setting and reviewing the performance assessment and remuneration policy, system, standard, and structure as well as individual compensation for Winbond directors and officers. The “Directors’ Remuneration and Assessment of Board Performance” and “Rules for Officers’ Remuneration and Assessment of Performance” were also drawn up to maximize the long-term effectiveness of the Board, ensure a close linkage between the performance of officers and company strategy (ESG), provide competitive remuneration, and improve business performance.

The 4th Remuneration Committee was made up of all independent directors and would be convened at least twice a year. Recommendations made by the Committee are put to the Board for Discussion while the standard of compensation and benefits are regularly adjusted based on market conditions and employee requirements.

For more information about the number of Remuneration Committee meetings and attendance rates, please refer to the [2020 Annual Report](#).

2.1.3 Audit Committee

Important company proposals must, by law, be submitted to the Audit Committee for review. The outcome of the review is then submitted to the Board of Directors for a decision to be made. The Winbond Audit Committee is primarily concerned with supervising the following items:

1. Appropriate expression of the company’s financial statements
2. Appointment (dismissal) of the CPA as well as the CPA’s independence and performance
3. Effective implementation of the company’s internal controls
4. Company compliance with the relevant laws and regulations
5. Control of existing or potential risks by the company

For more information about the number of Audit Committee meetings and attendance rates, please refer to the [2020 Annual Report](#).

2.1.4 Shareholder Engagement and Rights



Winbond has appointed a spokesperson and deputy spokesperson. Investor relations and stock affairs units have also been established to ensure that investors and shareholders can have timely access to disclosed business information. There have been no extraordinary motions or change of agenda at Winbond general shareholders’ meetings in the last 10 years, ensuring that shareholders may exercise their statutory rights during shareholders’ meetings.

Winbond has implemented procedures for prevention of insider trading to protect shareholder equality and maintain the fairness of stock market transactions. Company personnel or employees are prohibited against profiting from information not available on the market. Education on prevention of insider trading is conducted twice a year to prevent accidental violations of the relevant laws.

An institutional investor conference is held by Winbond every 6 months with 2 such conferences were held in 2020. The conferences provide general investors with a picture of the company’s business situation and industry developments as a whole, communicate our corporate philosophy and business approach, provide an opportunity for general investors to communicate with the management team and boost our market profile. These help to highlight our value and protect shareholder equity.



For more information on shareholder equity, please refer to the videos and presentations from the institutional investor conferences



2.2 Transparency and Integrity

“Business Integrity” is the most important component of Winbond’s corporate culture. It is implemented through regulatory compliance and enforcement, annual self-assessments on compliance with internal controls, and direct channel for whistle blower complaints. Top-down leadership is practiced with the management leading by example.

An annual report on business integrity promotion and training is regularly presented to the Board in the fourth quarter of each year. Internal cultural promotion and weekly articles on corporate philosophy published to employees’ homepages are used to support education and training on labor rights, environmental protection, health and safety, ethical standards, and prevention of training. The strengthening of internal ethical awareness by Winbond ensures compliance with corporate ethics and government regulations as part of a sound business integrity management regime. There was 1 violation of the Labor Standards Act in 2020 due to excessive working hours. Further education and training has since been conducted on statutory limits on working hours. The work hour reminder system has also been optimized to send an e-mail alert to employees that spend more time at work and to remind supervisors to check on their employee’s condition.

2020 Business Integrity Management Performance



Winbond cultivates employees’ understanding of “Business integrity” by providing courses on “Business Integrity” and “Corporate Social Responsibility” in accordance with the relevant laws and internal rules every year.



The course was rolled out to all employees worldwide as an online starting in 2020. It was completed by 2,921 people in 2020 and accumulated 1,168.4 person-hours of training. Topics covered by the course included anti-corruption, avoiding and reporting conflicts of interest, privacy protection, export controls, protection of confidential information, protection of IP rights, personal data protection, non-conflict minerals, and anti-trust (Fair Trade Act). Training was completed by 100% of directors and employees.



There were no economic or environmental violations at Winbond. Nor were there any cases of corruption, anti-competitive practices, or violations related to marketing and labeling.



No complaints on violation of business integrity were submitted through external communication channel either.

2.2.1 Internal Controls and Audits

Winbond’s internal audit unit is directly under the board of directors and the appointment and dismissal of the audit chief shall be approved by Audit Committee and the Board of Directors. In addition to reviewing and verifying the self-assessment results of the internal control system for each units and subsidiaries, the internal audit unit also evaluates the control operations of various operating activities of Winbond’s internal control system to measure the effectiveness and compliance of the existing internal control and its impact. The frequency and content of each periodic audit are determined according to the laws and regulations as well as the risk assessment; other important procedures or special cases may be audited by the auditing personnel at any time or from time to time.

The audit unit conducts audits according to the annual audit plan approved by the Board of Directors to determine the effectiveness of internal control design and implementation. Audit findings are followed up until corrective actions have been completed to ensure the appropriate measures were taken by the relevant units timely. The audit chief reports to the independent director (Convenor of Audit Committee) monthly after the completion of audit reports and the follow-up reports, and delivers them to the independent directors for examination before the end of next month following the completion of audit. The audit chief reports to the Board of Directors and Audit Committee quarterly. 2020 audit plan has been implemented in accordance with regulations, audit results and follow-up improvement have been reported to Audit Committee and the Board of Directors.

Irregular Business Activities Reporting Mechanism and Procedures

Winbond has established channel for communicating with Stakeholders. The internal and [external individuals may file a complaint or report anonymously or non-anonymously](#), if employees violate the conducts, unfair business activities, bribery or illegitimate interests, fraud, coercion, etc. It is conducted in accordance with the “Ethical Management Violation Handling Instruction”.

2.2.2 Tax Management

A unit responsible for tax governance has been established by Winbond to handle the filing of all tax returns in accordance with the law. We also support government policies on business innovation, research and development, and tax credits while also working to improve the transparency of our tax information. External professional consultants are retained or consulted with when required as part of business to ensure proper tax compliance and reporting.

Six Principles of Taxation Policy

1. Comply with local tax laws, file tax returns honestly, pay taxes on time, and fulfill our social responsibility as taxpayers.
2. Local and international tax reforms are thoroughly assessed to determine their impact and develop a swift response.
3. Tax information is disclosed in the financial statements and annual report to ensure information transparency.
4. Transactions between affiliated enterprises follow the same principles as for normal transactions and use the internationally accepted Transfer Pricing Guidelines defined by the Organization for Economic Cooperation and Development (OECD).
- 5 Winbond has built a relationship based on mutual trust and honest communications with the tax authorities.
6. All material transactions and decisions made by the Board take the effect of tax and leases into account.

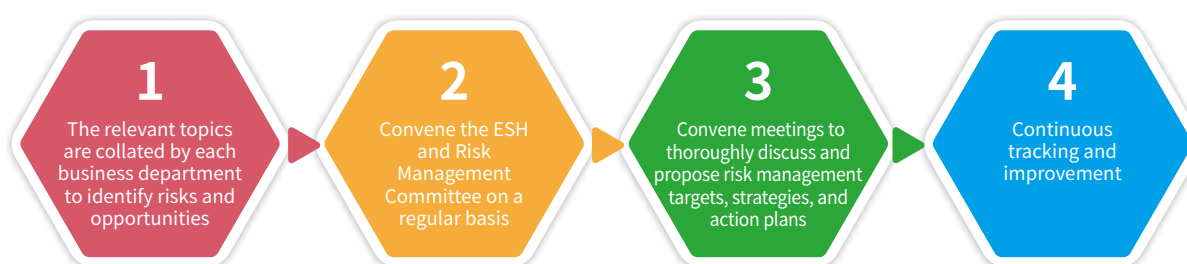


2.3 Risk Management

Winbond is a semiconductor manufacturing company so natural disasters, accidents, and man-made events may all make a serious impact on production operations, financial management, information security and climate change. A risk management mechanism was therefore set up by Winbond for early warning and response. Strict risk engineering control, implementation and management of safety rules and guidelines ensure proper implementation of risk engineering control, safety of the semiconductor industry. The highest standards of the company's financial and sustainable development policies. These help Winbond fulfill our vision of sustainable enterprise.

The World Economic Forum: The Global Risks Report 2020 stated that the top five long-term global risks have now gradually shifted from "economic problems" to "environmental problems" such as "extreme weather", "climate action failure", "natural disasters", "loss of biological diversity", and "man-made environmental disasters." Businesses around the world are increasingly coming under pressure from the deteriorating environmental and climate conditions. Winbond has added "climate change risk" as a long-term emerging risk to our long-term business management.

The "ESH and Risk Management Committee" is also convened quarterly to discuss management goals and devise response strategies. Discussion of climate change topics will also be added to "Executive Management Meetings" chaired by the Chairman to increase the level of management control. Progress on actions taken for related topics will also be tracked after the meeting to ensure that all corporate risk management goals can be met.



Three Major Business Risks

Identification of Risks and Opportunities	Explanation of Impact Assessment	Response	Performance Management
Business Risk Management			
Product Quality Anomaly	<ul style="list-style-type: none"> Loss of customer confidence and order cancellation. 	<ul style="list-style-type: none"> Non-conforming products or processes must be immediately reported to personnel with the responsibility and authority for corrective action. They must ensure non-conforming products are not shipped to the customer and that all potential non-conforming products are identified and contained. The relevant units must analyze the cause and the impact on the production process then take improving action accordingly. 	<ul style="list-style-type: none"> Strict quality controls and the improvement of product quality during the production process, that would help build long-term relationships with customers and increase satisfaction.
Infringement	<ul style="list-style-type: none"> Infringements may violate the law in severe cases that lead to civil and criminal liabilities for the management. Minor cases may also result in lead to financial damage or loss of business reputation for the company. 	<ul style="list-style-type: none"> Proactive Prevention: Product R&D department works closely with IP department on patent search, analysis and research. Licensing, design around and other techniques are employed when necessary for avoiding (willful) IP infringement. Effective Response after the Facts: If accused of IP infringement, the Legal and IP Division will immediately contact all relevant departments to clarify facts of the matters and make possible efforts to protect the interests of Winbond and our customers. 	<ul style="list-style-type: none"> Winbond respects IP rights of other parties and is willing to discuss for acquiring patent license if possible. This also could reduce litigation risks for the company.

Identification of Risks and Opportunities	Explanation of Impact Assessment	Response	Performance Management
Patent Risk	<ul style="list-style-type: none"> Impact on patent licensing negotiations and increases the risk of patent litigation. 	<ul style="list-style-type: none"> In any circumstances the patent assignees, based on protecting their own patent rights, business strategy, requesting for high royalty payment or filing a law suit against Winbond, we will cooperate actively with outside counsels for proper responsive strategy. 	<ul style="list-style-type: none"> By the following principle of mutually-beneficial outcomes as well as interacting with patent assignees in a reasonable and respectful manner, Winbond has effectively controlled the patent risks and avoided negative impacts to the company.
Epidemic Risk	<ul style="list-style-type: none"> The COVID-19 pandemic led to factories being shut down and supply chain disruptions around the world. 	<ul style="list-style-type: none"> Winbond monitors the latest COVID-19 developments as well as the production and business activities of vendors. Safety stock was also increased to deal with unexpected events. Strict epidemic prevention measures have also been implemented throughout the company including defined reporting processes, IR temperature screening, visitor management, rostered meal breaks, and regular disinfection. 	<ul style="list-style-type: none"> The safety of our employees as well as supply of products have not been seriously affected by COVID-19 and we continued to operate as normal.
Financial Business Risk Management			
Foreign Exchange Risk	<ul style="list-style-type: none"> The risk posed by changes in exchange rate from foreign currency transactions falls within the range permitted by the Procedures-for-Engaging-in-Financial-Derivatives-Transactions. Risk management is implemented through long-term foreign currency contracts. 	<ul style="list-style-type: none"> We closely monitor the financial markets to identify trends and familiarize ourselves with financial products, regulations, and trading techniques. The management and relevant departments are provided with adequate and timely information for their reference. Our trading of derivative financial products is aimed primarily as a hedge against economic risk. Credit risk is the most important factor when selecting transaction parties to avoid losses from breach of contract. Financial institutions with low credit risk that have good relations with the company and can provide professional information are preferred for transactions. Winbond caps the maximum unrealized losses from breach of contract in derivative financial productions at 20% of the total contract amount, or 3% of shareholder equity, whichever is lowest. A monthly assessment is carried out by the financial unit and a report produced for the head of the financial unit and senior executives authorized by the Board to predict the risks involved in each transactions as well as potential gains and losses. 	<ul style="list-style-type: none"> Net losses from current exchanges in 2020 (including gain/loss from derivative financial products) amounted to NT\$59,741,000. This represented just 0.15% of annual operating income and 4.43% of net profit before tax for the year. Winbond engages in the trading of derivative financial products as a hedge against foreign exchange risk from fluctuations in the exchange rate for our net foreign asset position. In 2020, derivative financial products with exposure to foreign exchange risks amounted to USD 264,000,000 and RMB 54,000,000. An assessment of fair value placed total unrealized gains at around NT\$38,380,000 so the potential gains and losses were all within the manageable range.
Interest Rate Risk	<ul style="list-style-type: none"> The main source of risk is long-term borrowings with a floating interest rate for production process upgrades or capacity expansion. 	<ul style="list-style-type: none"> Winbond tries to secure more interest rate terms based on the market conditions at the time in order to reduce the impact from interest range changes. The company bonds issued by Winbond have a fixed interest rate, are priced in NTD and are based on the amortized cost. Their cash flow and fair value are therefore not affected by interest range changes. 	<ul style="list-style-type: none"> In 2020, the consolidated net interest expenses amounted to NTD 249,455,000 and accounted for 0.41% of our consolidated operating income for the year. The impact interest rate changes on company operations were therefore assessed to be within the manageable range. Winbond will continue to monitor the impact of interest rate trends on cash flow.
Information Risk Management			
Information Security	<ul style="list-style-type: none"> Production disrupted by mass ransomware infection of factory machines. The infected machines could not be restored as there was no backup or the backup was also damaged. A lack of response responses and information as well as unfamiliarity with the reporting procedure all impacted on response and recovery time. 	<ul style="list-style-type: none"> A thorough virus scan was carried out during machine maintenance. Full backups were also made of machines' computers and stored separately. Regular backup and isolation of machine data for security. Large-scale factory exercise was conducted to verify that personnel, equipment and information were adequate to meet response and recovery requirements. 	<ul style="list-style-type: none"> An offline backup procedure and environment has been established for the factory. Large-scale response exercise was implemented with the results used to improve the reporting procedure and information required. Surprise exercises are conducted in different regions each year to ensure familiarity with the reporting and response procedures.
	<ul style="list-style-type: none"> Production disrupted by malware attack against factory infrastructure. Production affected by malicious attacks against the factory's auxiliary services such as water, electricity, and air-conditioning. 	<ul style="list-style-type: none"> Conduct self-assessment and analysis of current information security management situation, carry out risk assessment and draw up improvement plan. Conduct response exercises to verify that personnel, equipment and information were adequate to meet response and recovery requirements. 	<ul style="list-style-type: none"> Improvements to the physical and logical environment were implemented in 2020 based on the improvement plan. Information security incident response and recovery exercises were conducted in the second half of 2020 to ensure familiarity with the reporting and response procedures.

Climate Change Response

Winbond identified 3 climate change risk factors and 2 climate change opportunity factors using a climate-related financial disclosure framework (TCFD), internal and external research reports, and the latest market observations. Effective response strategies were devised through our comprehensive risk management system to strengthen our management and practices on climate change events. Every possible is being done to respond to the risks and opportunities brought about by climate change. We are therefore doing our part for this land even as we continue to follow the path of sustainability.

Climate Change Risks

Climate Change Risks	Risk Description	Scope of Impact	Winbond Response Strategy
Increased cost of energy prices	► GHG reduction requirements may impact on the cost of energy use due to higher energy prices and need to improve equipment performance.	Market price	► Promotion of workplace energy conservation and carbon reduction. ► Continue to undergo ISO 14064-1 GHG inventory verification. ► Set annual target for electricity savings.
More robust environmental regulation	► Domestic environmental legislation is still being amended and is becoming stricter.	Operating cost	► The responsible units are continuing to monitor and track related regulatory changes so that they can prepare in advance, in order to understand the risks involved and avoid non-compliance.
	► Amendments to the Renewable Energy Development Act increases the cost of energy use for businesses.	Operating cost	► Continue to evaluate the green electricity provisions for large electricity users and installation proportions for renewable energy equipment.
	► The Greenhouse Gas Reduction and Management Act will impose caps on GHG emissions and a carbon tax. These may increase operating costs by raising the cost of GHG emissions and electricity.	Operating cost	► The EPA is now building a carbon trading platform that offers carbon credits for businesses that start reducing their carbon emissions early. ► Set annual targets for GHG emissions.
Business interrupted by extreme weather events	► Extreme rainfall and drought: Reduction/disruption of production.	Business interruption	► Promote water-recycling technology and water-saving measures as well as devise response plan. Increase competitiveness by improving ability to adapt to climate changes.
	► Production activities affected by climate disasters such as: flooding, drought, fire, heat, and heavy snow. These events may impact on the delivery time of raw materials.	Business interruption	► Continue to take part in academic and industry climate change seminars to share and discuss the effects of climate change. Winbond will also continue to engage in energy saving initiatives to reduce the business impact and improve our competitiveness. ► Increase internal inventory and track supplier delivery schedules to ensure the reliability of the supply chain.


Climate Change Opportunities

Climate Change Opportunities	Opportunity Description	Scope of Impact	Winbond Response Strategy
Development and/or choose of low carbon emission or pollution-reducing eco-friendly products	► Choose low carbon emission or pollution-reducing eco-friendly products.	Market opportunities	► Develop low carbon emission / pollution-reducing products with suppliers.
Use of recycling and resource saving purchases	► Set up mechanism with subcontractors to reuse cassettes (FOSB). ► The outer cartons used for transporting wafers are recovered for reuse in future supplier shipments. ► FOSB/Mask Package Box/Parts are washed and reused to save resources.	Operating cost	► Collaborate with suppliers on recycling projects.




2.4 Information Security Management

2.4.1 Information Security Action Plans

The “Information Security Policy” and “Management Rules for Technical and Confidential Information” were drawn up by Winbond to protect confidential company information such as trade secrets and IP, and ensure proper protection of customer privacy. ISO 27001 ISMS was introduced in 2020 as part of Winbond’s information security management overhaul and certification was granted in February 2021.



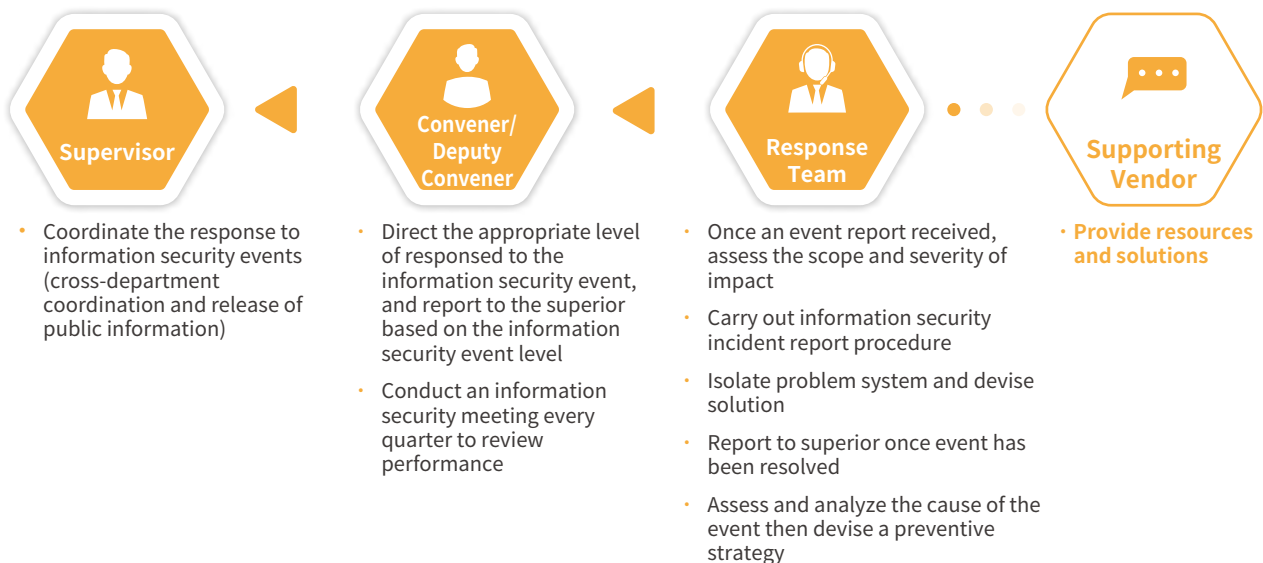
Winbond conducted an inventory of each unit’s information assets in 2020 based on the ISO 27001 Information Security Management structure. These included a risk assessment, consolidation of all internal controls and existing documentation, establishment of a complete information security environment, and compliance with all of the standard’s requirements. Certification by an external body was obtained in February 2021. Winbond is continuing to pursue the three main goals in information security :

-  **(Confidentiality) – Data**
-  **(Integrity) – Data and Systems**
-  **(Availability) – Systems and Services**

An information security body made up of representatives from all relevant departments has been established by Winbond in accordance with the implementation procedure for “Information Security Policy.” The body is responsible for the company’s information security control activities including recommendations, deployment, promotion, and audits. Regular meetings are convened to discuss and make decisions on information security topics in HR, physical security, information security, and logical security. Extraordinary meetings are held for major reforms or when an information security incident takes place. Winbond continues to communicate the importance of information security to employees through education, training and bulletins every year. Data protection exercises are also held at least once every 6 months by switching to the backup system for read/write testing.

To keep important company and product information secure, Winbond has strengthened our access control, security surveillance, information system access permissions management, as well as the recording and reviewing of access logs. Personnel and data access are both rigorously controlled to prevent unauthorized access and tampering as well as the theft and leakage of trade secrets and intellectual property.

Information Security Handling Process



2020 Information Security Management Performance

Information Security Education and Training	2,667 people received information security training and completion rate was 100%
	2,531 people received Personal Information Protection Act training and completion rate was 100%
Information Security exercises	1 social engineering training and test
	1 FAB virus exercise
	1 vulnerability scan

Passed High-Level Information Security Certification

In November 2015, Winbond's TrustMETM and its associating operating environment received EAL 5+ certification from the international organization Common Criteria. The certification indicated that Winbond's product information security controls complied with the requirements of Common Criteria. Winbond was therefore certified to produce trusted security products that comply with international standards for the protection of customer information and assets. Common Criteria's validation of TrustMETM memory products encompassed the Design & Development, Production, and Delivery phases. The new Jhubei building was commissioned in 2020 and a remote audit was conducted due to COVID-19. The audit found that all of relevant procedures and environments met the requirements of Common Criteria EAL 5+.



Supplier Information Security Management

Permissions-based control has been implemented by Winbond through our internal information security system to protect the privacy of our suppliers. Physical documents are centrally stored in the purchasing document management database. Information security clauses are attached to all orders for information security management at our suppliers. Suppliers must conduct a self-assessment on information security management during the annual audit for review by Winbond's Information Security department. An on-site audit is also conducted at suppliers every two years. During the 2020 supplier's conference, we invited suppliers to share their experience on preventive measures in information security and on information security management.

Information Security Clauses for Suppliers



2020

**Information Security Clause
for Suppliers**
100% commitment rate

- Products delivered by suppliers should not harbor potential information security threats such as viruses, back doors or Trojan horses that may impact Winbond operations.
- The necessary patches and safety updates must be provided to ensure that there are no information security vulnerabilities.
- If there is an information security event, a swift and effective solution must be provided. Corrective and prevention measures must also be proposed to minimize the damage.

CH3

Vision and Value



Winbond's investment in research, development and innovation, our quality and reliability management through the R&D and manufacturing processes, our digitized customer relations management and evaluations of supplier partners all embody our implementation of sustainable development. Under our corporate culture of total quality management and putting quality at the first place, Winbond accepts no compromises on the quality of any project. Every Winbond employees embraces quality and reliability assurance in their everyday work and take responsibility for ensuring that their work is reliable and defect-free. We promise to continue making improvements to quality so that we can provide customers and the general public with products and services that they can trust.

Material Topics/Themes and Management Approach

Quality of Product and Service , Research, Development and Innovation



Material Topic : Research, Development and Innovation

Material Theme : Research, Development and Innovation

Item	Management Methodology
Policy/Commitment	<ul style="list-style-type: none"> Winbond is committed to the development and supply of high-quality memory products and services. Various resources are offered to encourage innovative R&D by our personnel. We also communicate closely with customers on product design to understand the customer's needs. Our goal is to create products that are a win for both parties.
Responsibility	<ul style="list-style-type: none"> The IP department and Patent Committee jointly review the invention disclosures based on the patentability, give guidance on patent strategy, and provide training courses to increase the value of Winbond patent portfolio, as well as reduce product risk and business losses from infringement.
Resources	<ul style="list-style-type: none"> The patent incentive programs encourage employees to generate innovative ideas. R&D teams are provided with test chips for validating and implementing innovative designs. Continued investment in R&D.
Communication Channel	<ul style="list-style-type: none"> The innovative R&D teams regularly for discussions and brainstorming that encourage innovative product design and R&D among team members. This effective communication model is used to blend together internal opinions and suggestions. IP department provides R&D staffs with training courses on IP protection and invention proposals. It also offers patent strategy consulting.



Item	Management Methodology
Specific Actions	<ul style="list-style-type: none"> Winbond is actively focusing on the autotronics sector and working with vendors to expand the scope of application for Winbond products. We are continuing investing in R&D and hosting IP training courses every year. Our internal patent evaluation criteria are based on the manual of patent examine protocol of major territories and patent value assessed by the Patent Review Committee. The major territories and type of patent application are also taken into consideration. Active communication with Patent Examiners is conducted during patent prosecution for each territory to secure high-quality patents.
Mechanism for Evaluating Management Approach	<ul style="list-style-type: none"> Statistics on global patent applications and approvals are regularly compiled. Patent application and granted targets are set and checked. Comparative analysis of product attributes is conducted against competitors to determine the effectiveness of our innovation mechanism.
Management Methodology Approach Assessment	<ul style="list-style-type: none"> According to 2020 management plan submitted to the Board of Directors that set the short-term target (2020) as granting more than 400 global patents. Winbond obtained 502 patents in 2020 so the target was met.



Material Topic: Quality of Product and Service



Material Theme: Marketing and Labeling

Item	Management Methodology
Policy/Commitment	<ul style="list-style-type: none"> Winbond has developed quality culture based on total quality management, zero-defect and quality first through a process of continuous improvement. We supply all customers and the general public with the best products. We also provide comprehensive labeling and detailed user instructions for products and services.
Responsibility	<ul style="list-style-type: none"> We comply with international standards (e.g. RoHS, REACH) throughout the design, purchasing, manufacturing and sales process to ensure that products are free of hazardous substances and satisfy customer requirements. We also follow environmentally friendly practices to fulfill our social responsibility. We track all product and service quality related business activities conducted by our marketing, sales, quality, and business analysis departments.
Resources	<ul style="list-style-type: none"> Basic and advanced quality management training are carried out every year to ensure that employees treat quality and reliability assurance as a part of their job.
Communication Channel	<ul style="list-style-type: none"> Customer complaints are treated in accordance with the 8D principle. Failure analysis of customer complaints is used to determine defects and establish their true cause for corrective and preventive action to ensure consistent product quality and prevent major quality anomalies on the customer's end.
Specific Actions	<ul style="list-style-type: none"> Basic and advanced quality management training are conducted every year. Different themes and formats are also set to boost employee engagement. The theme for 2020 was 5-Why. Different activities such as Teams group activities, 5-Why case analysis competition, 5-Why experience-sharing, Teams live stream on quality culture and prize quiz were held.
Mechanism for Evaluating Management Approach	<ul style="list-style-type: none"> Two management review meetings are convened every year. Sufficient resources are provided for the implementation of the quality system, and the current quality system is regularly reviewed to ensure its continuity and effectiveness.
Evaluation result of Management Methodology	<ul style="list-style-type: none"> There were no cases of non-compliance on product/service information and labeling regulations at Winbond in 2020. Nor was there any non-compliance of marketing and communication legislation. A customer satisfaction rating of over 85% was maintained in 2020.

3.1 Innovative Research and Development

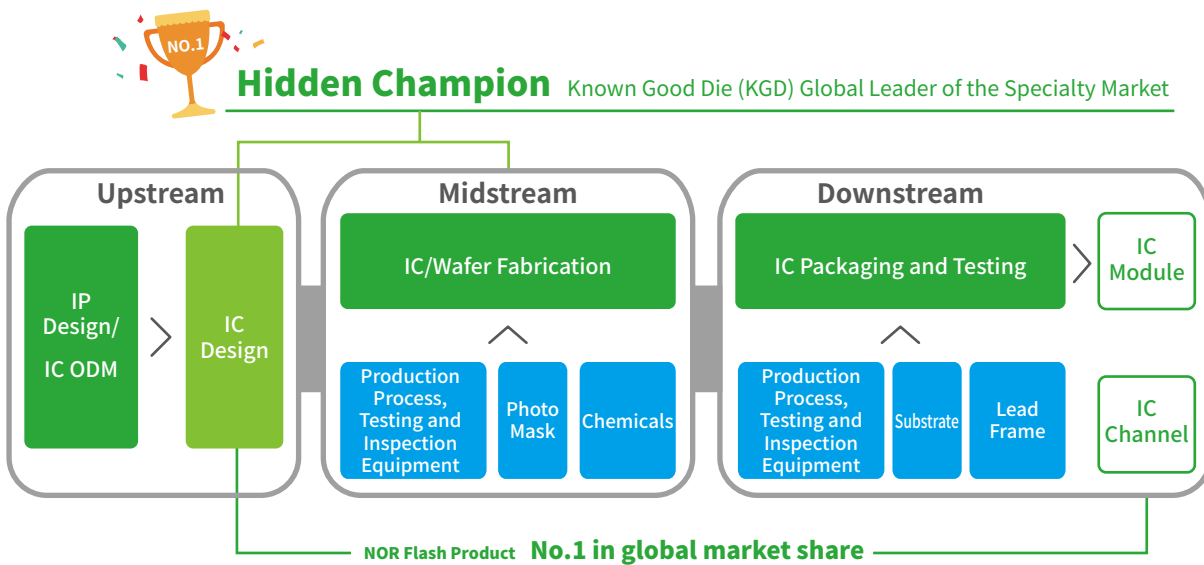
3.1.1 Innovative Technology R&D

Winbond continues to invest resources towards sustainable innovation on semiconductor design, production technology and products based on our market insights in next-generation products. We strive to increase our competitiveness and market share for green products. In 2020, we continued to expand our production capacity and upgrade our production processes to provide customers with even more energy-efficient green products. In product design, the Winbond design team now aims to lower power consumption alongside better performance; for production processes, Winbond is optimizing and consolidating the number of masks and steps in our existing process to effectively shorten the production time, lower production costs, and reduce the amount of hazardous substances generated and discharged during production. Source management is now practiced during process development as well. Continued refinements in every area serve to enhance the overall sustainable competitiveness of Winbond.

Semiconductor Industry Chain

Winbond boasts the most advanced and complete semiconductor industry chain and specialist partners in the world. These encompass the upstream IP and IC design industries, the mid-stream IC fabrication, wafer fabrication, related process testing and inspection equipment, photo mask and chemical agent industries, as well as the downstream industries including IC packaging and testing, related process testing and inspection equipment, components (e.g. substrate and lead frame), IC module and IC channel.

Winbond has many years of experience in the Known Good Die (KGD) field and work with chip suppliers to provide System in Package (SiP) solutions, which created additional value in the semiconductor industry chain.



Note:

1. System in Package, (SiP): From package (downstream of semiconductor industry) viewpoint, to assemble different chips with side-by-side or stacked form into a single electronic component.
2. Known Good Die, (KGD): Wafers are not packaged immediately after fabrication but are provided to the customer to be assembled with their product as a single chip. Extremely rigorous product quality control is necessary to ensure the functionality of the final product

Winbond strives to provide global customers with the full spectrum of specialty memory solution services. The core products include Code Storage Flash Memory, TrustME® Security Flash Memory, Specialty DRAM and Mobile DRAM, which making Winbond the only company in Taiwan with the capability to develop both DRAM and Flash technologies. Winbond has leveraged the synergies of its product portfolio to meet the diverse needs of its customers. Customers can therefore combine their own products with that of Winbond for applications with a high-threshold and high quality requirements, such as handheld devices, consumer electronics, computer peripherals products, automotive and industrial electronics.

Applications for Winbond Product R&D

Applications	Autotronics	Industrial Electronics	Communications	Computer Processing
<ul style="list-style-type: none"> Application /Systems 	<ul style="list-style-type: none"> Advanced Driver Assistance System (ADAS), automotive dashboards, onboard infotainment systems, and various automotive sensor components 	<ul style="list-style-type: none"> Point-of-Sales equipment, smart meters, programmable logic controllers, human-machine interfaces, industrial networks 	<ul style="list-style-type: none"> Networks, digital AV converters, switches, wireless access points, smartphones 	<ul style="list-style-type: none"> Notebook computers, gaming notebooks, desktop computers, hard disk, solid state disk, ultra-slim notebooks

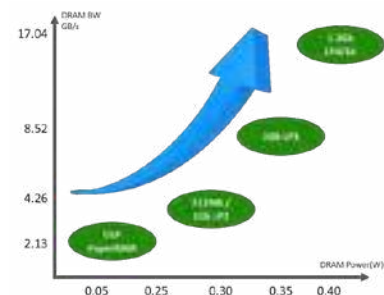
For more product information, please visit the Winbond website

Current State of Innovative R&D and Outcomes

• Dynamic Random Access Memory (DRAM) Products

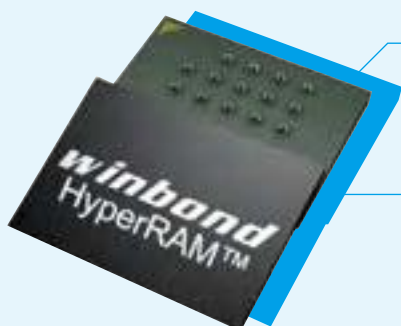
In terms of specialty memory products, Winbond is continuing to supply global customers with the full range of low-to-medium density memory solution services. In 2018, Winbond began planning an all-new 12" fab at the Southern Taiwan Science Park (STSP) in Kaohsiung to establish an in-house R&D capability and increase production output. The fab will be based on a streamlined 25nm process developed by Winbond. The process completed a rigorous validation procedure at the Taichung fab in the first quarter of 2021. The STSP fab should be fully fitted out in the first quarter of 2022 and be ready for mass production by the end of 2022. Winbond is also investing manpower and resources on developing our own next-generation 20nm technology so that we can provide customers with more competitive, high-quality memory devices.

In mobile memory, in addition to full range of low-to-medium capacity (LPDDR, LPDDR2, LPDDR3) products, Winbond's 1Gb and 2Gb LPDDR4 will be the first products in the industry which are designed for ISO 26262 ASIL B automotive specification. They can be used in a variety of device applications with outstanding quality and great improvements in reliability.



- 1 The fastest 1Gb DRAM product in the computing processing sector - 1Gb LPDDR4
- 2 Applications: Artificial Intelligence (AI), Internet-of-Things (IoT), TV, and automotive industries

Next-generation Hyper3.0




Low pin-count, low power consumption, ease of application design

Higher read bandwidth can be achievable by faster operating frequency with lower standby current.



Winbond knows that 5G and AI are now an important future market trend. We have begun collaborating with various AI SoC vendors on building the next generation of applications. Winbond products and technologies are helping developers overcome bottlenecks in AI computing technology to deliver even better solutions.

Collaborators	   			
Product Collaboration	Winbond : 1Gb LPR3 Kneron : KL720	Winbond : 1Gb LPR3 Tsing Micro : TX510	Winbond : HyperRAM 256Mb Ambiq : Apollo4	Winbond : LPR4X Flex logix : \InferX X1
Application Content/Field	Battery-powered applications such as smart locks and unmanned drones	High-speed image detection and identification applications including biometric recognition, video surveillance, smart retail, smart home automation and high-level industrial automation	Wearable device and AIoT application	Supports high-precision object detection and image recognition when processing high-quality video with high data density

No matter low-power, consumer and specialty DRAM products, Winbond pursues high performance products but also through innovative R&D, think outside of the box and develop streamlined circuit designs. Besides every new product generation resulting in lower standby current, the operating current has been reduced by at least 20% with every new generation of design as well.



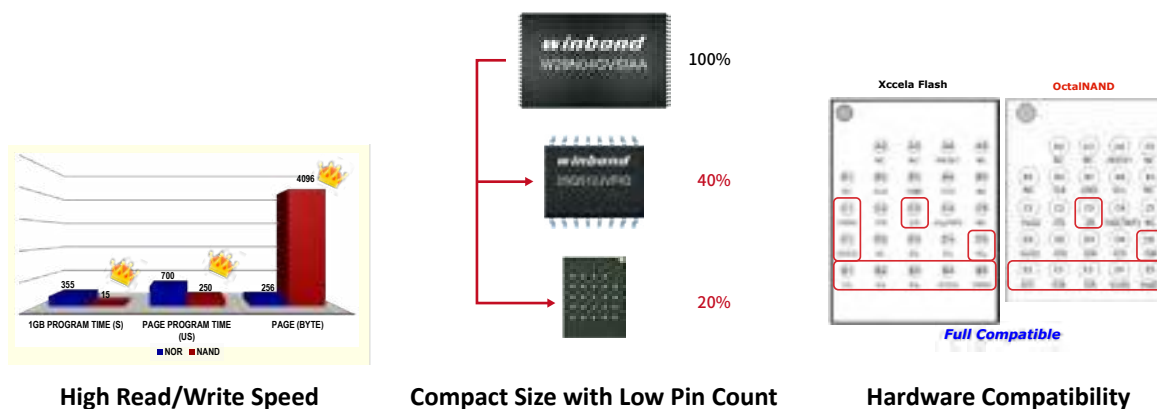
In year 2020, the overall energy consumption of DRAM products was reduced by 648.6 million kWh of electricity, which is equivalent to carbon captured by 855 Da-an Forest Parks.

•Code Storage Flash Memory

The increasing complexity of on-board systems and growing demand for Over the Air (OTA) technology means that the market requirement for large-capacity memory with support for high-speed read/write has grown as well. In 2020, Winbond responded to this trend by unveiling the “OctalNAND”, the world’s first serial NAND Flash with eight IO.

OctalNAND Advantage

The read speed of OctalNAND is up to 240 MB/s, 10 times faster than SLC NAND now in mainstream use. Its write speed is also double that of SLC NAND and ten times that of SPI NOR. The boost in performance is invaluable for applications that require fast boot and OTA support.



Note: Hardware compatibility means that the product’s pin definitions are identical. PCB Assembly (PCBA) can be switched out directly without requiring a re-design.

On the other side, reducing power consumption, extending battery life and decreasing thermal dissipation is always the goal of Winbond. A new production process and new circuit architecture development resulted in the first NOR Flash in the world to support an operating voltage of 1.2V. The power consumption of 1.2V NOR Flash is just 55% that of the standard 1.8V NOR Flash in use now. It can however achieve read/write speeds of up to 104MHz and maintain the performance of 1.8V/3V Flash. The product is suitable for wearable device applications where energy-efficiency is essential such as wireless headphones, smart watches, smart bracelets, smart glasses and other consumer electronic products.

Winbond obtained “ISO 26262 Road Vehicles - Functional Safety certification” in 2019, making it the first automotive memory manufacturer in Taiwan to be certified in the top international automotive safety standard. To continue expanding our automotive market and provide automotive products that satisfy the requirements of the international autotronic supply chain, Winbond is now working on the first Octal NOR Flash product to follow ISO 26262 during development and aimed at achieving the ASIL D rating. At the same time, Winbond is continuous updating our 4x nm technology to produce a new range of reliable, high-performance, low-power consumption and value-added Code Storage Flash Memory products. These will be pitched at the needs of PC, mobile and handheld device, network and 5G communications, IoT, consumer electronics, automotive and industrial electronics, medical electronics and information security applications. We plan to upgrade our product specifications in 2021 to achieve even higher product certification ratings.

3.1.2 Patent Management

The 502 patents granted in 2020 meant we met our short-term target of 400 patents a year.



Top 100 Patent Applicants and Assignees in 2020

- Winbond was ranked No. 10 by the number of invention patent applications by a enterprises with 151 applications for Taiwan invention patent in 2020
- Winbond was ranked No. 10 by the number of invention patents awarded with 138 Taiwan patents granted in 2020

Source: Intellectual Property Office, Ministry of Economic Affairs

Winbond has dedicated units (IP Department and Patent Committee) assigned to IP management, assessment and review, reward presentation, and strategy planning. Proposals are reviewed on the basis of the patent laws and review criteria set by national patent offices around the world as well as their commercial value. A combination of internal patent assessment and rigorous review by an external competent authority improves patent quality and approval rate. These in turn help with the protection of IP and research accomplishments.

To encourage employees to submit their proposals, rules for patent applications and rewards were devised by Winbond. A new inventor award in particular provides various patent granted bonus for different countries. It also applies to separated employees as well. IP department provides employees with assistance and guidance during the proposal phase for assurance on proposal direction and quality.

Winbond sets annual targets for invention proposals based on our business goals and R&D resources. More weight is given to patent proposals that are highly connected to our product development strategy to promote greater connectivity between business goals and patent management strategy. IP department has embarked on the digital transformation of IP management. The IP management system and patent search system have been enhanced to provide business intelligence analysis from an IP perspective. This in turn improves the efficiency of patent management, the approval rate from internal review of proposals, and patent quality. IP department regularly grades approved patents based on Winbond's assessment criteria so that the value of patent portfolios can be reviewed and maintenance costs reduced.

2018-2020 Patent Statistics

Item	2018	2019	2020
Patent Granted (Cumulative Cases)	2,714	3,146	3,648
Patents Approved during the Year(Cases)	381	432	502

Patent Statistics from Previous Years (Unit : Cases)

Item	2014	2015	2016	2017	2018	2019	2020
Invention Patent - Applications	356	306	354	429	436	497	541
Invention Patent - granted	105	209	318	306	381	432	502

In order to increase our product design ability, production technology, and business competitiveness as well as satisfy the needs and expectations of our customers, Winbond provides employees with IP training and a variety of channel for making proposals. We also teach employees about IP concepts and actively file applications for invention patents. Winbond has been granted 3,648 patents as of 2020. Winbond is continuing to encourage employees to actively engage in innovation, solve problems, and improve product quality to ensure the competitiveness of the company.

To improve the patent quality and approval rate from internal patent committee review meeting for each invention disclosure, customized IP training courses are offered for each RD division based on their technical fields. These teach employees about IP protection, inspiring them to generate invention proposals, and facilitating them to produce high quality and valuable patents, so that can enhance Winbond business achievement. To minimize the risk of patent infringement, compulsory online training courses are also offered by the Legal and IP Division. Unauthorized use of other parties' IP such as trade secrets, patents, trademarks and copyrights by employees in their work is prohibited. IP department hosted 6 training courses in 2020 with 194 R&D background participants.

For critical technology topics connected to the company's business goals, Winbond also helped R&D staffs organize several brainstorming conferences aimed on the critical technologies to generate high-quality patents. Patent strategies are devised and implemented for key technologies to enhance company's market competitiveness. In 2020, IP department invited the R&D managers to join brainstorming conferences on DRAM patent development strategy. High quality proposals were generated as a result.

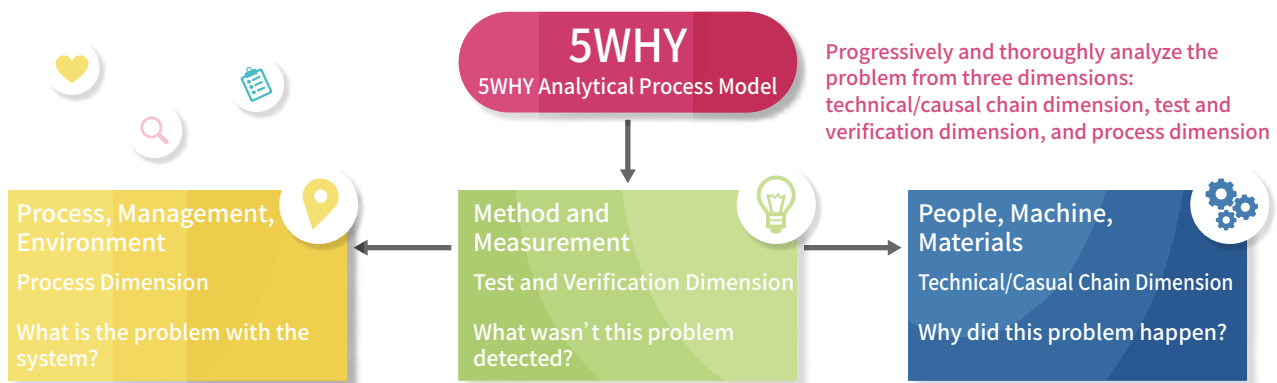


3.2 Quality Management

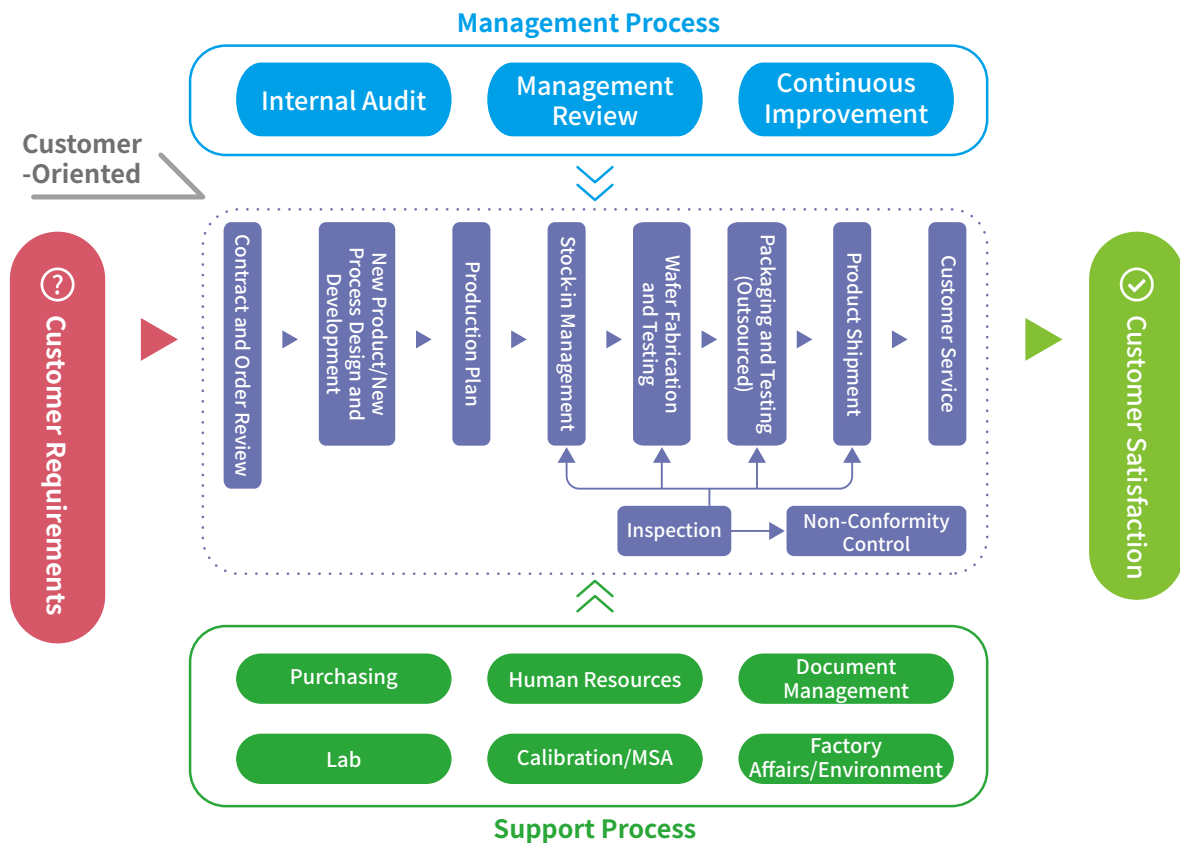
3.1.1 Product and Service Quality Management

Product quality management is important to Winbond. A process of continuous improvement has established a corporate culture based on systematic quality management, putting quality first, and supplying customers with quality products and services.

Quality management at Winbond already complies with the IATF 16949, the quality management system standard for the automotive industry. Quality management is carried out using the five core tools of “Advanced Product Quality Planning And Control Plan”, “Failure Mode Effects Analysis”, “Measurement System Analysis”, “Statistical Process Control”, and “Production Parts Approval Process.” The 8 Disciplines process (8D) and 5-Why method are also implemented for continuous improvement to product quality.



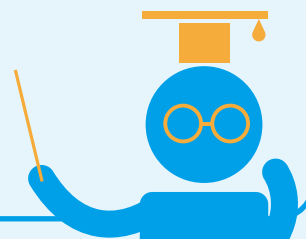
Quality Management System Process



Quality Management 101 : 8D Quality Improvement Tool

The 8 Disciplines process (8D) was originally adopted by Ford as its quality management method. It is now a widely used quality management tool and divides the quality improvement process into 8 steps.

- ① Form the Team
- ② Describe the Problem
- ③ Contain the Problem
- ④ Identify the Root Cause
- ⑤ Formulate and Verify Corrective Actions
- ⑥ Correct the Problem and Confirm the Effects
- ⑦ Prevent the Problem
- ⑧ Congratulate the Team



Quality Focused Corporate Culture

Winbond invests resources in the very competitive global market with the goal of providing customers with satisfactory service quality. We also aim for continuous self-improvement by organizing annual education and training plans every year. For the Quality management courses, Winbond held Total Quality Management (TQM) training courses and competitions, 5-Why courses, and ISO 26262 key concept courses every year. It enhance the quality awareness of employees, familiarize them with the application of quality tools/techniques, and meet the expectations and requirements of automotive customers.

2020 Quality Month : 5-Why

Winbond organizes various quality promotions and training activities on a regular basis. The theme for 2020 was 5-Why. Different activities such as Teams group activities, 5-Why case analysis competition, 5-Why experience-sharing, Teams live stream on quality culture and prize quiz were held to promote quality concepts and techniques as well as enhance employees' quality awareness. This year's Quality Month activities attracted 3,104 participants and successfully encouraged the enthusiastic participation of employees in the quality activities.



To cultivate the desire to pursuit outstanding quality among employees, we also hold "Quality Management Courses" for managers and junior employees every year. Average course satisfaction in 2020 was 4.22 (out of 5).



Quality Education and Training Courses



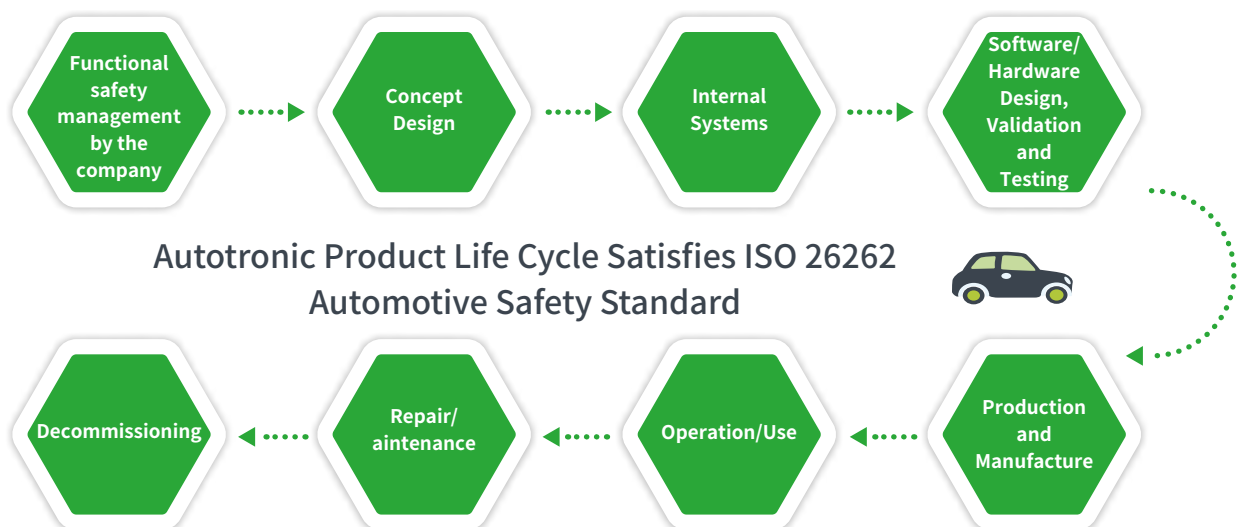
2020 Course Name	Total Hours	Persons
In-depth Introduction 5-Why Concepts and Practice	228 hours (38 classes)	704 (cumulative total was 2,244)
Basic ISO 26262 Concepts	152 hours (2 classes)	76
ISO 26262 Safety Analysis	186 hours (1 class)	62
TQM Training Course	86 (23 classes)	4,959

International Standards Certification

Winbond has established strict production process control and quality management for continuous improvement of product quality. Yield analysis, supply chain management, customer satisfaction level and requirements are used to build a strong reputation. Winbond also actively seeks certification in other areas such as local product quality, hazardous substance management, production environment management, and corporate social responsibility to ensure not only compliance with international standards in the economic, environment and social aspects, but also the high standards of our customers.

ISO 9001		ISO 14001	
IATF 16949		ISO 45001	
QC 080000			
TOSHMS	SONY Green Partner	AEO	ISO 26262
			

Winbond development has focused on Automotive electronic products in recent years. In 2019, we became the first automotive memory maker in Taiwan to obtain “ISO 26262 Road Vehicle - Functional Safety” certification. It upgraded the reliability and functional safety of our automotive products and led to the global autotronics supply chain for advanced safety systems. The ISO 26262 certification established our credentials on development of product functional safety and as a trusted partner for international auto makers. In 2020, we upgraded our Automotive Safety Integrity Level (ASIL) certification for selected products to expand our autotronics market and offer automotive products that satisfy the requirements of the international automotive supply chain.



Quality Awards

Winbond encouraged employees to take part in the “Taiwan Continuous Improvement Awards” organized by the MOEA Industrial Development Bureau. Team spirit and competitiveness were enhanced through the quality culture of excellence at Winbond. The competition involved multiple stages and competitors must be promoted through regional competitions before taking part in the final judging and competition. Gold, silver and bronze tower awards were then awarded based on their total scores.

Winbond participated in the 2020 competition as well and won four silver tower awards. The awards not only recognized Winbond’s efforts in the pursuit of outstanding quality, but also gave our employees top honors for their performance. Winbond joined the competition in 2013 and has accumulated 22 trophies as of 2020 including 4 golden tower awards, 12 silver tower awards, and 6 bronze tower awards.



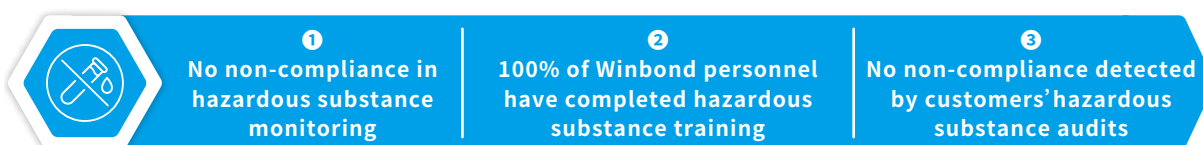
3.1.2 Hazardous Substance Management

Winbond adheres strictly to international guidelines and standards such as QC 080000 (Hazardous Substance Process Management System Requirements), RoHS Directive (EU Restriction of Hazardous Substances in Electrical and Electronic Equipment), and REACH (Registration, Evaluation, Authorization and Restriction of Chemicals). These ensure that the hazardous substance content of wafer, chip and package IC products manufactured by Winbond satisfy international environmental regulations and customers' green product requirements. They must also avoid polluting the environment or posing a threat to human health. Winbond has drawn up the "Hazardous Substances Control Regulations" and set up a cross-department hazardous substance management team to oversee all product-related design, purchasing, production and sales processes. Suppliers and subcontractors are also required to adopt green product requirements. Our ultimate goal is to supply customers with Hazardous Substance Free (HSF) products that meet their requirements. The following principles are followed during R&D, purchasing, production, operations and services to reduce the impact of our company operations on the natural environment and human beings:

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

The HSF Policy commits Winbond to the design, purchasing, manufacture, and sale of hazardous substance-free products. Every effort is made to fulfill the company's responsibilities as a corporate citizen through compliance with international regulations, satisfaction of customers' requirements, and protection of the environment. The Hazardous Substance Process Management System Requirements, (HSPM) representatives convene a management review meeting every year to review and discuss policies, targets, regulations, audit outcomes and management performance. We are continuously improving the effectiveness of our hazardous substance management system.

2020 Targets Achieved



3.3 Customer Relationship Management

Protection of Customer Privacy

Customer-related information are closely controlled by Winbond. All customer commercial information such as customer correspondence and data are retained in Winbond's secure internal systems. The approval and authorization of internal personnel permissions all adhere to the relevant operating guidelines and procedures. All Winbond employees have been required to pass the "Information Security Awareness" course since 2013. The personal smartphones of employees at our Jhubei office building must all be registered and install a camera management that disables the camera on company premises to keep R&D and production data secure. Metal detectors are installed at the entrances of foundries and fabs to control the movement of IT devices on the production line; AI technology is used to manage contractor access to the site through facial recognition. These measures Winbond's proper protection of customer privacy and defense against the theft or leakage of trade secrets and IP. The ISO 27001 Information Security Management System certification obtained in 2020 was used to improve the integrity of the information security system.

The EU "General Data Protection Regulation" (GDPR) took effect in May, 2018. Winbond has updated our website, reviewed our online membership details and made appropriate adjustments in accordance with the requirements of GDPR. The relevant regulations of GDPR were also incorporated into the Personal Information Protection Act online course. The training was undertaken and completed by 2,531 people in 2020 with a 100% pass rate.

There were no complaints against Winbond for violation of customer privacy or loss of customer data in 2020. Neither were we fined for violation of product liability regulations.

Customer Service Quality Improvement

Winbond conducts customer questionnaire surveys on a yearly basis. The 2020 customer satisfaction consists of on 3 key indicators. The following are the items with an average satisfaction with an average satisfaction score greater than 3.5 out of 5 were: Sales (90%), Product and Technology Support (83%), and Product Quality (90%), Average satisfaction exceeded 85%.

To satisfy the needs of our global customers, in addition to our Taiwan headquarter we have also established subsidiaries and service locations in the US, Japan, Israel, China, Hong Kong, Germany and India. There are sales center located in each of the above countries. We are also actively working to develop distributor networks in each country. In 2020, our distributors and technical service centers are built throughout China, Europe, and the Americas.

Winbond is continuing to optimize our internal data processing efficiency through the Electronic Data Interchange (EDI) platform. Process integrity and data security are verified by the platform. The automatic identification of customer orders and their conversion to Winbond's standard orders has an accuracy rate of 97%. For 2021, we expect continued improvements to accuracy in 2021, and an even faster review of the customers' services aimed at enhancing customer satisfaction.

A collaborative platform is also offered for the processing out outgoing products. In addition to notifying the cargo agent of the shipping time and packing details, it also provides cargo brokers with a way of checking where their cargo is and their shipping status in order to improve both efficiency and speed.

24 -Hour Smart Instant Chatbot

To answer customers' requirements in a timely manner, Winbond has established a 24-hour Chatbot line on the corporate website to provide the customer with Winbond product information.



3.4 Responsible Supply Chain

3.4.1 Supplier Sustainability Management

Winbond has actively embraced CSR to build a more resilient and sustainable supply chain. We also expanded the scope beyond our own business to our supply chain and wish to establish a stable and sustainable partnership with suppliers and subcontractors. In addition to quality, delivery time, price and production process technologies, we also set high standards for CSR to realize corporate sustainability.

2020 Sustainable Supplier Management Outcomes

- | | |
|--|------|
| 1. Suppliers committed to the Winbond Ethics and Integrity Policy | 100% |
| 2. Commitment rate for Winbond Supplier Code of Conduct Commitment Letter | 100% |
| 3. Commitment rate for Declaration of Non-use of Hazardous Substances | 100% |
| 4. Commitment rate for Contractor Safety, Health and Environmental Protection Management and Letter of Commitment for Education Training | 100% |

Supplier Sustainability Management Structure

1. New Supplier Selection	2. Supplier Maintenance	3. Supplier Communication
Signing of commitments by new supplier Written review	Supplier management and audit	Training and reporting mechanism
<ul style="list-style-type: none"> Review of basic information Preference given to vendors with ESG standards Request or sign relevant sustainability guidelines/standards 	<ul style="list-style-type: none"> Supplier classification Supplier audit (including sustainability audit) Conflict minerals investigation 	<ul style="list-style-type: none"> Establish disaster reporting mechanism with supplier Hosting of regular education and training (suppliers conferences, counseling courses)

Winbond requires all suppliers to conform to or sign onto the sustainability-related codes of conduct and ethics, Employee Code of Ethics, International Declaration of Human Rights, and International Labor Office Tripartite Declaration of Principles. They must have adopted policies on green products, environmental protection, and Hazardous Substance Free (HSF), or comply with the requirements set by the Responsible Business Alliance (RBA). Preference is given to vendors with ESG standards during the selection of new suppliers. Suppliers are classified and graded by Winbond for effective management and maintenance of approved suppliers. Regular supplier audits and conflict mineral investigations are also conducted. In 2020, all (163) raw material suppliers had signed the Winbond Code of Ethics and Integrity, Winbond SUPPLIER CODE OF CONDUCT COMMITMENT LETTER (including clauses on compliance with RBA and Conflict Minerals Declaration), and Declaration of Non-use of Restricted Substances.

At the same time, Winbond maintains close contact with suppliers through activities such as the annual suppliers conference. Winbond also set up natural disaster reporting mechanism with suppliers for the reporting of earthquakes in the supply chain. Timely information on the geographic information of affected suppliers helps Winbond mitigate losses from business disruptions while improving our productivity and efficiency.

New Supplier Selection

The new supplier selection mechanism includes the quality system questionnaire (covering quality, delivery time, service, technology, and supplier quality systems), RBA Code of Conduct, and CSR standards. The supplier must also provide a third-party quality system certificate, the supplier management principles for Process/Product Change Notice (PCN), and fill out the questionnaire on hazardous substance management. Subcontractors for secure products must also provide their international security certification and fill out the "Security Control Measures Questionnaire for Secure Product Subcontractors."

Percentage/Number of Suppliers Approved under Environmental, Social and Governance

Screening (Unit : %)



Year	Number	Percentage
2018	2	100
2019	11	100
2020	4	100
Total	17	100

Winbond has key operating sites in Japan, Korea, and Taiwan. We have suppliers in the US, Japan, Korea, Taiwan and other parts of the world. The purchasing statistics from each operating site showed that 96.5% of raw materials were purchased locally by value in 2020. This was 3.0% lower than the previous year due to allocation of orders based on supplier production capacity. The largest category of purchasing from previous years was direct materials at 40.5%.

Localized Purchasing from Suppliers (Unit : %)



Type	Proportion by Value (Domestic)		Proportion by Value (Overseas)	
	2019	2020	2019	2020
Wafer	41.5	38.6	0.2	0.8
Chemical	45.4	45.6	0.4	2.7
Gas	10.8	10.4	0.0	0.0
Target	1.8	1.9	0.0	0.0
Total	99.5	96.5	0.6	3.5

Risk Management for Key Raw Materials

Winbond engages in risk management for key raw materials in accordance with our procurement management procedure. The formula of raw materials provided by upstream suppliers are confidential, but the risk management processes would insure Winbond's requirement on non-use of restricted substances. All suppliers are regularly required to provide their CMRT list as well and none sourced their materials from smelters in high-risk regions.

3.4.2 Supplier Sustainability Audit

Supplier Classification and Grading

Suppliers are classified and graded by Winbond for their effective management (sorted by type of requisition). Inventories are also conducted to track the overall condition of the supply chain. The six main categories of Winbond suppliers are equipment, parts and components, raw materials, factory affairs, automation, and back-end subcontractor.

Establishment of Supplier Sustainability Audit Standard

Winbond regularly evaluates approved suppliers on their quality, delivery time, service, and service. Suppliers are then graded as A, B or C based on the outcome of the evaluation. Their grade also affects how they are handled. To ensure the normal operation of all related mechanisms, Winbond also conducts annual audits at suppliers (raw materials) and subcontractors (packaging and testing) for control of supply chain risks. The audit looks not only at “quality management” but also “green audit” and “social responsibility audit.” All suppliers undergo written or field audits every year. In 2020, 12 subcontractors and 20 suppliers of raw materials were audited and all suppliers met Winbond’s standards.



Supplier Evaluation Outcome Handling Mechanism

Supplier Grade	A	B	C
Handling Mechanism	<ul style="list-style-type: none"> Maintain existing relationship with the supplier and continue with regular written audits. 	<ul style="list-style-type: none"> Supplier must sign and return the “Raw Material Supplier Improvement Notice” within one month along with the corrective action taken. A supplier that receives a B grade for two or more consecutive times is downgraded to C. 	<ul style="list-style-type: none"> Supplier must sign and return the “Raw Material Supplier Improvement Notice” within one month along with the corrective action taken. A grade C supplier will have its order quantity reduced if necessary. The user unit may also be asked to provide an alternate material evaluation plan.

Sustainability Review Standard

Aspect	Review Item	Scoring Criteria
Quality Management	<ul style="list-style-type: none"> In addition to requiring quality and management system certification from suppliers, Winbond has defined 12 categories in the inspection form: Quality system; contract review; design management; document control; suppliers management; product source traceability; control of manufacturing process; inspection and testing; verification management; control of non-conforming products; product transport, packaging, storage and delivery; quality records. These include 4 quality indicators. 	<ul style="list-style-type: none"> Excellent (Score $\geq 90\%$) Good (90% > Score $\geq 80\%$) Re-review (Score <80%)
Green Review	<ul style="list-style-type: none"> Suppliers undergo a green review every year to ensure their compliance with the “Green Product and Environmental Policy.” The review looks four areas (management responsibility, outsourcing management, process management and customer support) and has 7 indicators. Green review also covers conflicts mineral investigation. The supplier is required to sign a declaration and provide the relevant investigative data. 	<ul style="list-style-type: none"> Excellent (Score $\geq 90\%$) Good (90% > Score $\geq 80\%$) Re-review (Score <80%)
Social Responsibility Review	<ul style="list-style-type: none"> The “Winbond Code of Conduct for Suppliers” is based on the relevant standards defined by the Responsible Business Alliance (RBA). Suppliers undergo a review of their economic, environmental and social performance. The RBA Self-Assessment Questionnaire (SAQ) and Validated Audit Program (VAP) are also employed for an in-depth analysis of actual supplier engagement with social responsibility. 	<ul style="list-style-type: none"> In 2020, 11 subcontractors completed SAQ and 6 of them also completed VAP.

Supplier/Subcontractor Pass Rate for Economic, Environmental and Social Audits (Unit : %)

Procurement Type / Aspect and Standard		Supplier/Subcontractor (Packaging and Testing Vendor)
Economic Aspect	ISO 9001 Quality Management System	100
	IATF 16949	100
Environmental Aspect	ISO 14001 Environmental Management Systems	100
	REACH	100
	RoHS	100
	IECQ QC 080000	100
Social Aspect	ISO 45001	100
	Responsible Business Alliance (RBA)	91.7

Outcome of Supplier/Subcontractor ESG Assessment

Supplier Category	Companies Audited	Companies Approved
Packaging and Testing Vendor	12	12
Raw Materials Vendor	20	20

Conflict Minerals Management

Winbond does not purchase or use minerals such as Gold (Au), Tantalum (Ta), Tungsten (W) and Tin (Sn) sourced from mines in conflict regions controlled by non-government or illegal armed groups in the Democratic Republic of Congo in accordance with the RBA Code of Conduct. 100% of our key suppliers have signed the Winbond SUPPLIER CODE OF CONDUCT COMMITMENT LETTER as well. We have formally stated to suppliers our policy on non-use of conflict minerals through our corporate website and information letters.

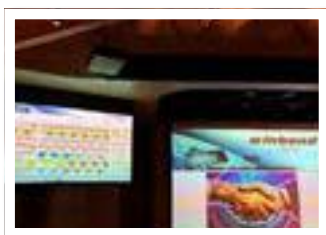
Winbond uses the Conflict Minerals Reporting Template (CMRT) from the RBA CoC to investigate suppliers for conflict minerals. Suppliers are asked to provide Winbond with the smelters of related materials and ensure that their information is up to date. Winbond will continue to work with suppliers to ensure that we only use Tier-1 certified Conflict-Free Smelters announced by RBA. Conflict mineral investigations were conducted by Winbond at 22 companies (including 14 suppliers and 8 subcontractors) and all complied with the relevant regulations. In 2020, no sales prohibitions were placed on Winbond products either.

3.4.3 Supplier Sustainability Engagement

Winbond values our partnership with suppliers. We not only look forward to working with suppliers on improving our sustainability competitiveness and performance, but also consider it to be our social responsibility. Supplier's conferences are therefore regularly held by Winbond along with sustainability review standards to help suppliers improve their economic, social and environmental performance.

Suppliers Conference

Winbond values our long-term relationship with subcontractors and a Suppliers Conference is convened every year to communicate our quality and CSR policies, share the latest Winbond quality requirements and industry innovations, strengthen our consensus and collaboration with subcontractors, and encourage suppliers to join us in fulfilling their CSR. Awards are also presented to outstanding suppliers to thank them for their support and motivate their continued push for sustainability.



Supplier/Subcontractor Counseling

Winbond looks forward to growing together with our supplier and subcontractor partners through continuous improvements in production processes and quality. We therefore offer counseling on improvement activities to suppliers and subcontractors, and work with them to use the DOE experimental design method to improve product yields. At the same time, we encourage the sharing of information security practices and factory automation experience, so that we can all learn from each other and grow together. We actively assist local suppliers with enhancing their capabilities to create a win-win outcome as well as improve the sustainability and resilience of the supply chain.

Supplier/Subcontractor Counseling Outcomes

Scope of Counseling	Problem Description	Improvement Method	Improvement Outcome
Improve WLCSP yield at subcontractor	WLCSP AOI (Automatic Optical Inspection) yield did not meet the target of 99.5%	<ul style="list-style-type: none"> • DOE validation for dicing tape • DOE validation of wafer saw parameters • Establishment of SOP 	Before improvement : 97.63% After improvement : 99.86%
Maintenance of information security	Production disrupted for 7 days at subcontractor due to ransom ware attack	<ul style="list-style-type: none"> • Strengthening of vulnerability scans, phishing drills, education and training • Partitioning of network into multiple domains for rapid recovery 	Production restored within one day
Promotion of production automation	Manual product testing and packaging was very time-consuming	<ul style="list-style-type: none"> • Design of AGV (Automated Guided Vehicle) to replace manual operations 	Improved efficiency and reduced costs

Education and Training for Security Guards

Winbond also develop training courses and programs for security guards at our sites every year. We regularly organize training on topics such as human rights as well as RBA audits for security contractors. All security contractors passed the RBA audit in 2020. The audit covered 10 items including human rights, health and safety. Such audits not only maintain workplace safety at Winbond but also improve security contractors' understanding and performance in social responsibility.

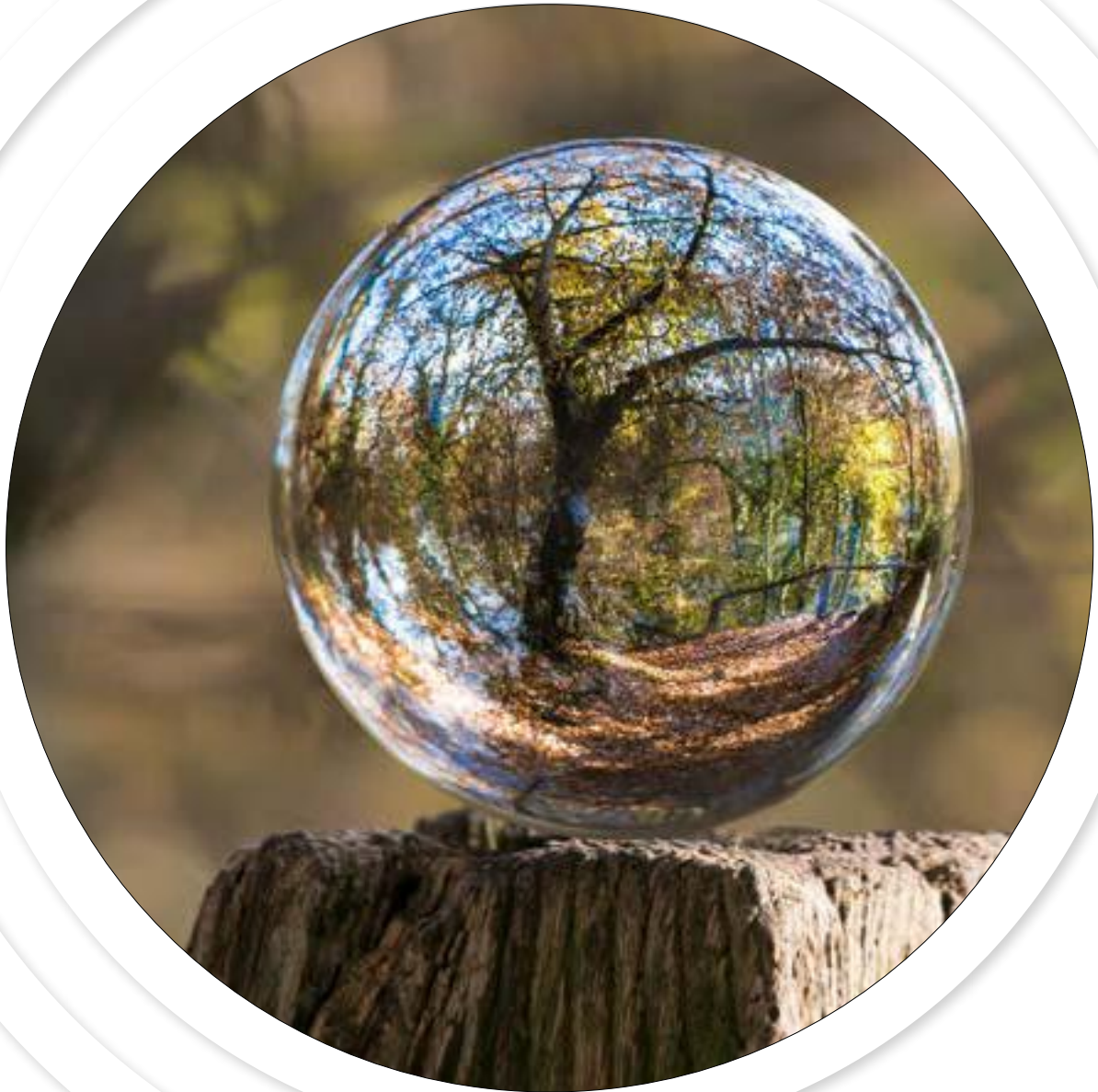
Site security implemented enhanced COVID-19 prevention measures for personnel entering the site in 2020. These included taking body temperature measurements and wearing of masks. Management training on epidemic prevention was also implemented.

Education and Training Outcomes

Topic	Content	No. of Security Guards	Course Duration (Hours)	Site
Workplace Equality	Education and training on workplace bullying, abuse, and harassment.	17	3	CTSP Site
		12	2.5	Jhubei Office
Epidemic prevention education	Security guard provided education and training on temperature measurements and wearing of masks for epidemic prevention to employees/visitors/contractor personnel entering the site.	17	4	CTSP Site
		12	3	Jhubei Office

CH4

Green Environment and Devotion to Environmental Protection



Green manufacturing puts the onus on business to reduce the environmental impact and effects of business operations. Winbond has therefore invested many resources into environmental management, including measures to reduce energy consumption and GHG emissions, improving water efficiency, and enhancing waste and emissions management, to realize our vision of sustainable development.

Material Topics/Themes and Management Approach

Legal Compliance



Material Topic : Legal Compliance



Material Theme : Environmental Compliance

Item	Management Approach
Policy/Commitment	<ul style="list-style-type: none"> • Strive to comply with the latest international environment, safety and health standards; commit to providing a healthy working environment that conforms to statutory requirements through respect, caring, as well as mechanisms for worker consultation and participation. • Continuous improvement to promote personnel safety and eliminate hazards; practice environmental protection to reduce environmental, safety, health and asset risks.
Responsibility	<ul style="list-style-type: none"> • The ESH department is responsible for environmental topics. An ESH and Risk Management Committee is also convened every quarter to review the progress on environmental targets.
Resources	<ul style="list-style-type: none"> • \$373 million was invested in environmental pollution control/remediation in 2020
Communication Mechanism	<ul style="list-style-type: none"> • Make a proposal by filling out the "ESH and Risk Committee Proposal Form". • Issues can be raised through employee representatives taking part in the site ESH and Risk Management Committees. • Provide suggestions through improvement suggestions form and options feedback form, base on the "Regulations of improvement suggestion Reward".
Specific Actions	<ul style="list-style-type: none"> • Introduction of the ISO 14001 international management system for effective management of environmental issues. • Regular inspection and inventory of changes in domestic/overseas environmental legislation; Winbond's internal rules are also examined and amended as necessary to ensure compliance with the latest regulations.
Mechanism for Evaluating Management Approach	<ul style="list-style-type: none"> • The business execution of competent units is checked by the Legal Affairs department to ensure compliance with the latest regulations. • The violations, resolutions, corrective actions and number of cases in each field (including ESG aspects) are tracked during the year. • The completion rate for physical and online environmental compliance courses is tracked.
Outcome of Management Approach Assessment	<ul style="list-style-type: none"> • All inspection reports filed comply with environmental emission standards and regulatory provisions.

4.1 Green Manufacturing

Winbond continues to invest in environmental management and pollution prevention under the principle of green manufacturing. In 2020, a total of \$373 million was spent on environmental protection measures, an increase of 5.25% over 2019, to continue reducing the environmental effects and impact of Winbond operations.

Environmental Spending (Unit : NT\$ Thousand)

Cost Type	Expenditure	2018	2019	2020
New prevention/control equipment	Air pollution control equipment	25,437	35,289	95,355
	Water pollution control equipment	71,729	30,227	2,900
Operation and maintenance of control equipment	Air pollution control equipment	92,908	103,287	93,889
	Water pollution control equipment	165,734	123,331	113,214
Waste disposal fee	General industrial waste	24,508	29,466	34,558
	Hazardous industrial waste	33,030	32,552	32,833
Total		413,346	354,152	372,749
Revenue (Individual)		40,733,527	37,884,848	39,649,875
Proportion of Revenue (Total Expenditure/Revenue)		1.01%	0.93%	0.94%

Economic Benefits of Environmental Spending (Unit : NT\$ Thousand)

	Type	2018	2019	2020
Income	Waste Recycling	4,700	5,600	8,100
Conservation	Electricity Saving Measures	157,460	163,030	170,500
	Water Saving Measures	7,564	8,617	7,512
Total Economic Value Created		169,724	177,247	186,112

4.2 Energy and GHG Management

Winbond has always followed the principle of “optimal” material/fuel use to reduce consumption, waste output and GHG emissions. Production costs are lowered at the same time, making it better both environmentally and economically.

4.2.1 Energy Management

Winbond continues to adjust the operating parameters and consumption of raw materials and fuel, launch energy-saving projects, set unit of intensity targets, and regularly reviews the overall reduction performance of the company in order to realize the requirements for optimization and minimization.

The expansion of our production site and the addition of new plant equipment meant there has been a gradual increase in all raw material and fuel usage. In 2020 our total energy consumption was approximately 2,205,221 GJ. Winbond also introduced 11 electricity-saving measures in 2020 that increased electricity savings by around 8,957 GJ compared to the preceding year.



Total electricity consumption was reduced by 1,071,185 GJ between 2016 and 2020, equivalent to the annual electricity consumption of 85,015 households

Note: Calculation was based on Taipower's 2018 data which gave the average annual electricity consumption for each household as 3,504 kWh, or 12.6GJ.

In 2020, the energy consumption per unit of product at our 12" fab was 80.1 MJ per mask layer. This was approximately 7.8% lower than the 86.9 MJ from 2019. We will continue to carry out energy conservation projects in the future to reduce our environmental burden.

Target Progress



Indicators and targets	2020 progress	2020 targets
Energy consumption per unit of product (MJ/layer)	80.1	≤ 82.8

Electricity Savings from Past Years



Electricity Saving Statistics/Year	2016	2017	2018	2019	2020
Cumulative Electricity Saving Measures (Cases)	165	180	201	208	219
Annual Electricity Savings (GJ)	169,841	196,343	227,556	234,244	243,201

2020 Energy Saving Measures and Performance



Type	Energy Saving/Carbon Reduction Project Name	Energy Saved (kWh)	GHG Reduction(tCO ₂ e)
Energy-saving lighting improvements	Energy-saving lighting improvement at wastewater plant	76,037	39
	Energy-saving lighting improvement for 2F of office building	16,923	9
Energy-saving facility improvements	Energy-saving improvement for chiller pump	1,436,640	731
	Energy-saving improvement for cooling water tower fan	169,243	86
	Energy-saving sensor lighting improvement for clean room	424,107	216
	Energy-saving improvement through optimization of cooling system conduits	17,988	9
	Energy-saving improvement of operation of pure water treatment MB (mixed bed) system	6,552	3
	Energy-saving improvement for recovery of concentrated water from UF (ultra filter) for pure water treatment	77,298	39
	Energy-saving improvement to heat oven	42,041	21
	Energy-saving improvement to scrubber system	200,166	102
	Feasibility study for introduction of nano-type energy-saving heating strip	21,170	11

Note: The baseline year was 2019; the calculation of electricity savings from electricity-saving measures was based on the requirements of the "Reporting Form for Verifying Energy Savings by Energy User."

Energy Usage

Raw Material/Energy	2018	2019	2020
12" wafer (Tonnes)	76	74	84
Electricity Consumption (GWh)	498	528	546
Process Gas Usage (Tonnes)	278	293	407
Process Chemical Usage (Tonnes)	10,110	10,541	11,877
Plant Gas Usage (Million M ³)	188	207	217
Plant Chemical Usage (Tonnes)	15,675	17,085	19,093
Natural Gas Usage (Ten Thousand M ³)	547	577	636
Diesel Usage (M ³)	138	52	54

Note: Recycled materials cannot be used due to the nature of Winbond products.

Unit Energy Intensity

Energy Intensity/Year	2018	2019	2020
Total Energy Usage (GJ)	2,024,278	2,119,538	2,205,221
Energy Intensity per Unit of Product (MJ/Layer-Wafer Mask)	89.8	96.8	89.9
Total Electricity Usage (GJ)	1,793,894	1,902,182	1,966,533
Electricity Usage per Unit of Product (MJ/Layer-Wafer Mask)	79.6	86.9	80.1
Electricity as a Proportion of Total Energy Usage (%)	88.6	89.7	89.2
Total Natural Gas Usage (GJ)	225,545	215,526	236,788
Natural Gas Usage per Unit of Product (MJ/Layer-Wafer Mask)	10.0	9.8	9.7
Natural Gas as a Proportion of Total Energy Usage (%)	11.1	10.2	10.7
Total Diesel Usage (GJ)	4,839	1,829	1,899
Diesel Usage per Unit of Product (MJ/Layer-Wafer Mask)	0.2	0.1	0.1
Natural Gas as a Proportion of Total Energy Usage (%)	0.2	0.1	0.1

Note:

1. No renewable energy is used by Winbond.
2. Energy usage has been converted into Joules. 1 kWh of electricity = 3,600 KJ; 1 cubic meter of natural gas = 8,914 kcal; 1 L of diesel = 8,400 kcal, and 1 cal = 4.184 J.
3. Standards, methodology, assumptions and tools used: All energy usage comes from meter readings, the natural gas monthly settlement form/requisition form and part number inventory change record check list. There are no estimates.
4. Source of conversion factor used: Natural gas was calculated using the specific heat value provided by the vendor. The rest was all calculated using the Greenhouse Gas Emission Factor Management Table Ver. 6.0.4 issued by the EPA.

Investment in Renewable Energy

Winbond installed 499 kW of renewable energy generation facilities in 2019 in support of the government's renewable energy policy. Generated electricity is then sold back to Taipower. The annual output of up to 420,000 kWh makes a contribution to the development of renewable energy in Taiwan as well.



FAB-A



4.2.2 Greenhouse Gas Management

GHG generated during business activities contribute to global warming. Winbond actively cooperates with the government's push on GHG inventory registration by implementing GHG management measures at our sites, adopting the weighted operational control method, introducing ISO 14064-1, conducting GHG emission inventories and verification, setting reduction targets and identifying reduction opportunities. We also propose improvement plans to progressively improve our GHG reduction performance.

At the same, Winbond has participated in the Perfluorocarbons (PFCs) Reduction of GHG emissions projects of Taiwan and the World Semiconductor Council (WSC). These involved process adjustments, use of alternative gases and installation of fluorocarbons (FCs) reduction equipment. We also secured 285,771 tonnes of reduction credits through the EPA preliminary program to reduce GHG emissions, lower risk impact, and enhance Winbond's ability to adapt to climate change, improve our competitiveness, and create new opportunities. Such initiatives also prepare us for future GHG emission caps.



ISO 14067 Carbon Footprint Verification planned for 2021 Q3

GHG Emission Strategy Targets and Progress

The main sources of GHG emissions at Winbond are FCs used in production processes and externally purchased electricity. These accounted for over 85% of all GHG emissions. Our main targets are therefore the reduction of direct FCs emissions (through improvement of process efficiency and addition of tail-gas incinerator equipment) and indirect emissions from electricity.

Target Achievement

GHG emission intensity per unit of product(Kg CO₂e /layer-wafer mask)

2020 progress	2020 targets
13.5	≤ 15.09

Note:

1. The reduction targets cover Scope 1 and Scope 2 emissions
2. The calculation for direct emissions of process gases was changed from Tier 2a to Tier 2b in the GHG inventory report as of 2020.

Winbond continues to promote carbon reduction projects and to improve energy efficiency. In 2020, we reduced our total CO₂ emissions by 207,475 tonnes, the equivalent of the carbon captured by 538 Da-an Forest Parks in a year (based on the data published by the Forestry Administration of Council of Agriculture, Executive Yuan, and Land Administration Bureau of Taipei City Government (25.93 hectares, carbon fixation factor 14.9 tCO₂e/hectare/year), Da-an Forest Park absorbs 386 tonnes of CO₂e per year). To reduce the need for employees to drive between the Zhubei office and Taichung site, Winbond organizes 6 coach services in each direction during work days. Employees are encouraged to take the company shuttle as much as possible. The CTSP site also provides shuttle bus services (service to downtown Taichung is divided into the northern and southern routes) for engineering assistants. These are used during commuter hours to reduce the fuel consumption and air pollution from transportation.



Total GHG reductions in 2020 amounted to 207,475 tCO₂e.

GHG Reduction Performance (Unit: tCO₂e)

GHG Reduction/Year	2018	2019	2020
Reduction in Direct (Scope 1) GHG emissions	190,574	201,583	173,089
Reduction in Indirect (Scope 2) GHG emissions	33,691	33,119	34,386
Total GHG Reductions	224,265	234,702	207,475

Note: The value for 2020 is an estimate because the electricity carbon emission factor for 2020 has not yet been announced; the 2019 value was revised in accordance with the published emission factor.

GHG emissions at Winbond can be divided into three main types. Scope 1 are direct GHG emissions including GHGs (hydrofluorocarbons, perfluorocarbons, perfluorinated compounds, trifluoride, nitrous oxide, methane, and carbon dioxide, etc.), GHG emissions from fuel usage (e.g. natural gas, petrol, and diesel), and fugitive emissions such as treated organic waste gas, septic tanks, high and medium voltage panels, and firefighting equipment; Scope 2 indirect energy emissions come externally purchased electricity; Scope 3 are other indirect GHG emissions generated by employee commutes/business trips, product and raw material transport, supplier production of raw materials, as well as the waste recovery and treatment.

GHG Emissions Overview (Unit: tCO₂e)

Greenhouse Gases	2018	2019	2020
Scope 1	64,510	65,749	53,271
Scope 2	265,596	268,947	278,046
Total Emissions	330,106	334,696	331,317
Emission Intensity (Kg CO ₂ e /layer-wafer mask)	14.7	15.3	13.5

Note:

1. Winbond activated the PFCs tracking system for production process gases in 2020 to discriminate between the gas usage of each process. The method for calculating GHG emissions was changed from Tier 2a to Tier 2b to obtain more precise emissions data. The baseline year for GHG inventory was therefore set as 2020 for now and total emissions were 331,317 tCO₂e.
2. The Global Warming Potential (GWP) used in this table comes from the "IPCC Fourth Assessment Report (2007)".
3. The types of greenhouse gases include N₂O, CH₄, CO₂, HFCs, PFCs, SF₆, NF₃, etc.
4. Standards, methodology, assumptions and tools used: All energy usage comes from meter readings, the natural gas monthly settlement form/requisition form, and the AS400/part number inventory change record check list. The table contains no estimates.
5. The coefficients used are mainly based on the recommendations in the EPA's latest version of GHG emission coefficients, and the uncertainty data for emission coefficients were used as reference. To assess the uncertainty in activity data, we used the technical specifications of the measuring instrument as the basis for our assessment.
6. The value for 2020 is the estimated value, as the emission factor for 2020 has not yet been announced.

Global Scope 1 Emissions (Unit: tCO₂e)

CO ₂ Types	Scope 1 Emissions
Carbon Dioxide (CO ₂)	14,279
Methane (CH ₄)	68
Nitrous Oxide (N ₂ O)	17,348
Hydrofluorocarbons (HFCs)	3,129
Perfluorocarbons (PFCs)	11,621
Sulfur Hexafluoride (SF ₆)	3,919
Nitrogen Trifluoride (NF ₃)	2,907

Note: Winbond has no restricted Scope 1 emissions (tCO₂e)

4.3 Water Resource Management

Water is a critical global resource. The finite nature of global water resources reinforces Winbond's determination to optimize our water efficiency.

Water Risk Assessment

Winbond employed the water risk assessment tool developed by the Water Resources Institute (WRI) and the "Aqueduct Water Risk Atlas" from the Aqueduct website to analyze the water resource distribution of Taiwan. The analysis found that all of our operating locations in Taiwan are located in regions with low water resource risk.



In 2020, we recycled up to 10.21 million cubic meters of water
Fab water recycling rate reached 81%

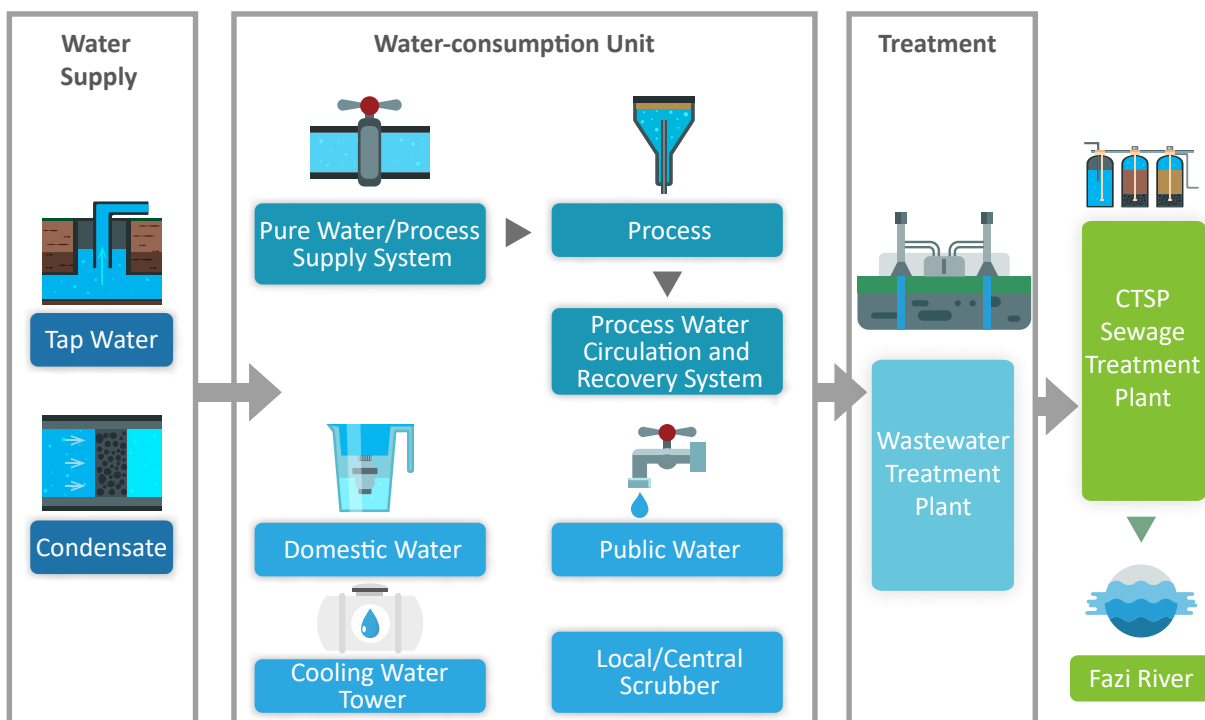
Introduction of Water Footprint Verification

Winbond plans to strengthen our water resource management ability by obtaining ISO 14046 Water Footprint Verification in Q3 2021.

4.3.1 Water Usage

Winbond's main source of water is tap water supplied by Taiwan Water Corporation. Most are supplied by the Liyutan and Deji reservoirs with a small part coming from rainwater and air-conditioning condensate. In 2020, our total water consumption amounted to 3.6 million cubic meters. The water intensity per unit of product per layer of 12" wafer averaged 148L and met our target for 2020 (≤ 150 L/layer).

Site Water Usage Process



Note: Local Scrubber: localized air treatment equipment; Central Scrubber: centralized air treatment equipment

2020 Target Achievement



Indicators and targets	2020 targets	2020 progress
Water consumption per unit of product (L/layer)	≤ 150	148
Fab Water Recycling Rate (%)	≥ 80	81%

2020 Water-saving Measures (Unit : Cubic meters/year)



Item	Water Saving Measures	Water Saving Measure Description	Water Saving Degree
1	FAB-B UPW UF Concentrated Water Recovery	FAB-B UPW (ultrapure water) UF concentrated water passed its water quality assessment. It was originally discharged into the pre-treatment tank but now goes to the de-ionization tank to reduce the amount of recycled water in the 2B3T system (ionic exchange resin system).	14,164
2	Continued Improvement to 2B3T Water Savings in UPW System	The regenerative cycle was extended from 4,600 m ³ to 5,000m ³ to reduce the amount of water used during regeneration, startup and shutdown.	15,595
3	Improved recovery efficiency of wastewater system	Reverse Osmosis (RO) system added to wastewater treatment to increase the amount of wastewater recovered.	6,200

Water Withdrawal (Unit : ML)



Water Resource Types		2018	2019	2020
Water withdrawal by source	Third-party water	3,128	3,368	3,633
	Surface water (Total)	3,128	3,368	3,633
Total water withdrawal		3,128	3,368	3,633

Note: Winbond uses tap water provided by a third-party. We do not use surface water, ground water, seawater or discharge water. The third-party's water source is surface water (fresh water with ≤ 1,000 mg/L total dissolved solids); Total water withdrawal was calculated as the sum of surface water (total), ground water (total), seawater (total), discharge water (total), and third-party water (total).

Water Consumption (Unit : ML)



Type	2018	2019	2020
Total water consumption	945	979	1,216
Change in water storage	0	0	0

Note: Change in water storage is calculated as the difference in total water storage between the start and end of the reporting period. The water storage tanks at our sites have a fixed capacity so there was no change.

4.3.2 Water Recycling

Winbond continues to increase the water recycling rate. In 2020, the site recycled approximately 81% of its water and 91% of its process water (meeting the science park's commitment under the environmental impact assessment to recycle more than 77% of all water used and more than 85% of process water). Winbond implemented 3 water-conservation measures in 2020 that boosted water savings by 36,000 cubic meters. Cumulative water savings between 2016 and 2020 has now reached 2.58 million cubic meters, equivalent to 51% of Baoshan Reservoir's capacity.

Note: This is based on Baoshan Reservoir's effective capacity of 5.04 million cubic meters as measured by the MOEA Water Resources Agency in 2019.

Water Recycling Performance in Past Years

Water Recycling Rate/Year	2016	2017	2018	2019	2020
Water Recycled (Million M3)	7.03	9.57	9.51	9.66	10.21
Fab Water Recycling Rate (%)	81	83	82	82	81%

Note: Fab Water Recycling Rate = (Recycled Condensate + Recycled Process Water + Recycled Reclaimed Wastewater) / (Tap Water + Recycled Condensate + Recycled Process Water + Recycled Reclaimed Wastewater - Evaporation).

4.3.3 Wastewater Management

Winbond has an on-site wastewater treatment area responsible for the treatment of general acidic and alkaline wastewater, fluoridated wastewater, wafer planarization wastewater, ammonia nitrogen wastewater, tetramethylammonium hydroxide wastewater, copper wastewater, and hydrogen peroxide wastewater generated during the wafer manufacturing process, as well as domestic wastewater generated by employees. These are passed through a membrane bio-reactor before being discharged into the CTSP Sewage Treatment Plant. Once the wastewater has been treated to discharge standards it is discharged into Fazi River.

The wastewater treatment facilities of Winbond were designed to collect up to 20 types of waste liquids through separate pipelines. Each wastewater type is then treated through 11 distinct wastewater treatment facilities. Operating and discharge permits are applied for in accordance with the Water Pollution Control Act and the Soil and Groundwater Pollution Remediation Act. Testing is conducted by a laboratory accredited by the Environmental Analysis Laboratory every two years to confirm that the discharge water quality satisfies CTSP's influent standard. To reduce the environmental burden of the wastewater treatment facilities and chemical usage, we also collect and treat waste liquids from the washing towers, cooling towers, process cooling water, and recycled soft water from production processes for secondary water applications throughout the site. We continue to refine our water pollution prevention and control facilities to reduce the pollutant biochemical oxygen demand (BOD), chemical oxygen demand (COD), and the amount of suspended solids (SS) and sludge. The COD, SS and BOD readings for 2020 were each 17 times, 45 times and 28 times lower than the CTSP influent standard respectively.

Water Emission Quality (Unit : mg/L)

Influent Standard/Threshold Value	Chemical Oxygen Demand	Suspended Solids	Biochemical Oxygen Demand
CTSP Influent Standard	500	300	300
Measured on 2020.05.18	27.4	8.8	12
Measured on 2020.11.10	31.6	4.6	9.5

Water Discharge Volume (Unit : ML)

Item	Type	2018	2019	2020
Emissions by Destination	Total Surface Water Emissions	2,182	2,389	2,417
Emissions by Treatment Level	Total Emissions after Level 3 Treatment	2,182	2,389	2,417

Note: According to discharge by destination, Winbond's wastewater was mainly discharged into surface water (fresh water $\leq 1,000$ mg/L total suspended solids).

4.4 Waste Management

Winbond ensures that waste generated during business operations is properly and safely disposed off in accordance with the “Waste Disposal Management Procedure.” Waste reduction, reuse and recycling are used to reduce the amount of waste produced by our sites in order to minimize environmental impact.

Waste Management Process



Winbond generated around 6,570 tonnes of waste in 2020. Waste generated per layer of 12” wafer mask averaged 0.268 tonnes; 100% of hazardous industrial waste was disposed of through licensed local waste disposal organizations. Recycling rate was 93% with 6,079 tonnes of waste recycled, meeting our annual target of exceeding 90%.

Waste Recycling Rate (Unit : %)

Year	2018	2019	2020
Total Waste Recycling Rate	92	92	93

Waste Generation, Disposal and Transfer (Unit : Tonnes)

Waste Composition	2018	2019	2020
General waste	3,842	3,808	4,064
Hazardous waste	2,240	2,234	2,506
Waste Recycling	5,578	5,575	6,079
Total waste	6,082	6,042	6,570
Percentage of hazardous waste	37%	37%	38%
Percentage of recycled waste	92%	92%	93%

Note:

- 1 The amount of waste generated is the value reported under waste disposal regulations.
2. All waste generated by Winbond sites is removed for processing by qualified disposal organizations and none is processed directly on-site.

4.5 Emissions Management

Winbond has installed zeolite rotor treatment systems for handling volatile organic gas (VOC) emissions. Cleaner natural gas is used as fuel to reduce secondary pollution from combustion. Our average removal rate for VOCs in 2020 reached 97% and exceeded the relevant EPA regulations.

Winbond's air pollution prevention strategy starts with reducing emissions at the source. Process improvements are used to reduce the amount of pollutants generated to a reasonable level. Pollutants in the missions are then treated with high-performance control equipment to ensure that atmospheric emissions exceed government standards for pollutant content. All past measurements found that Winbond emissions were all lower than EPA emission standards.

Emissions from Winbond processes are categorized as acidic, alkaline, volatile organic or general emissions based on their attributes. General emissions are mainly hot exhaust from machines which do not cause air pollution. Effective air pollution control equipment is used for each type of pollutant. Winbond has installed local scrubber equipment for certain hazardous, flammable, FCs and PFCs emissions from production processes. These emissions go through the absorption and incineration process before being channeled to the central emission washing tower for washing and neutralization of their inorganic acids and alkaloids. Emissions that contain VOCs are sent directly to the zeolite rotor for absorption before being treated by vertical incinerators.

The air pollution prevention and control facilities at Winbond can be immediately switched to a backup system in an emergency or during maintenance. They are equipped with emergency power and other backup systems as well as an advanced real-time monitoring system that tracks changes in the system's operating parameters on a 24-hour basis. An alert is immediately sent if a pre-set threshold is exceeded for immediate action to ensure reliable and continuous operations 24 hours a day, 365 days a year. The effective treatment of air pollutants conforms with the relevant regulations of the "Air Pollution Control and Emissions Standards for Semiconductor Industry" and the "Air Pollutant Emissions Standards for Stationary Pollution Source."

Air Pollutant Emissions (Unit: Tonnes)

Item	2018	2019	2020
NOx emissions	11.82	10.77	12.06
SOx emissions	0.29	0.17	0.45
VOC emissions	3.73	3.61	4.80



CH5

Harmony and Cooperation



Talent cultivation and development is valued by Winbond in keeping with our spirit of a “human-oriented” approach. We strive to build a friendly workplace, provide employees with a safe and healthy working environment, fulfill our corporate social responsibility and make a positive contribution. We continue to give back to society under our philosophy of “giving back what you take.”

Material Topics/Themes and Management Approach

Occupational Health and Safety



Material Topic : Occupational Safety and Health / Material Theme : Occupational Health and Safety

Item	Management Approach
Policy/Commitment	<ul style="list-style-type: none"> Winbond strives to comply with the latest international environmental, safety and health standards. We are also committed to fulfilling our social responsibility as a world-class company by providing a healthy working environment that conforms to statutory requirements through respect, caring, as well as mechanisms for worker consultation and participation. It is the social responsibility of a world-class company to ensure there are zero hazards and to reduce the environmental burden.
Responsibility	<ul style="list-style-type: none"> A Winbond ESH and Risk Management Committee chaired by the President has been established. Regular meetings of the Committee are convened to discuss occupational, environmental, safety and health matters.
Resources	<ul style="list-style-type: none"> Internal and external Occupational Health and Safety training. Incentive mechanism for reporting of anomalies.
Communication Mechanism	<ul style="list-style-type: none"> ESH Management System Consultation and Communication Procedure. <ol style="list-style-type: none"> Make a proposal by filling out the "ESH and Risk Committee Proposal Form". Issues can be raised through employee representatives taking part in the site ESH and Risk Management Committees.
Specific Actions	<ul style="list-style-type: none"> The ISO 45001 management system has been introduced for continuous improvement of the Occupational Safety and Health system.
Mechanism for Evaluating Management Approach	<ul style="list-style-type: none"> A PDCA validity assessment of the Occupational health and safety management system is conducted every 6 months in accordance with Winbond's "Internal Audit Procedure for ESH System"; external verification by third-party is also conducted every year. The ISO 45001 management system is regularly updated to maintain the validity of the Occupational Safety and Health management system.
Outcome of Management Approach Assessment	<ul style="list-style-type: none"> There were no violations of Occupational Health and Safety regulations in 2020. Maintain certification for the new version of the ISO 45001 management system.

5.1 Recruitment and Retention

Winbond adheres to international human rights conventions and labor rights laws in protecting employees' freedom of association and right to speech. We do not discriminate on the basis of employees' race, age, gender, sexual preference, disability, pregnancy, politics, and religion. We are also committed to creating a workplace free from discrimination. Human rights training and education are conducted at every level of Winbond each year to prevent illegal discrimination. To ensure equal opportunity and prevent potential human rights risks, a strict recruitment procedure has been devised that prohibits illegal discrimination against applicants from the very beginning of the recruiting process. Training courses for managers on talent selection also cover non-discrimination against applicants.

Winbond continues to refine its HR management system and optimize its HR integration system in areas such as recruitment, retention, compensation, benefits and talent cultivation. We also communicate the people-centric corporate culture of Winbond to boost employee identification with the company. The many resources invested toward attracting and retaining talent have helped Winbond maintain its competitiveness in a fast-changing world.

5.1.1 Workforce Structure

Global Talent Strategy

Winbond has established global operating locations in Taiwan, the USA, Japan, Israel, Germany, China and India to provide better services. At the end of 2020, the Winbond headquarters employed 2,908 people including 2,339 management, R&D/production and administration/sales personnel, as well as 569 production support personnel.

Global Workforce Distribution (Unit : persons)

Item	Headquarters (Taiwan)		Asia (not including Taiwan)		North America		Middle East	
	Fixed-term Contract	Indefinite Contract	Fixed-term Contract	Indefinite Contract	Fixed-term Contract	Indefinite Contract	Fixed-term Contract	Indefinite Contract
Male	8	1,978	12	85	0	60	0	29
Female	13	909	7	25	1	11	0	9
Subtotal	21	2,887	19	110	1	71	0	38
Total	2,908		129		72		38	

Note: In addition to the employees listed in the table above, there is also 1 employee on an indefinite contract in Europe

Distribution of Foreign and Overseas Employees

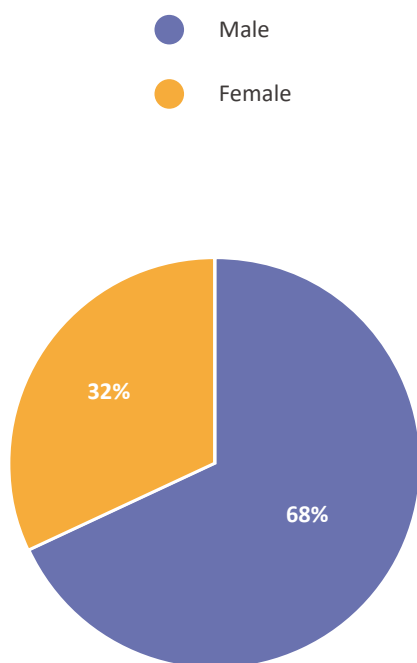
	Foreign Employees	Overseas Employees
Number of Employees	38	1
Percentage (%)	1.307	0.034

Note: The calculation of foreign and overseas employees is based on dividing the number of foreign and overseas employees by the total number of employees in Taiwan

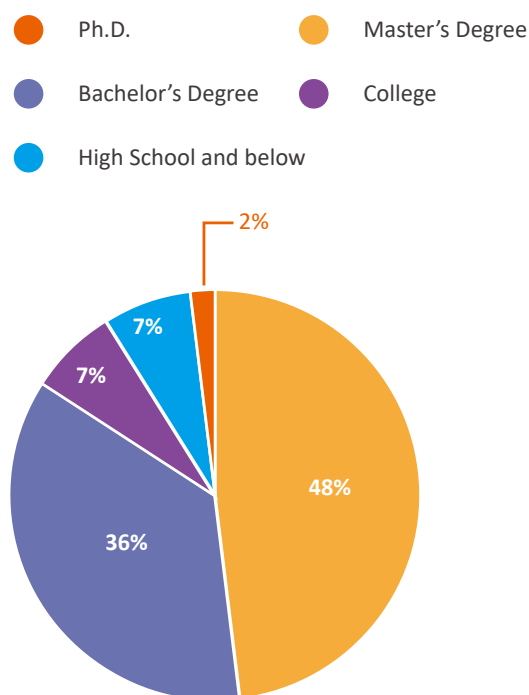
2020 Employee Composition

Winbond regularly examines the composition of our employees and draws up recruiting strategies for quality talent in order to recruit suitable professional expertise for maintaining our competitiveness in the industry. In 2020, 50% of all employees held a master's or Ph.D. degree, while 36% of employees held a bachelor's degree. Our employee composition reflected the knowledge-intensive nature of the semiconductor industry. In terms of age distribution, Winbond adheres to all local and overseas regulations and guidelines on the non-employment of child labor or those who have not completed their compulsory education. All employees are over the age of 18 with 77% of our employees aged between 31 and 50.

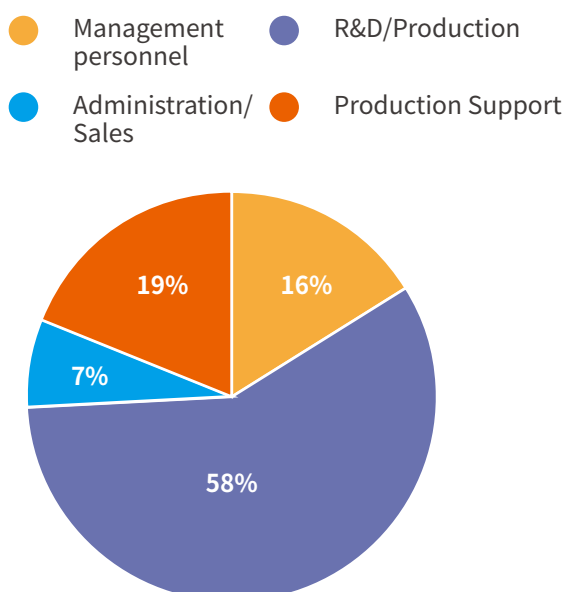
Ratio of Male to Female Employees



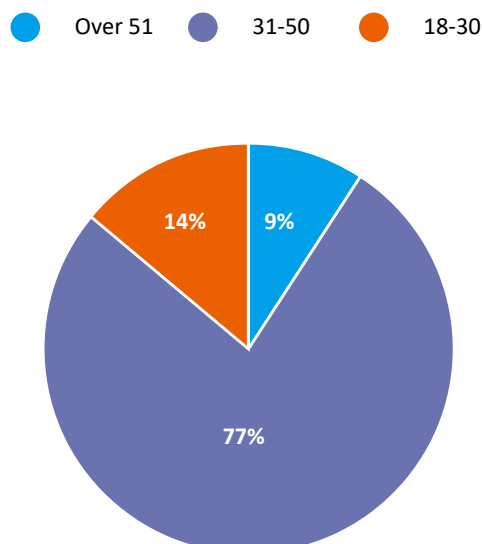
Distribution of Employees' Educational Backgrounds



Distribution of Employee Roles

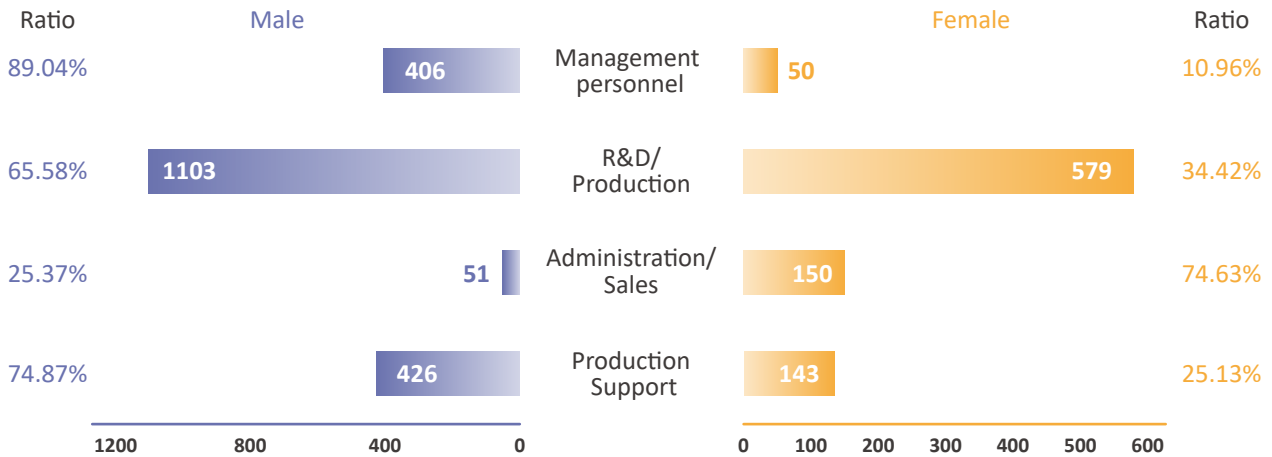


Employee Age Structure



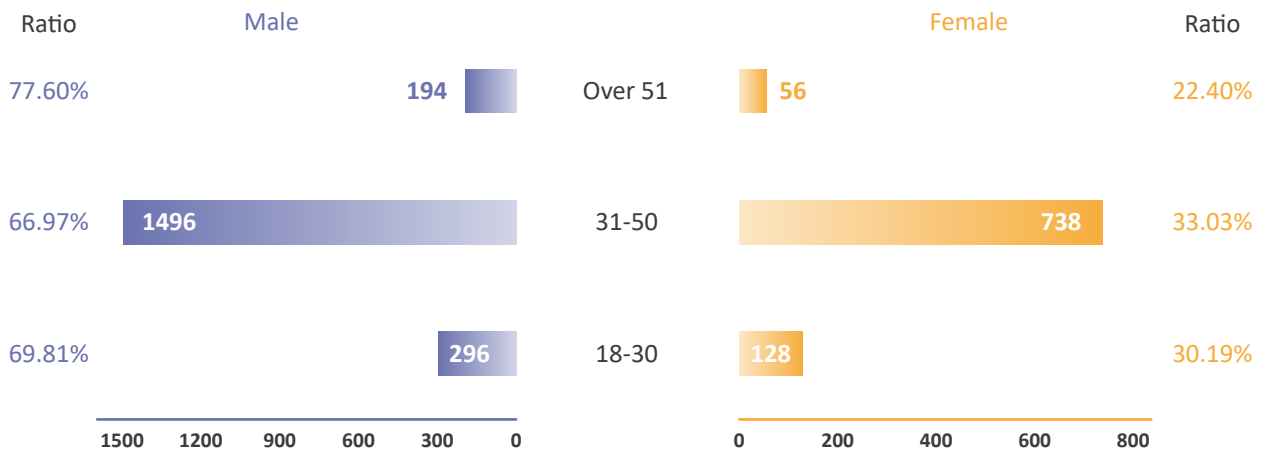
1 Distribution of Male and Female Employees

Due to the nature of the technology industry, the job market, and other factors, the majority of Winbond employees are male. There are 1,986 male and 922 female employees for a gender ratio of 2:1. Winbond maintains the number of female employees at a certain percentage, treats employees equally and offers job protection. To maintain the balance of our employee gender distribution, there are no gender-based differences in selection and promotional prospects.



2 Age Distribution of Male and Female Employees

Winbond employees are mainly aged between 31 and 50. The ratio of male to female is 2:1.



3 Employee Type and Roles

Our 2,908 employees are divided into those on fixed-term contracts and those on indefinite contracts. Distribution of roles is 456 in management roles and 2,452 in non-management roles.

Distribution of Employee Employment Contracts

Item	Male		Female		Total Number of People	
	Number of People	Ratio	Number of People	Ratio	Number of People	Ratio
Fixed-term Contract	8	0.28%	13	0.45%	21	0.72%
Indefinite Contract	1,978	68.02%	909	31.26%	2,887	99.28%
Total	1,986	69.11%	922	30.89%	2,908	100%

Distribution of Employee Employment Types

Item	Male		Female		Total Number of People	
	Number of People	Ratio	Number of People	Ratio	Number of People	Ratio
Full-time	1,982	68.16%	920	31.64%	2,902	99.79%
Part-time	4	0.14%	2	0.07%	6	0.21%
Total	1,986	69.11%	922	30.89%	2,908	100%

Note: Full-time personnel includes employees on indefinite contracts, engineering assistants, and periodic contracts; part-time personnel are part-time employees on fixed-term contracts

Distribution of Employee Roles

Item	Male		Female		Total Number of People	
	Number of People	Ratio	Number of People	Ratio	Number of People	Ratio
Management	406	13.96%	50	1.72%	456	16.12%
Non-Management	1,580	54.33%	872	29.99%	2,452	83.88%
Total	1,986	68.29%	922	31.71%	2,908	100.00%

Note: Management refers to section chief or higher grades responsible for supporting and directing employees in their department

5.1.2 Talent Recruitment and Performance Evaluation

Winbond offers compensation and benefits superior to statutory requirements. The principle of equality is used to attract and retain talented people. In addition to quarterly reviews of legislation on employee compensation, benefits and gender, Winbond also regularly studies the job market to adjust the standard of employee compensation and benefits accordingly. A comprehensive evaluation system is also used to reward outstanding performers; an appropriate and reasonable level of turnover is maintained in accordance with the company's development goals to bring new ideas and mindsets to Winbond. Winbond adheres strictly to local and overseas labor laws and the RBA CoC. We prohibit the use of child labor or those who have not completed their compulsory education (under each country's local law).

Diverse Recruitment Channel

A diverse range of recruitment channel is used by Winbond including job search platforms and campus recruitment. We reach out to new graduates joining the work force through a strict selection mechanism. Employee referrals of talented people are also encouraged. An internal transfer system is also used to find talented people and match them to the right roles. Due to the demand for the different types of high-level technical expertise found in each country, we employ many foreigners from Japan, Korea, India, and the US. The multicultural exchange in the workplace fosters new perspectives and thinking.

- **Campus recruitment:** Campus recruiting events are used to interact and network directly with students. Students can also receive employment counseling on the spot. Fairs were canceled in 2020 due to COVID-19 and recruiting was carried out through other channel instead.
- **Internal transfer system:** The recruitment requirements are issued by the hiring unit. HR will post internal job openings in the recruitment system to promote the flow of talent and diversification of employee skills.
- **Recruitment website:** Applicants can find out about Winbond job opportunities and descriptions through mainstream career websites, Facebook, or LinkedIn.
- **Employee referrals:** Winbond employees can refer talented people to the company.

Talent Attraction and Retention in 2020

Winbond strives to build a diverse, inclusive and equal-opportunity workplace. We believe that diversity in the management and workforce can help us keep track of market trends, understand the needs of customers, and maintain our competitive advantage.

To promote balance in diversity and conform to the requirements of the EU General Data Protection Regulation (GDPR), the gender and date of birth fields were removed from the company's resume form in 2020. We hope this will lead to more objective selection of talent during recruitment.

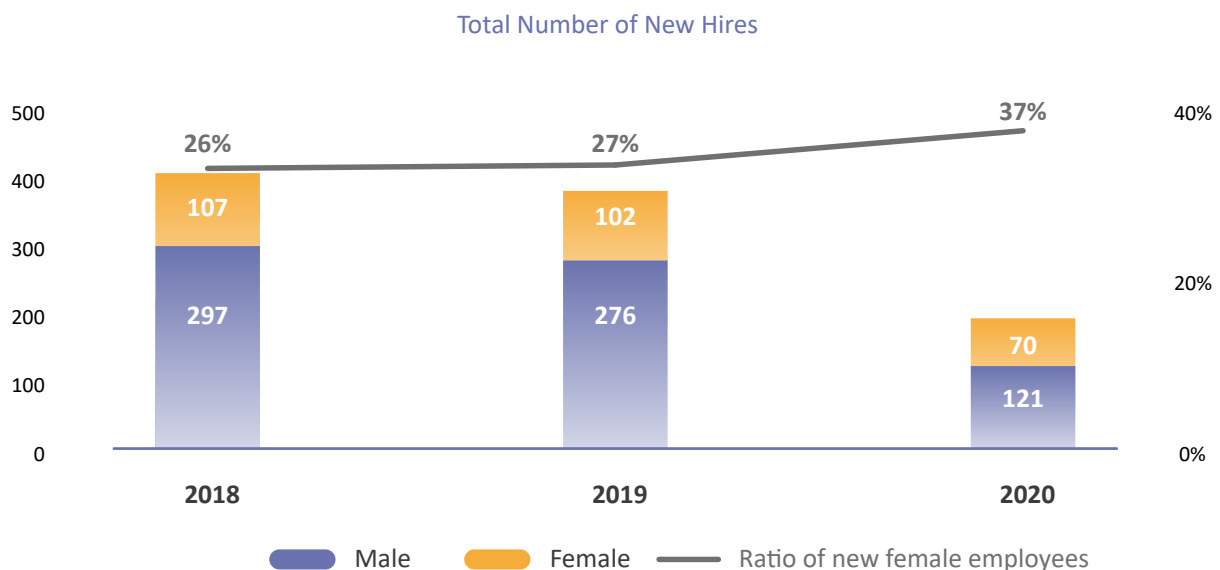
In 2020 Winbond recruited 163 new employees and our annual new hire rate was 6%. Of these, 56% were young people under the age of 30 and their recruitment was aimed at revitalizing the organization. A further 43% were aged between 31 and 50. Their inclusion brought a wealth of work experience for boosting and revitalizing organizational performance.

COVID-19 posed a serious challenge to the socioeconomic environment in 2020. Winbond wound back its recruitment efforts to avoid affecting employee compensation. We also boosted productivity by encouraging employees to become involved in learning and by carrying out a series of digital transformations. An appropriate and healthy level of turnover was maintained by Winbond despite the adjustment to recruitment efforts. As a result, the 2020 turnover rate of 8% was still higher than previous years. In addition to actively reaching out to resigning employees to understand the reason for departure so that improvements can be made, Winbond also used large communication meetings and diverse communication channel to give employees a better understanding of the company's future development strategy. We also listened to employee feedback and provided appropriate assistance when necessary to improve our turnover rate and retention.

New hiring and turnover Statistics

Category	New Hires in 2020		Employee Turnover in 2020	
	Number of People	Percentage of that employee category	Number of People	Percentage of that employee category
Female	53	6%	74	8%
Male	110	6%	166	8%
Over 51 years old	2	1%	26	10%
31 to 50 years old	70	3%	127	6%
Under 30 years old	91	21%	87	21%

New Recruit Hire Statistics

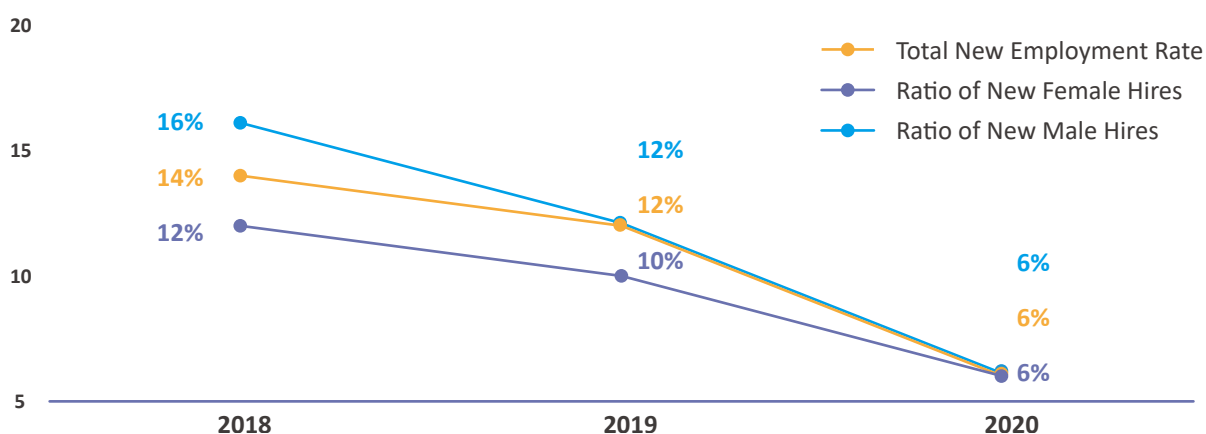


New Hire Ratio

Year	Male		Female		Total	
	Number of People	Ratio	Number of People	Ratio	Number of People	Ratio
2018	297	16%	107	12%	404	14%
2019	276	12%	102	10%	378	12%
2020	110	6%	53	6%	163	6%

Note: New hire rate is the number of new recruits for the year divided by the total number of personnel with the same gender on December 31 of the same year

New Hire Statistics

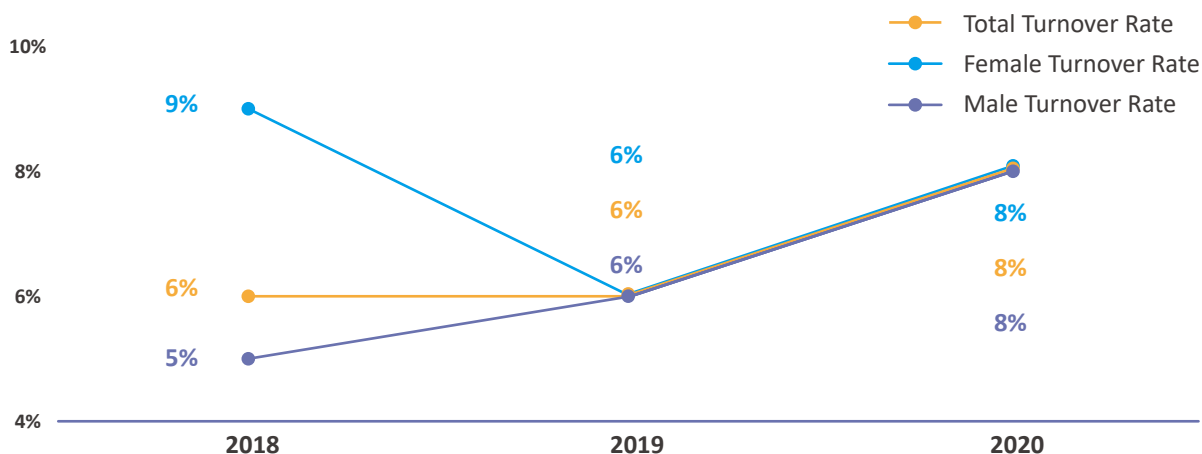


Employee Turnover Statistics

Year	Male		Female		Total Number of People	
	Number of People	Ratio	Number of People	Ratio	Number of People	Ratio of resignations
2018	95	5%	77	9%	172	6%
2019	135	6%	65	6%	200	6%
2020	166	8%	74	8%	240	8%

Note: Turnover rate = Number of employees of that gender resigned from the company that year (including retirements) divided by the total number of personnel of the same gender on December 31 of the same year

Turnover Rate



Retention Rate

Item	Number of People
Number of new hires in 2018 (A)	404
Number of new hires in 2019 (B)	378
Number of new hires in 2020 (C)	163
Total	963
Total number of new hires from 2018 who resigned from the company between 2018/1/1~2018/12/31 (D)	24
Total number of new hires from 2019 who resigned from the company between 2019/1/1~2019/12/31 (E)	46
Total number of new hires from 2020 who resigned from the company between 2020/1/1~2020/12/31 (F)	15
Total	103
Retention rate of new personnel hired between 2018 and 2020 at Winbond (Taiwan site) : 89%	
The number of new hires who resigned from the company in 2020 was 67% lower than the previous year	

Note:

- 1.Retention rate of new hire $(B+C)-(E+F)/(B+C)$
- 2.Retention rate of new hire within the last three years $= (A+B+C)-(D+E+F)/(A+B+C)$

Hiring Individuals with Disabilities

Winbond continues to work with government employment agencies to examine the resumes of people with disabilities and increase their acceptance rate. At the end of 2020 there were 12 employees with disabilities and these counted as 28 after weighting by the degree of disability. The main reason why Winbond did not meet the statutory quota was that applicants were not qualified for the available job openings. A difference allowance was therefore paid in accordance and the law and we will continue to provide job opportunities for people with disabilities.

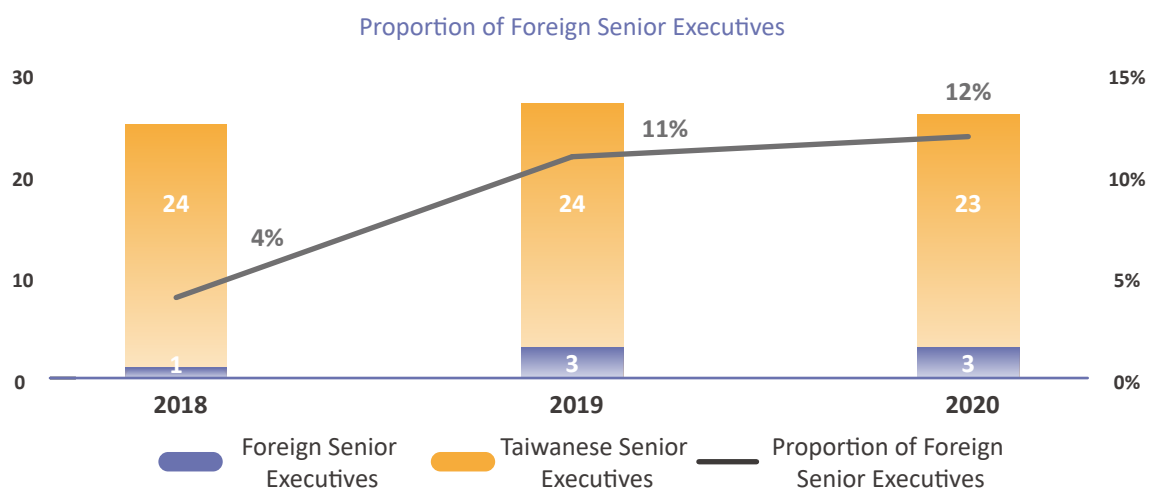
All employees with disabilities are involved in actual business operations. Winbond provides such employees with an introduction to their commuting routes and work flows tailored to their disability. Appropriate personnel, equipment and working environment are also provided once they start work to ensure that they can put their talents to good use.

Number of Employees with Disabilities

	Male		Female		Total Number of People	Weighted by degree of disability
	Number of People	Ratio	Number of People	Ratio		
Hires	10	83%	2	17%	12	28

Recruitment of Foreign Specialists

Winbond continues to recruit experts from around the world to ensure the diversity of our workforce and build a talent pool for specialized fields. Foreign nationals from more than 6 countries now work in Taiwan with those from Japan and Korea being the largest groups. To attract and retain foreign talents, Winbond not only provides competitive remuneration and comprehensive assistance program, but also offers equal opportunities for career development regardless their gender or origin. During the year 2018 to 2020, the number of foreign specialists (senior executives) has been growing in a steady rate.



Recruitment of Indigenous People

Winbond has a multicultural workforce. In 2020, 8 of our domestic employees were from indigenous backgrounds. Indigenous employees are offered leave during traditional festivals to protect their right of participation and to do our part in preserving the indigenous culture of Taiwan.

Number of Indigenous Employees and Applications for Tribal Festival Leave

Year	Number of Indigenous Employees	Applications for Tribal Festival Leave	
		Number of People	Percentage
2018	5	1	20%
2019	8	2	25%
2020	9	3	33%

Performance Management System

Winbond has established a comprehensive performance management system to ensure that the performance targets for managers and employees are aligned with company objectives. By understanding the work performance of employees and assisting them with the development of their personal skills, the competitiveness of the company as well as the overall performance of the organization and team can all be enhanced.

A new recruit evaluation mechanism was put into place by Winbond for new recruits on probation. Individual feedback from new recruits and their supervisors' evaluation are used to determine the suitability of new recruits as soon as possible. In terms of performance management, performance targets are set for employees at the start of the year and tracked through performance evaluations every half year. Employee performance is examined through the performance evaluation system in the middle and at the end of each year. One of the key evaluation items is their core competency (including Conduct business with integrity and ethical behavior, and Sustainable contribution). The outcome of the evaluation serves as the basis for rewards, promotions, and performance counseling. 100% of all direct and indirect personnel underwent the performance evaluation process in 2020.

Winbond will optimize the "Performance Management System" from 2021 onwards to incorporate "Objective Setting," "Performance Communication" and "Performance Evaluation" to better realize the benefits of performance management; the "Performance Communication" platform not only establishes a constructive and transparent channel for two-way communication between supervisors and employees but can also assist supervisors with employee instruction; "Performance Evaluation" is a composite evaluation that not only assesses employee ability to meet Objective but also incorporates competency evaluation and core competency evaluation to strengthen our core culture, as well as management competency and specialist competency to track employee ability and identify talent gaps. Greater emphasis will be placed on the development of employees' long-term and future abilities.

5.1.3 Compensation and Benefits

Winbond offers the most competitive compensation package and comprehensive benefits. These include generous base salaries, allowances, bonuses, and remuneration. Various cash bonuses are also disbursed in a timely manner to share the fruits of our business with employees. Employee performance, professional knowledge and skills are also taken into account when determining bonuses and employee remuneration.

Remuneration System

Employee remuneration is based on the principle of internal fairness and external competitiveness. It includes the fixed compensation (e.g. base salary, allowances) and variable compensation (e.g. Operational Performance bonuses and employee remuneration). Cash bonuses are also disbursed in a timely manner to share the fruits of our business with employees to attract, motivate and retain talent. Individual employee remuneration is based on the employee's role and professional skills. Bonuses and employee remuneration reward employees for individual performance and contribution.

In 2020, the entry-level monthly salary at Winbond was between 1.3 to 1.7 times higher than the statutory minimum wage. To reward and retain talent, we also conduct market salary research every year to review our compensation and make salary adjustments. For the sake of human rights, compensation, benefits, evaluations and promotions are handled in an objective manner and not influenced by employee gender, race, skin color, religious, political affiliation, sexual preference, age, marital status, pregnancy, disabilities, blood type, star sign, or their role as workers' representatives. The annual salary of the highest-paid worker in Taiwan is about 11.9 times higher than an employee on the median salary. The salary adjustment for the highest-paid employee in 2020 was approximately 40% higher than that of the median employee.

Ratio of Entry-Level Salary to Local Minimum Wage

	2019	2020
Direct personnel	1.4 times	1.3 times
Indirect personnel	1.7 times	1.7 times

Note: Direct personnel is based on the monthly salary of entry-level employees with no experience; indirect employees are based on the monthly salary of entry-level employees with a university education.

Ratio of Entry-level Salary between Male and Female Employees

2020	Entry-level salary		Minimum wage
Remuneration	Female	Male	
Ratio of entry-level salary	1.7	1.7	1

Note: There is no gender-based difference in basic salary

Salary Statistics of Full-time Employees in Non-Management Roles

Item	2019	2020	Annual Salary Difference
Number of Full-time Employees in Non-Management Roles	2,808 persons	2,826 persons	0.6%
Total Salary of Full-time Employees in Non-Management Roles	NT\$3,794,367,000	NT\$4,022,013,000	6.0%
"Average Salary" of Full-time Employees in Non-Management Roles	NT\$1,351,000	NT\$1,423,000	5.3%
"Median Salary" of Full-time Employees in Non-Management Roles	NT\$1,193,000	NT\$1,225,000	2.7%

Employee Salary Ratio

Type of Personnel	Female	Male
Senior Management		1
Middle Management	1	1.1
Non-Management	1	1.1

Note: Middle management are those at the section and department level; senior management are those at or above the division level

Generous Benefits

Winbond provides every employees with a full-spectrum of benefits ranging from work-related incentive bonuses, lifestyle-related subsidies, to employee leave and a variety of clubs. These increase employee motivation and help them find fulfillment through work-life balance.

The cost of employee benefits at Winbond includes base salary, holiday bonuses, special bonuses, and performance bonuses, pensions and other benefits. In 2020, the total cost of employee benefits was NT\$10,537,650,000 (including consolidated subsidiaries). This included NT\$10,045,951,000 in short-term employee benefits and NT\$491,699,000 in retirement benefits.

Note:

1. All the welfare and benefits would be issued based on the related regulations.
2. Short-term benefits refer to employee benefits that should be repaid within 12 months of the current period after the relevant services were provided by employees (with the exception of separation benefits).

Total Employee Care

Bonuses



Subsidies/Insurance



Leave



Lifestyle Support



Club



<ul style="list-style-type: none"> • Holiday Bonuses • Special Bonuses • Operational Performance Bonus • Employee Remuneration • Incentive Bonus • Winbond Star Bonus • Patent Bonus • Pension 	<ul style="list-style-type: none"> • Childbirth Allowance • Wedding Allowance • Childcare Allowance • Group Insurance • Retirement and Transfer Program 	<ul style="list-style-type: none"> • LOHAS Holiday • Unpaid Parental Leave 	<ul style="list-style-type: none"> • Foreign Employee Care • Health Exam • Healthcare • Health Promotion 	<ul style="list-style-type: none"> • Sports • Arts and Culture • LOHAS • Public Welfare
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• Bonuses

Winbond encourages innovation and learning among employees through a diverse range of incentive bonuses. A total of NT\$294,485,000 was disbursed in 2020.

Diverse Incentive Bonuses



Incentive Bonus Type	Explanation
Winbond Star Bonus	Public recognition for individuals and teams that lived up to the Winbond work culture (business integrity, team accountability, passion for learning, active innovation, sustained contribution) and made an important contribution to the company.
Special Bonuses	Employees are rewarded in a timely manner for outstanding performance or their performance in special projects.
Operational Performance Bonus	The fruits of business are shared with employees based on the company's performance in each quarter.
Employee Remuneration	The company's annual profits are shared with employees. The total amount is decided by the company's articles of incorporation. Employees are then rewarded on the basis of their contribution to the company and individual performance.
Incentive Bonus	A fund is offered for employee activities and gatherings. These help to strengthen employee relations, boost morale and maintain a positive atmosphere at work.
Patent Bonus	Boost patent output by encouraging employees to develop original inventions related to product design, manufacture, testing, application and marketing.

• Subsidies/Insurance

Childcare Allowance

Winbond supports the government push for increasing the national birth rate and implemented the "Childcare Allowance" policy in April 2011. Winbond employees receive a monthly allowance of NT\$5,000 for each newborn child until the child reaches the age of 4. The policy has been effective in boosting the birth rate among employees. The monthly allowance was also increased to NT\$6,000 in April 2021. As of 2020, the allowance has been applied for 1,417 children since 2011. Winbond not only supported employees' families by alleviating the financial burden for new parents, but also improved the reinstatement rate for employees that took parental leave and boosted their happiness at work.

Childcare Allowance Performance Statistics



Item	Explanation
Effect	Number of children applied for: As of 2020, 1,417 children have benefited from the allowance since 2011 Total subsidies in 2020: NT\$27.71 million

Childbirth and Wedding Allowance

Winbond not only offers subsidies to encourage employees to raise children. We also provide employees with subsidies when they get married or give birth. A total of 35 male and 15 female employees were granted the wedding allowance in 2020. 63 and 38 female employees received the childbirth allowance for a total allowance amount of NT\$159,000.

Group Insurance

In addition to enrolling every employee in Labor Insurance and National Health Insurance as required by law, Winbond also provides comprehensive group medical insurance including life insurance, accident insurance, hospital insurance and cancer insurance. Insurance coverage is also not limited to employees themselves but also extended to their spouse and offspring. Optional group insurance is available at the employee's own expense for themselves, their families and parents. Employees can therefore choose an appropriate level of coverage for their needs. The family group insurance option provides employees and their families with more comprehensive protection of their health, allowing employees to concentrate on their work. NT\$14,807,000 in premiums were paid between January and December 2020.

Retirement and Transfer Program

Winbond appropriates funds (old system) or makes contributions (new system) for each permanent employee's pension. For those on the old pension system (Labor Standards Act), 2% of their monthly salary is paid to the pension preparatory fund. The contribution rate is also reviewed annually and a lump-sum payment made to meet the pension obligations of employees eligible for retirement. The payment is deposited into the account under the name of Supervisory Committee of Winbond's Labor Retirement Reserve at the Bank of Taiwan by the end of March in the following year.

For the new pension system (Labor Pension Act), Winbond contributes 6% of each employee's monthly salary based on their pay grade to their personal pension account. Employees may also voluntarily contribute up to 6% of their monthly salary based on their pay grade. Total appropriations (old system) and contributions (new system) for pensions amounted to NT\$199,925,000 in 2020.

Winbond notifies all employees of any major operational changes in accordance with the local regulatory requirements of each operating location. Assistance is provided if necessary with transferring to another internal unit or for applying to the government for related subsidies.

• Leave

LOHAS Holiday

Winbond offers LOHAS holidays that exceed the requirements of the Labor Standards Acts to promote work-life balance among employees. Employees are entitled to 7 days of LOHAS holiday in their first year with the company (pro rata); we offer a flexible leave system that allows leave to be taken in hourly increments for employees that need it. Winbond even encourages employees to take longer vacations each year. Employees can spend more time relaxing with their family and friends, balance their work and life, and live a more interesting life. This option was exercised 2,353 times in 2020.

Unpaid Parental Leave

Winbond offers unpaid parental leave as an employee benefit to help employees balance their careers with their families and to encourage employees to have children. A flexible leave and attendance management system provides employees with more flexibility and peace of mind for taking care of their children. A total of 36 Winbond employees applied for unpaid leave in 2020. Reinstatement rate after unpaid parental leave in 2020 was 88%.

Unpaid Parental Leave Statistics



	Male	Female
A: Number of employees on unpaid parental leave in 2020	8	28
B: Number of employees that should be reinstated in 2020	4	9
C: Number of employees actually reinstated in 2020	3	7
D: Number of employees reinstated in 2019	0	8
E: 2019 reinstatements - Number of employees still with the company after one year ^{Note}	0	7
Reinstatement rate (%) = C/B	75%	78%
Retention rate (%) = E/D	0	88%

Note: Only employees that remained with the company for one full year starting from the date of reinstatement, up to 2020/12/31

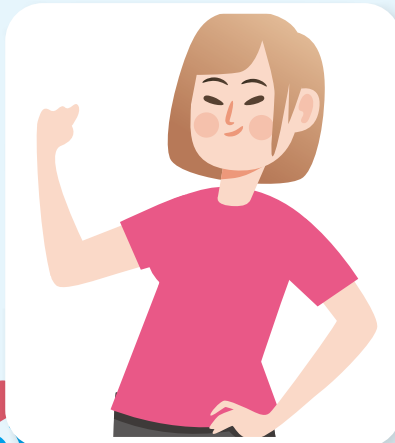
• Lifestyle Support

Foreign Employee Care

Winbond proactively recruits global talents to refine our advanced production processes and improve the quality of R&D expertise. More often than not, foreign employees encounter issues regarding cultural, lifestyle and language when they first arrive in Taiwan. Some employees with family relocating to Taiwan even require additional assistance in helping their family settle in. Our foreign employee supportive team are dedicated to making their life easier by providing introduction to Taiwan's culture at work, company systems, applying for work permits, arranging for their children's school enrollments, and looking for proper rental for them to make Taiwan their second home. Regular follow-ups are used to check on their requirements at work and at home, so they can settle into their new life in Taiwan with least trouble. At the end of 2020, we were happy to celebrate the 5th anniversary with 58% foreign employees for their long-term partnership with Winbond.

"My Winbond colleagues are very friendly. Senior employees are also very open-minded and willing to listen to everyone's opinions input. This has made my job easier. The Company also provides challenging assignments that keep me motivated, and many opportunities for me to improve my skills. I am amazed that the Company has been able to prioritize employee health and safety in the face of an unpredictable epidemic. Flexible strategies were quickly established so that I could take care of both my work and my family. By sharing information with Headquarters personnel through effective communication, we can complete our joint tasks together and feel a sense of pride in our achievements. We respect and help each other. We work together to realize our common goal."

Naomi Morimoto, Winbond Japan



Health Exam

Winbond employees are like family. Health exams that exceed statutory requirements and special exams are organized every year. We also regularly organize advanced abdominal ultrasounds, PAP smears and breast scans for women, eye examinations, physical fitness tests and other exams, as well as hygiene education and consultation by specialist physicians every year. Preventive medicine, such as early screening and prevention, is practiced for holistic health management and promotion.

Employees assigned to special hazardous operations must undergo regular special health exams for health promotion and in accordance with the law. In 2020, a total of 124 workers in special operations underwent health exams. All were classified as category 2 or lower for the purpose of health management and promotion based on the results. Their health are also undergoes regular monitoring.



■ Annual Health Exam



■ Abdominal Ultrasound Exam

Healthcare

Item	Content
Maternal Health Protection and Management	<p>The following measures are provided by Winbond in addition to implementing maternal health promotion measures in accordance with the law:</p> <ol style="list-style-type: none"> 1. One-to-one hygiene education and consulting along with pregnancy gifts and gift cards that inform mothers about exclusive Winbond benefits and the application method. 2. Break rooms and dedicated parking spaces are provided for pregnant women to alleviate the discomforts of pregnancy. 3. Provision of warm and comfortable breast feeding rooms.
Preventing Over-work	<p>The health management unit manages the risks for each employee. Regular follow-up is practiced for people in the high-risk group for cardiovascular disease regularly. One-to-one consultations are also organized with specialists. Professional nurses also provide timely listening services. Referrals to specialist consultants, psychiatrists, or related resources can be provided if necessary.</p>
Metabolic Syndrome Health Management	<p>Services include convenient follow-up examinations, free consultations with specialist physicians, regular follow-ups by nurses, and even tailored weight-loss classes. Generous incentives are provided by the company as well.</p>
Liver Function Anomaly Health Management	<p>Hepatitis and liver cancer are among the main health risks experienced by workers in Taiwan. The nurses regularly check on the condition of employees with elevated liver function test results. Specialists are also available for health consultations.</p>



Breast feeding room



Break room for pregnant women



Flu vaccination



Health exam - Optometry clinic



Free online health consultation with specialists

Health Promotion

Winbond believes that we should not only provide a safe and healthy working environment, we must also cultivate a safe and healthy environment that makes employees feel happy in order to generate more energy and growth.

Winbond provides convenient sporting venues where employees can physically and mentally unwind outside of work; the hardware facilities include a recreation center equipped with a variety of sports and recreational venues such as a gym, basketball courts, badminton courts, volleyball courts, table tennis room, billiards room, children's library, and a multimedia area with books, newspapers and magazines.

Winbond hopes that employees can get in the habit of exercising regularly. We not only offer free classes on stretching, but also a variety of sports clubs. In 2018, we launched the Million Calorie Campaign to promote sports and fitness. Peer support is leveraged to get everyone into the habit of exercising for health and figure. More than 10 million calories have been accumulated to date and the campaign is still active in 2020.



Improving the Physical and Mental Well-being of Winbond Employees through Stretching Classes



Million Calorie Campaign for Maintaining Good Health and Figure

Health Management System

A health management system that provides more timely, continuous and complete information was procured by Winbond to improve employee health management. Employees can now log in and upload their latest blood pressure measurements to the back-end health management database. Winbond employees can use the personal health management function of the system to obtain a picture of their own health such as: body weight, blood sugar, healthy hydration, sporting time and calorie counts. The health management unit can also configure the health management system back-end. Reminders can then be sent to the health management unit if abnormal physiological readings are picked up in certain groups. The information facilitates future follow-up.



In 2020, the system was used 2,848 times to record personal health.

In 2020, a total of 1,571 people expressed their support through this system






The health management system platform also allows employees to register for various health promoting activities including: LOHAS seminar, LOHAS charity events, and weight-loss classes. Health promotion ensures that employees are educated on health, adopt a proactive attitude to personal health, develop personal health promoting activities, and ultimately develop a sound lifestyle.

• Types of Clubs

Diverse clubs have been established by Winbond to encourage employees to engage in healthy club and public welfare activities. “Regulations for Management of Employee Welfare Committee Club Subsidies” have been established in the hope that club activities will boost employee interactions, physical and mental well-being, and productivity. There are currently 47 registered clubs at the end of 2020. The four types of clubs are sports, LOHAS, art & culture, and public welfare. 30 clubs were suspended and 17 clubs continued to operate as normal in 2020 due to COVID-19.

Diverse Club Activities



Club Type	Description
Sports Clubs	<p>The 26 sports clubs for ball sports, cycling, running and other sports account for 55% of all clubs. Many senior executives play an active role in the club activities to encourage other colleagues in their unit to exercise; the badminton and softball clubs at CTSP in particular have been frequent winners of the “CTSP Cup - Ball Sports Competition.”</p>  <p>■ Zhubei badminton club activity</p>  <p>■ Zhubei table tennis club activity</p>  <p>■ Billiard club activity</p>
	<p>There are 5 art and culture clubs including the Biodiversity Club, Anime and Manga Club, and Photography Club, which make up 11% of all clubs. These clubs make effective use of company resources to host educational seminars, annual photography exhibitions, and film appreciation sessions. These types of activities enjoy the highest level of family participation.</p>
	<p>The 15 clubs make up 32% of all clubs and boast the most diversity. They include the Health Counseling Club, Camping Club, and Board Games Clubs. Their varied activities offer employees a way to expand their horizons and cultivate new hobbies.</p>
	<p>There is 1 club which accounts for 2% of all clubs. Named the Silence Club, the mission of the club is to engage quietly in public welfare activities such as helping the disadvantaged, social services, and environmental sustainability as part of CSR fulfillment. Founded in 2010, club activities include neighborhood cleanup, dream fulfillment, children’s home cleanup/repairs, and children’s breakfast program.</p>

5.2 Talent development

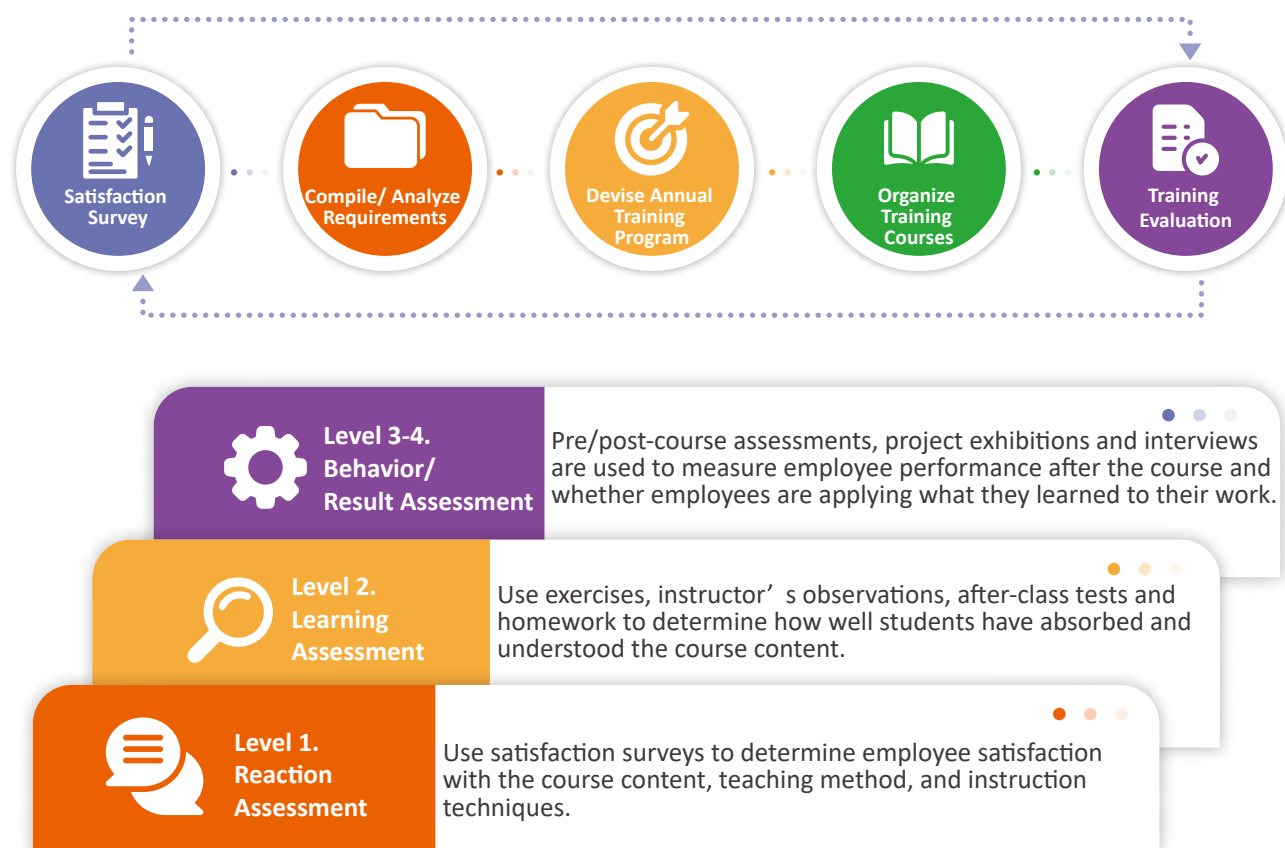
Talent development is a cornerstone of progress at Winbond. Our company vision, business philosophy and cultural values are supplemented by training requirement surveys and training evaluation to draw up personalized learning and development courses in four areas: core competency, management skills, specialist skills, and data science. A variety of courses are organized to let employees enhance their personal competitiveness, discover their potential, unleash their personal ability, and demonstrate their originality. In addition to basic training courses for all employees, Winbond offers diverse online courses through our Learning management system so that employees can study on their own initiative.

5.2.1 Personalized Development System

Winbond conducts multiple demand analyses that are combined with organizational strategy, company vision, business philosophy and corporate culture to devise an annual training plan and hold the necessary courses.

To track and verify the effectiveness of training, the 4-stage education and training evaluation model proposed by the Donald L. Kirkpatrick, an American academic, is used by Winbond for the design, execution and outcomes of courses based on their course attributes and to determine whether they meet the course objectives.

The outcomes of the 4-level evaluation are used to devise the annual training program, allocate resources, and organize more effective training courses. Multi-level inspection methods such as satisfaction surveys, course exams and work feedback are used to track and verify training outcomes. 100% of the courses developed in responses to company-wide training and development requirements were conducted in 2020. Training and development activities on work culture, specialization, common skills, and even management and leadership all take the company's development and employee careers into account during their design. In addition to classroom lectures, courses may also include activities, discussions, and team competitions that make the learning more relevant and practical. In addition to company-wide training courses for all employees, diverse online courses are offered by Winbond through our cloud learning platform, so that employees can study on their own initiative. The average satisfaction rating for physical courses was 4.4 (out of 5) and for digital courses was 4.3 (out of 5) in 2020.



5.2.2 Employee Learning Outcomes

Winbond believes that continued learning is fundamental to innovation. In addition to adding many new online courses due to COVID-19 in 2020, we also continued to host existing courses. Employees were offered a variety of training resources and activities to improve their professional abilities. For direct employees, training emphasized continued development through On job training, machine operator training, and promotion of corporate culture or policies. For indirect employees, we provided employees with specialized training based on their competency and grade. However, most female employees are in administrative support units and the specialist knowledge they need is generally learned through on job training. As a result, male personnel's average training hours were slightly higher than those of female personnel.

Employee Training Views from Specialist Courses

Training Type	Employee Type	Participants		
		Male	Female	Total
Core Competency	Direct Employee	0	12	3,691
	Indirect Employee	2,179	1,500	
Management Skills	Direct Employee	0	65	13,330
	Indirect Employee	9,272	3,993	
Specialist Skills	Direct Employee	0	3,855	66,882
	Indirect Employee	51,210	11,817	
Data Science	Direct Employee	0	29	21,965
	Indirect Employee	17,229	4,707	
Other (External Training)	Direct Employee	0	0	162
	Indirect Employee	134	28	
Total		80,024	26,006	106,030

Note: Direct employees were engineering assistants (in 2020 all production line workers were female) while indirect employees were full-time personnel

Total Training Hours Sorted by Gender and Employee Type

Employee Type/Gender	Male	Female	Subtotal
Direct Employee	0.00	2,847.39	2,847.39
Indirect Employee	95,613.90	24,889.84	120,503.74
Subtotal	95,613.90	27,737.23	123,351.13

Number of Employees Sorted by Gender and Employee Type

Employee Type/Gender	Male	Female	Subtotal
Direct Employee	0.00	380.00	380.00
Indirect Employee	2003.00	538.00	2541.00
Subtotal	2003.00	918.00	2921.00

Note: The average employee number in a 2020 is the sum of the number at the beginning and the end of 2020 divided by 2 (not including global branches, affiliated enterprises, expatriates, and contractors)

Average Employee Training Hours Sorted by Gender and Employee Type



Employee Type / Gender	Male	Female	Subtotal
Direct Employee	0.00	7.49	7.49
Indirect Employee	47.74	46.26	47.42
Subtotal	47.74	30.21	42.23

New Hire Training (New employee orientation)

Winbond's new employee orientation provides the help to Winbond life and introduces corporate culture and company policies with online courses to help new employees settle in and become a part of Winbond quickly. The average satisfaction rating for all training courses in 2020 was 4.3 (out of 5) and the completion rate was 100%.

A "Winbond Camp" training program lasting 2 weeks per batch has begun from the second half of 2016 and targeted at new employees with less than 3 years of professional experience. The "Winbond Camp" effectively enhances the organizational identification and willingness of retention for newcomers by instilling Winbond Cultural DNA, which help develop them as ambassadors of Winbond culture. In 2020, the average satisfaction of "Winbond Camp" was 4.56 (out of 5) among 24 participants. Those who completed the training program still stayed at the end of December 2020, demonstrating the effectiveness of the training with 100% retention rate.

A diversified talent survey was conducted in early 2021 among different employees at random to realize talent requirements. The survey found that employees present strong need for training resources, and much more female executives will encourage female employees to seek further career development. The introduction of the SuccessFactor training platform by Winbond in 2019 greatly boosted the e-learning capabilities of employees. Due to the severity of COVID-19 in 2020, Winbond enhanced the content of the training platform, which offers more than 2,000 specialist, management and data conversion courses until now. Employees around the world can now engage in learning at any time and places, demonstrating considerable enthusiasm for learning. The course content will be further enriched in 2021 by integrating with offline physical courses, providing more diversified learning content to improve employee skills.

Management Training

Winbond designed dedicated courses for different levels of management. A variety of learning resources is also provided for improving the leadership skills of managers. First-time managers are given help with understanding the knowledge, skills and attitudes expected of their new role. A refresher course was also organized in 2020 to observe how junior managers applied what they learnt and to improve their advanced management skills. This included reviewing the techniques of interviewing and performance management, discussing problems they encountered, and reinforcing usual performance management and counseling methods through simulated rehearsals of daily scenarios. For middle and senior management, quarterly internal sharing seminars are conducted for the sharing and passing on of business wisdom. Outside industry, government and academic experts are also invited to conduct seminars on the latest trends in politics, economics, technology and leadership management to cultivate and expand the horizons of future managers. The value of the seminars are also maximized by turning them into digital teaching materials for the rest of the company to learn from in accordance with our corporate culture of "enthusiasm for learning."

Winbond continued to promote online courses in the face of COVID-19 in 2020. A leadership section was set up to provide 136 different courses on leadership and management related courses and articles. The managers can learn and build skills anytime and anywhere.

Core Management Competency Course



Management personnel	Professional course
Junior Management	Management courses on leadership, communication, interview techniques, implementation skills, coaching and counseling
Middle Management	Advanced management competency training for managers
Senior Management	Business management philosophy and methods

5.3 Labor Relationship

Open Labor-Management Communications

Winbond offers a variety of open and transparent channel for effective communication and interaction with employees at any time, including: suggestion box, 75234 hotline (complaints), complaint box, and sexual harassment complaints committee. There are also various regular functional communication meetings including the labor-management meeting, management seminars, Employee Welfare Committee, Environmental Safety Committee, production management meetings, and quality re-education meetings.

Winbond employees can express their opinions or offer suggestions in an anonymous or non-anonymous manner through various channel. Winbond responds to all feedback and the content of all responses is published on the internal homepage. Focus groups and individual interviews are also used by Winbond to collect employee opinions on a regular or ad hoc basis to serve as a basis for improvements to management policy and service quality. At the same time, courses are arranged for new recruits to ensure that employees are familiar with the relevant channel. A total of 26 cases were received through the suggestion boxes (physical and online) and dealt with in 2020. Winbond's 75234 employee complaint and Care complaint hotlines also received 2 cases that are now closed. There were no cases of sexual harassment. Labor-management meetings were convened 8 times with no serious resolutions or related votes made. 4 management conferences were attended by 1,703 people for a total attendance of 76%.

Diverse Channel for Employee Feedback

Suggestion Box

- Suggestion boxes are placed near the employee cafeteria and production line break rooms. All employees can use them to make suggestions about work or life issues.

Grievance Hotline

- Winbond has set up a 75234 employee feedback hotline. An "Internal Complaints Form" can also be submitted in writing or by e-mail to the "Employee Suggestion and Feedback Box" set up by the HR Department or implementing unit. All feedback is handled by dedicated personnel. To protect employees and jobseekers from sexual harassment in the workplace, Winbond drafted the "Rules for Prevention of Sexual Harassment in the Workplace," set up a "Sexual Harassment Prevention Information Website," and established a "Sexual Harassment Complaints Committee" to handle sexual harassment cases under the Gender Equality in Employment Act.

Factory Communication and Discussion Meetings

- Factory communication and discussion meetings are held twice a year by factory supervisors. The meetings are used for two-way communication with production line workers on management and production issues. Re-education courses are also conducted on quality and RBA CoC.

Labor-Management Meeting

- Labor-management meetings are held regularly. Employee suggestions are compiled by labor representatives elected by all employees, and a meeting is convened every quarter to discuss and resolve topics such as labor-management coordination, promotion of labor-management cooperation, working conditions and benefits, and productivity improvements.

Management Conference :

- The purpose of management conferences is to facilitate direct two-way interaction between all managers and the Chairman and President. The focus of communications is on company operations and management systems.

5.4 Occupational Safety and Health

Winbond Occupational Health and Safety Goals

Zero accidents

Zero work injuries

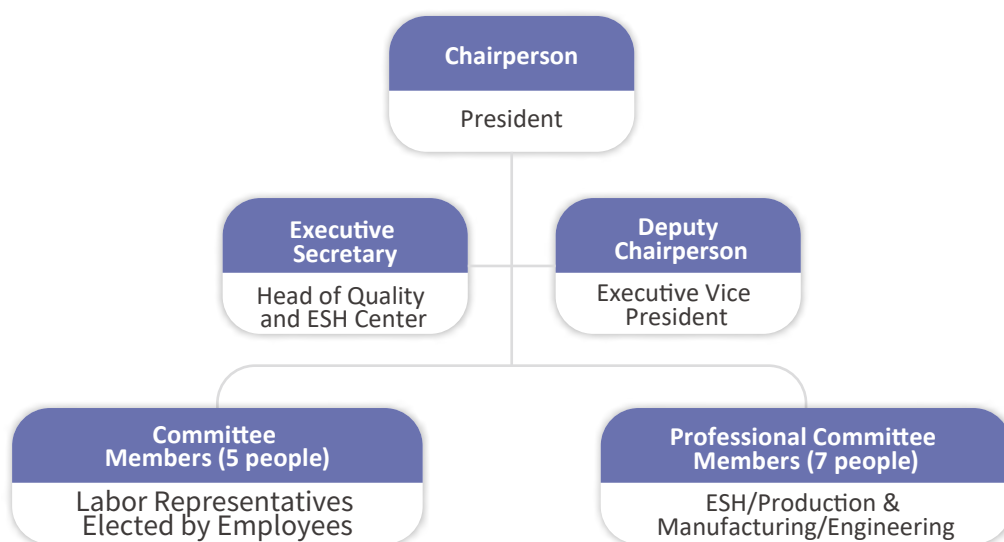
Reduction of environmental impact

5.4.1 Occupational Safety and Health Management System

Winbond strives to provide employees with a healthy and safe work environment that complies with local OHS regulations and the latest international ESH standards. We are also committed to establishing a comprehensive Occupational health and safety management system based on respect and care, and mechanisms for worker consultation and engagement. Continuous improvement will be used to promote personnel safety, eliminate hazards and reduce environmental, safety, health and asset risks.

ESH and Risk Management Committee

The Winbond ESH and Risk Management Committee is regularly convened to discuss ESH matters. The 15 members include management representatives, employee nominated representatives from each unit, labor representatives elected by employees, as well as ESH and health management personnel. There are 5 labor representatives elected by employees and they account for one-third of the committee to provide employees with a channel for face-to-face communication on ESH issues; each department also appoints an ESH secretary to provide assistance, advice, and promotion of ESH affairs so that all employees can stay informed.



Occupational Health and Safety Management System

Winbond has already obtained ISO 45001 Occupational Health and Safety Management System and “Taiwan Occupational Health and Safety Management System (TOSHMS) certification. Internal audits are conducted every 6 months and external audits are conducted by an international certification company every year to ensure that the system is operating normally. Our ISO 45001 and TOSHMS conversion certifications have already been completed in 2019 to maintain the validity of the OHS management system. Winbond adheres strictly to government safety and health legislation. We also enforce health and management tasks such as safety and health risk assessment, defining and executing safety and health work rules, and hosting safety and health training and exercises.

Winbond has won many government awards on safety and health, including the “Friendly Workplace Certification” issued 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 Substances” and “Excellence unit of safety of hazardous materials use/procurement management and high-risk operations management” issued by the Central Taiwan Science Park Bureau.

In terms of hardware security control, hardware vendors are required to provide an independently verified Semiconductor Equipment and Material International (SEMI S2) assessment report to comply with the requirements for intrinsic safety. A variety of safety controls are also carried out between machines being delivered to the site and actual installation. To ensure safety during machine installation, the Equipment Sign-Off program tests whether the

safety features are working normally, whether all of the machine's internal firefighting, safety, environmental protection facilities and labels are complete. The machine can only be put into operation after testing.



Number of Employees Covered by the Occupational Health and Safety Management System

2020	Number of People Covered by Management System		Total Organization Personnel		Ratio	
	Employees	Non-employees	Employees	Non-employees	Employees	Non-employees
Not audited	0	0	773	40	0	0
Passed internal audit	2,135	400	2,135	400	1	1
Audited or verified by external body	2,135	400	2,135	400	1	1

Work-related Injuries Statistics for Employees

Year	Total Hours of Work	Occupational Injury			Ratio of deaths due to work-related injuries	Ratio of severe work-related injuries	Ratio of work-related injuries on record
		Number of employees with severe work-related injuries	Number of Fatalities	Number of employees with work-related injuries on record			
2018	5,296,064	0	0	2	0	0	0.38
2019	5,773,048	1	0	2	0	0.17	0.35
2020	5,816,552	0	0	3	0	0	0.52

Note: There were 3 cases of work-related injuries in 2020, which were 2 fall-related injuries and 1 crush injury. Accident investigations were conducted resulting in the installation of warning signs, reinforcement of employee discipline, and additional education on taking proper occupational safety measures.

Work-related Injuries Statistics for Non-Employees

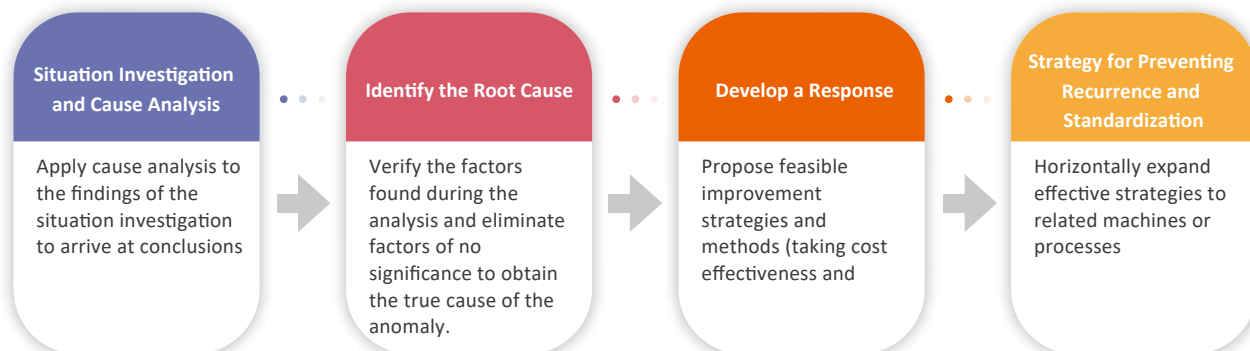
Year	Total Hours of Work	Occupational Injury			Ratio of deaths due to work-related injuries	Ratio of severe work-related injuries	Ratio of work-related injuries on record
		Number of employees with severe work-related injuries	Number of Fatalities	Number of employees with work-related injuries			
2018	96,720	0	0	0	0	0	0
2019	91,760	0	0	0	0	0	0
2020	110,000	0	0	0	0	0	0

Accident Investigation and Injury Prevention

A complete standard operating procedure (SOP) on accident investigation has been established by Winbond to reduce accident damage and risk. The SOP is applicable to all Winbond employees, contractors, and visitors. In the event of an accident, different levels of investigation are carried out based on the severity and type of the accident. The level of investigation also determines the composition of the investigation team.

The operation of the ESH management system undergoes routine internal audit, review and update every 6 months. An external audit is also conducted every year so that Winbond can continue to ensure a safe working environment for employees, control potential risk factors and make continuous improvements.

Standard Accident Investigation Process




Occupational Health and Safety Management Training




Occupational Health and Safety training is conducted by Winbond every year to reduce the incidence of occupational injuries and to strengthen employee understanding of safety and health regulations. In 2022, Winbond provided 10,477 training hours to 8,373 non-managerial participants; and 2,120 training hours to 1,735 managerial level participants. A total approach to education and training at Winbond has cultivated an organizational culture that takes Occupational Safety and Health seriously. This in turn provides employees with a healthy and safety workplace environment.

Occupational Health and Safety Training Performance

Gender	Male		Female		Total	
Employees	Participants	Person-Hours of Training	Participants	Person-Hours of Training	Participants	Person-Hours of Training
Management	1,553	1,900	182	220	1,735	2,120
Non-Management	5,842	7,303	2,531	3,174	8,373	10,477

Occupational Nurse Training Performance

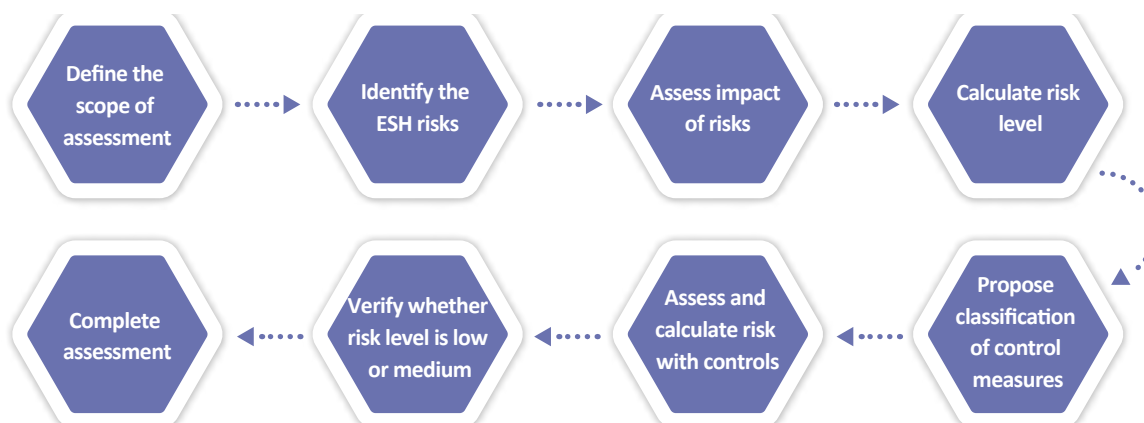
Item	Content	2020 Training Frequency
 <p>CPR and AED Training</p>	First-aid training is regularly organized for the medical section in the emergency response team to ensure immediate first-aid.	Training completed by 164 people.

Item	Content	2020 Training Frequency
 <p>Public Education on Unlawful Infringement in the Workplace</p>	Management regulations and training were put into place to help all employees understand the preventive measures and introduce them to the company's internal complaints and reporting mechanisms. Public education measures are provided for all employees every year as well.	A total of 46 people have completed the management-level training course.
 <p>Employee Problem Discovery and Response and Sensitivity Training for Managers</p>	Managers were provided with training on recognition techniques to help them detect common employee problems. They can then help employees by providing the resources for trouble-shooting or referrals right away. Training courses related to empathy skills for discovering and responding to employee problems and management sensitivity training.	Management-level training was completed by 105 people.
 <p>Crisis Response - Management Training</p>	Managers may need to assist in emergencies or at-risk employees (special cases, mental illness, emotional breakdown, suicide risk, employees with pending complaint) in the workplace. An advanced course on crisis response was therefore organized.	Management-level training was completed by 86 people.

5.4.2 Environmental Safety and Health Risk Assessment

The “ESH Risk Assessment Operating Procedure” was defined by Winbond to ensure the personal safety of employees in the workplace and to minimize risks. The procedure involves the identification and analysis of ESH risks to the environment, personnel and hygiene from activities, products or services. Risk level is calculated by Winbond based on past operational history and the current situation. The potential situation, effect or impact (e.g. personnel injury, environmental impact, production disruption, or financial loss) and probability are assessed. Improvement measures are then drawn up for risk reduction in the following order: elimination, replacement, engineering control, signage/warning/management control, and personal protective equipment.

An internal audit is conducted by Winbond at least once a year to ensure the effective implementation of the “ESH Risk Assessment Operating Procedure.” Any major changes to production processes, facilities and operational content as well as accidents all trigger a new evaluation.



5.4.3 Emergency Response Measures

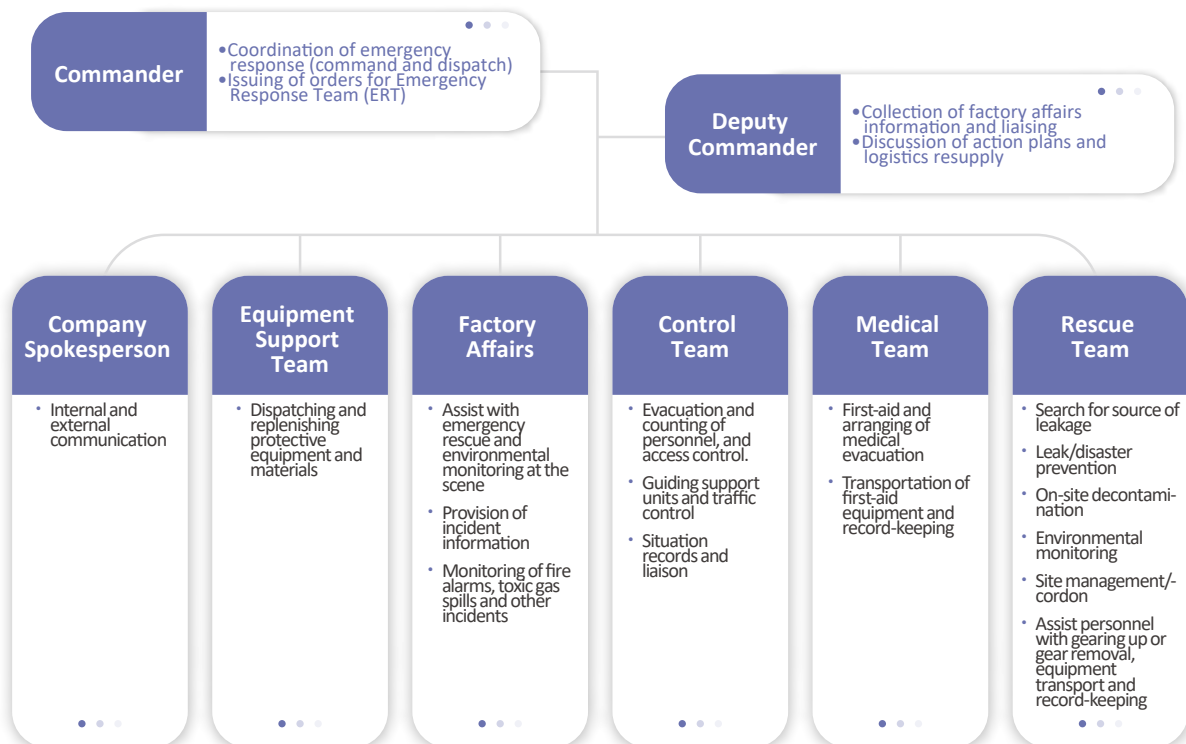
Winbond's ESH and Risk Management Division has defined emergency response procedures for internal anomalies or external natural disasters such as fire alert/alarm, gas leak alarm, chemical spills, earthquakes, and odors. The procedures are used by internal units as the basis for developing corresponding response processes, response teams, drills and training.

Occupational Health and Safety Risk Identification and Response Strategies

Risk Type	Risk Identification	Strategy/Action Adopted
Business Risk	Fire	<ul style="list-style-type: none"> The design of the fire protection system and its installation is based on international standards (NFPA, FM) and domestic fire safety regulations. It includes the fire detection and alarm system, various automatic fire suppression systems, and fire compartmentalization. Installation of emergency generators and uninterruptible power systems Plant facilities and protection are designed and constructed to international industrial standards. Machinery and equipment must also conform to international safety standards (SEMI-S2, FM4910). 24-hour monitoring system for emissions/wastewater treatment facilities.
	Power Outage	
	Chemical Spill	
	Abnormal Emissions/ Wastewater Emissions	
Natural Disaster Risk	Earthquake	<ul style="list-style-type: none"> Plant buildings are designed to withstand earthquakes up to 7.0. Machinery and equipment incorporate shock-resistant design. Installation of reserve water tanks.
	Water Shortage	
Regulatory Risk	Occupational safety laws, fire safety laws, environmental protection laws	<ul style="list-style-type: none"> Regularly carry out compliance inspections. Identify and respond to the impact of new regulations or amendments. Make regular inspections and reports as required by law.

Emergency Response Organization and Duties

An Emergency Response Team (ERT) is stationed in each area throughout the sites. The ERT is commanded by a division or higher-level manager. ERT team members are required to undergo regular training and drills. In the event of an emergency, the mission of the ERT is to minimize casualties, financial losses and disruption to production.



Winbond has defined response processes and plans for potential emergencies and incidents in each area. Regular emergency response drills are held on disaster containment to improve the emergency response capabilities throughout the site.

A total of 93 emergency drills were conducted by Winbond for fire, chemicals, gas leaks, water leaks, electrocution and other events in 2020.



2020 Emergency Response Drills

Emergency Drill Statistics

Item	Total Sessions
Fire	39
Chemical Spill	16
Gas Leak	9
Water Leak and Shock Hazard	6
Other (Emergency Evacuation/Loss of Consciousness/Power Outage)	23
Total	93

5.5 Community and Social Participation

Winbond has been involved in public welfare for many years. “Caring for the socially underprivileged, focusing on environmental sustainability, and fulfilling social responsibilities” define the core CSR values of Winbond. To fulfill the ideals of caring for society, serving the public, and environmental friendliness, Winbond mobilizes internal company resources along with the enthusiasm and compassion of employees for areas such as “caring for children and youths,” “helping the underprivileged,” “promotion of public welfare,” “academic sponsorship,” and “art and cultural activities.” The core capabilities of the industry are channeled into substantive social action. Employee participation is also encouraged to build cohesion, communicate the importance of giving back to society, and set the benchmark for CSR.

Community and Social Participation and Distribution of Resources in 2020



Form	Amount Invested (Unit : NTD)	Ratio of Total Investment
Caring for children and youths	1,404,600	9.9%
Helping the underprivileged	3,047,925	21.5%
Promotion of public welfare	7,500,000	53.0%
Academic sponsorship	2,210,000	15.6%
Total	14,162,525	100%



Volunteer Participation for 2016–2020

Participants: 1,098

Time Volunteered: 1,606 hours

5.5.1 Caring for Children and Youths

Breakfast Program for School Children in Remote Areas

Breakfast is the most important meal of the day for school children as it provides the energy they need to attend school and focus in class. To improve the breakfast situation for children in remote, rural regions, Winbond executives launched a fund-raising drive in 2011 to sponsor breakfast programs for remote elementary schools in Hsinchu and Taichung in partnership with non-profit organizations. The breakfasts and support for remote schools are aimed at sustaining the basic needs and health of school children so they can be physically and mentally equipped to explore

the world around them. Winbond provided NT\$600,000 in breakfast funding in 2020 to continue supporting healthy learning for school children. Staff was also dispatched by Winbond to examine the benefits of the support program to see if the sponsorship should be continued. The survey results for 2020 found that 90% of school children were satisfied with the breakfast program.



Volunteer Tutoring Services

The Winbond “Silence Club” began visiting local children’s homes to provide clean-up and repairs in 2010. Volunteers were also recruited to provide long-term tutoring services to provide the Taichung Christian Herald Children’s Home and Nantou Ren-Ai Home with long-term tutoring services from September 2015 onwards. These included teaching academically weak children words and reading, as well as strengthening the basics for academically sound children and cultivating their interest in learning. Group recreational activities also expanded children’s horizons through contact with volunteer teachers from different industry backgrounds. Social welfare organizations were directed by the government to suspend tutoring activities for epidemic prevention in the first half of 2020. A total of 24 hours of tutoring service was provided over 24 volunteer sessions when the epidemic situation eased.

Film Appreciation for Children’s Homes

Winbond has been inviting children from children’s homes to the cinema over the winter and summer breaks since 2010. The sessions help introduce children at children’s homes or from single-parent families to the value of mixed arts and cultivate their artistic appreciation ability. The fun atmosphere also makes them feel like a part of society. A total of 335 children from children’s homes were treated to the movies in 2020.

5.5.2 Helping the Underprivileged

Volunteering at Children’s Homes

Since the Silence Club was founded at Winbond in 2010, the 50 volunteers “volunteering at children’s homes” ranging from senior executives to entry-level employees as well as their friends and families have pitched in, as well to help children’s homes with cleaning up their environment, soliciting/donating receipts, and funding the replacement of damaged facilities. These efforts help children’s homes with their staffing shortages and alleviate some of their facility costs. Volunteering for clean-ups at children’s homes was suspended in 2020 due to COVID-19. Over 115 m2 of damaged flooring was also replaced at children’s homes to provide the children with a safe environment.



Skills Training Program for Children's Homes

Winbond began supporting the skills program at the Taichung Christian Herald Children's Home in 2018. The program teaches children life skills such as carpentry and drumming. A total of 447 managers and employees participated in the program during 2020. Total investment including teacher and equipment costs amounted to \$758,500. Learning about carpentry and drumming significantly improved the children's concentration and patience. Their self-identity and self-confidence were strengthened as well.

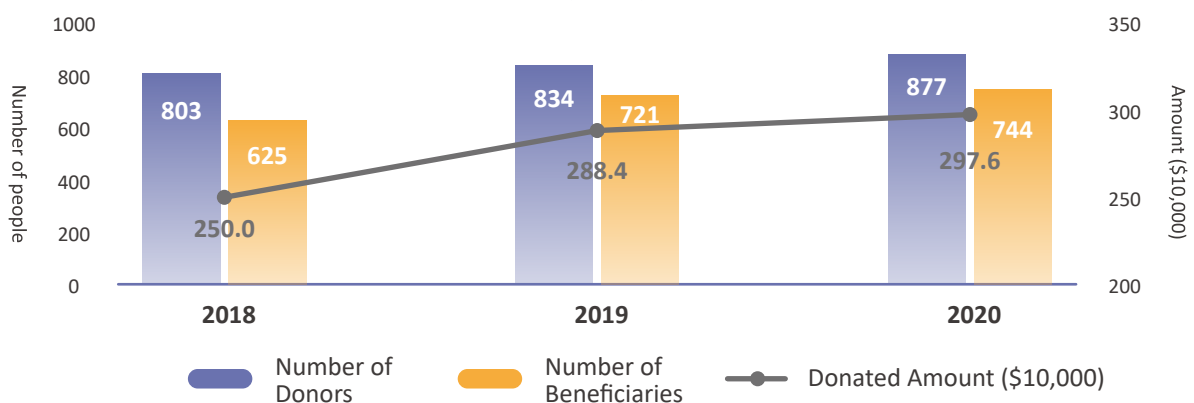
Fundraising for Tuition Assistance

Statistics from the Taiwan Fund for Children and Families (TFCF) indicated that around 14,000 elementary students in Taiwan apply for tuition assistance each year. There is a gap of around 700 places in regular sponsorship funding. These amount to \$2,000 per place each semester, or \$2.8 million per year in total. To supplement education resources for children from impoverished families so they can attend school on a regular basis, Winbond has collaborated with TFCF since 2017 by inviting employees to raise funds for tuition assistance. An enthusiastic response from everyone including the company president and entry-level employees raised \$2,976,000 from 877 donors in 2020. The amount is sufficient to support 744 elementary school students for a whole year!

Fundraising for Uplift Tuition Assistance

Item	2018	2019	2020
Number of Donors	803	834	877
Donations (\$10,000)	2,500,000	2,884,000	2,976,000
Number of Beneficiaries	625	721	744

Outcome of Fundraising for Uplift Tuition Assistance



Emergency Relief for Employees

Winbond treats every employee with empathy as every employee represents a family. Employees are the pillars of their families, and each family contributes to social stability. In the spirit of mutual support, brotherly love and empathy, if an employee or their family member experiences an emergency such as injury, disability, death or accident that impacts on their livelihood, emergency relief and loans are available from Winbond. These help employees tide over their financial difficulties and provide temporary support for their lifestyle so they and their families can continue to work and live normally. A total of 229 employees applied for \$507,000 in emergency relief during 2020.

5.5.3 Promotion of Public Welfare

Medical Public Welfare

Winbond and the Walsin Group's affiliated companies jointly donated NT\$50 million to the Taipei Veterans General Hospital to purchase cutting-edge equipment including heavy particles for the development of new radiotherapy and precision medicine treatments, smart medicine, and cancer treatment research. The equipment will begin installation and testing once the new center is completed in June 2020. Once commissioned, it will hopefully offer the public new hope through advanced cancer therapy and provide cancer patients with better radiotherapy quality. This act of corporate philanthropy will hopefully inspire more people to join in improving the standard of healthcare throughout the nation.



Blood Donation

"Donate a bag of blood and save a life!" Winbond has been organizing blood donation drives in partnership with the "Taiwan Blood Services Foundation" since 2010, and hosted the event for 10 consecutive years with 50 events. Up to now we have raised nearly 1,536,000 c.c. of blood, 6,584 bags of blood and 4,143 participants to date. Hot-blooded Winbond employees have all developed the habit of donating blood regularly. Through their actions, Winbond employees embody the high value placed on life in our corporate philosophy and help strengthen the domestic blood supply for healthcare. A total of 3 blood donation events were held in 2020 with 440 bags of blood donated by 269 people.

5.5.4 Academic Sponsorship

Winbond demonstrates its support for the IC industry by continuing to sponsor symposiums that create new opportunities for technological exchange. The hosting of the International Symposium on VLSI Technology, Systems and Applications (VLSI-TSA) helped to accelerate the upgrading of Taiwan's information and communications industry as well as encourage the domestic/international exchange of technologies and industrial techniques. We also regularly sponsor large technology management seminars organized by the Chinese Society for Management Of Technology (CSMOT). The seminars provide an avenue for active involvement in academic, industry, research and government partnerships. In 2020, Winbond began supporting the Pan Wen Yuan Foundation, an advocate for semiconductor, information and communications technologies. The sponsorships and exchanges will hopefully provide further encouragement to talented researchers in the semiconductor, information, communications and optoelectronics fields so scientists can realize their ideals through innovation and enthusiasm.

Appendix

Appendix 1 About this Report

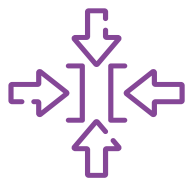
About this Report

Winbond Electronics Corporation (“Winbond”) began publishing the “Corporate Social Responsibility Report” in 2015 to provide transparent and complete disclosure on the impact of our business operations in the Environmental, Social and Governance (ESG) aspects as well as our actions on sustainability topics. The report shows that in addition to Winbond’s focus on sustainability, topics such as social justice, community welfare, employee development and environmental protection are important to the company as well. Related measures have been implemented through the promotion and spread of business activities as a response to stakeholder expectations and requirements of Winbond’s sustainability and management.

Scope

The scope of information disclosed in this report is for Winbond from January 1, 2020, through to December 31, 2020. The report boundary includes the Taiwan headquarters. In addition to the presentation of data from Winbond, the report also includes material information on suppliers, demonstrating Winbond’s influence and sense of responsibility towards the value chain. There were restatements of information in this year’s “2020 CSR Report” compared to the “2019 CSR Report” from last year.

Management Method



Internal Audit

- The contents of this report were reviewed by the Winbond CSR Implementation Committee and the management representatives of each department.
- The President’s Office is responsible for the proposal and implementation of CSR policy, systems, related management approach, and substantive implementation plans, with regular reports made to the Board of Directors.



External Audit

- The financial data was audited and verified by the accounting firm Deloitte Taiwan. The default currency is New Taiwan Dollars.
- Independent assurance of this report was conducted by BSI Taiwan in accordance with the AA 1000 Assurance Standard (2018 Addendum Type 1) to confirm that it conforms with the “Core” options of the GRI Standards. Please refer to the independent assurance statement included in the appendix section of this report for more details on the results.
- ISO 14064-1 GHG emissions were verified by BSI Taiwan.
- IATF 16949, ISO 14001, ISO 45001 and TOSHMS certification were approved by DQS Taiwan Inc.

Editorial Principles and Guidelines

Winbond compiles and researches material economic, environmental and social topics in Taiwan and abroad. The topics of concern to stakeholders are then determined through materiality analysis. All the relevant departments are interviewed to establish their implementation performance and set the relevant topics as the core disclosures of this report. This report complies with the Core options of the GRI Standards issued by the Global Reporting Initiative, and the industry standards issued by the Sustainability Accounting Standards Board (SASB).

Publication Time

The Winbond CSR Report is published annually and this is the 7th report. Paperless operations are promoted by Winbond to save energy, reduce carbon emissions, protect the environment and care for planet Earth. This report therefore continues the tradition of being published in an electronic format on the Winbond website for all stakeholders to read.

Current version : Published in June 2021

Previous version : Published in June 2020

Next version : To be published in June 2022

Feedback

If you have any questions or suggestions regarding this report, please do not hesitate to contact us. Our contact details are as follow :

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Appendix 2

GRI Standards Disclosures Comparison Table

* Falls under voluntary disclosure



GRI Standards	Disclosure	Corresponding Section	Page	Remarks
GRI 101: Foundation 2016 (contains no disclosures)				
GRI 102: General Disclosures 2016				
Organizational profile				
102-1	Name of the organization	1.1 Introduction to Winbond	16	
102-2	Activities, brands, products, and services	1.1 Introduction to Winbond	16	
102-3	Location of headquarters	1.1 Introduction to Winbond	16	
102-4	Location of operations	1.1 Introduction to Winbond	16	
102-5	Ownership and legal form	1.1 Introduction to Winbond	16	
102-6	Markets served	1.1 Introduction to Winbond	16	
102-7	Scale of the organization	1.1 Introduction to Winbond	16	
102-8	Information on employees and other workers	5.1.1 Workforce Structure	78	
102-9	Supply Chain	3.4 Responsible Supply Chain	59	
102-10	Significant changes to the organization and its supply chain			No significant changes during the reporting period
102-11	Precautionary Principle or Approach	2.3 Risk Management	41	
102-12	External initiatives	1.2 Sustainable Development Strategy	24	
102-13	Membership of associations	1.1 Introduction to Winbond	16	
Strategy				
102-14	Statement from senior decision-maker	Message from the Chairman and CEO	4	
Ethics and Integrity				
102-16	Values, principles, standards, and norms of behavior	2.2 Business Integrity	39	
Governance				
102-18	Governance structure	2.1 Corporate Governance	37	
Stakeholder engagement				
102-40	List of stakeholder groups	1.3 Materiality Analysis and Stakeholder Engagement	30	
102-41	Collective bargaining agreements	–	–	There are no collective bargaining agreements as no union has been formed
102-42	Identifying and selecting stakeholders	1.3.1 Stakeholder Engagement and Response	30	
102-43	Approach to stakeholder engagement	1.3.1 Stakeholder Engagement and Response	30	

GRI Standards	Disclosure		Corresponding Section	Page	Remarks
102-44	Key topics and concerns raised		1.3.2 Identification of Sustainability Topics	32	
			1. Sustainability Philosophy and Taking the Lead	14	
			2. Integrity and Stability	34	
			3. Vision and Value	46	
			4. Green Environment and Devotion to Environmental Protection	64	
			5. Harmony and Cooperation	76	
Reporting practice					
102-45	Entities included in the consolidated financial statements		1.1 Introduction to Winbond	16	
102-46	Defining report content and topic boundaries		Appendix 1 About this Report	108	
102-47	List of material topics		1.3.2 Identification of Sustainability Topics	32	
102-48	Restatements of information		—	—	There were no restatements of information
102-49	Changes in reporting		1.3.2 Identification of Sustainability Topics	32	
102-50	Reporting period		Appendix 1 About this Report	108	
102-51	Date of most recent report		Appendix 1 About this Report	108	
102-52	Reporting cycle		Appendix 1 About this Report	108	
102-53	Contact point for questions regarding the report		Appendix 1 About this Report	108	
102-54	Claims of reporting in accordance with the GRI Standards		Appendix 1 About this Report	108	
102-55	GRI content index		Appendix 2 GRI Standards Reference Table	110	
102-56	External Assurance		Appendix 3 Third-Party Assurance Statement	116	
Operational Performance (Material Topic)					
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its boundary	1.3.2 Identification of Sustainability Topics 1. Sustainability Philosophy and Taking the Lead	32	
	103-2	The management approach and its components		14	
	103-3	Evaluation of the management approach			
GRI 201 Economic Performance 2016	201-1	Direct economic value generated and distributed	1.1 Introduction to Winbond	16	
Corporate Governance and Business Ethics (Material Topic)					



GRI Standards		Disclosure	Corresponding Section	Page	Remarks
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its boundary	1.3.2 Identification of Sustainability Topics 2. Integrity and Stability	32	
	103-2	The management approach and its components		34	
	103-3	Evaluation of the management approach			
GRI 205 Anti-corruption 2016	205-2	Communication and training about anti-corruption policies and procedures	2.2 Transparency and Integrity	39	
	205-3	Confirmed incidents of corruption and actions taken	2.2 Transparency and Integrity	39	There were no incidents of corruption
GRI 206 Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	2.2 Transparency and Integrity	39	There were no incidents of anti-competitive behavior.
Energy Management					
GRI 302 Energy	302-1	Energy consumption within the organization	4.2.1 Energy Management	66	
	302-3	Energy intensity	4.2.1 Energy Management	66	
	302-4	Reduction of energy consumption	4.2.1 Energy Management	66	
Water Resource Management*					
GRI 303 Water and Effluents 2018	303-3	Water withdrawal	4.3.1 Water Usage	71	
	303-4	Water discharge	4.3.3 Wastewater Management	73	
	303-5	Water consumption	4.3.1 Water Usage	71	
Emissions Management*					
GRI 305 Emissions 2016	305-1	Direct (Scope 1) GHG emissions	4.2.2 Greenhouse Gas Management	69	
	305-2	Energy Indirect (Scope 2) GHG emissions	4.2.2 Greenhouse Gas Management	69	
	305-4	GHG emissions intensity	4.2.2 Greenhouse Gas Management	69	
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	4.5 Emissions Management	75	
Waste*					
GRI 306 Waste 2020	306-3	Waste generated	4.4 Waste Management	74	
Legal Compliance (Material Topic)					
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its boundary	1.3.2 Identification of Sustainability Topics	32	
	103-2	The management approach and its components	2. Integrity and Stability	34	
	103-3	Evaluation of the management approach	4. Green Environment and Devotion to Environmental Protection	64	

GRI Standards		Disclosure	Corresponding Section	Page	Remarks
GRI 307 Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations	2.2 Transparency and Integrity 4. Green Environment and Devotion to Environmental Protection	39 64	There were no incidents of non-compliance
Employee Relations*					
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	5.1.2 Talent Recruitment and Performance Evaluation	81	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	5.1.3 Compensation and Benefits	86	
	401-3	Parental leave	5.1.3 Compensation and Benefits	86	
Occupational Safety and Health (Material Topic)					
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its boundary	1.3.2 Identification of Sustainability Topics 5. Harmony and Cooperation	32	
	103-2	The management approach and its components			
	103-3	Evaluation of the management approach		76	
GRI 403 Occupational Health and Safety 2018	403-1	Occupational Health and Safety Management System	5.4.1 Occupational Safety and Health Management System	98	
	403-2	Hazard identification, risk assessment, and incident investigation	5.4.2 Environmental Safety and Health Risk Assessment	101	
	403-3	Occupational health services	5.1.3 Compensation and Benefits	86	
	403-4	Worker participation, consultation, and communication on occupational health and safety	5.4.1 Occupational Safety and Health Management System	98	
	403-5	Worker training on occupational health and safety	5.4.1 Occupational Safety and Health Management System	98	
			5.4.3 Emergency Response Measures	102	
	403-6	Promotion of worker health	5.1.3 Compensation and Benefits	86	
	403-7	Prevention and mitigation of Occupational Health and Safety impacts directly linked by business relationships	3.4 Responsible Supply Chain	59	
	403-8	Workers covered by an Occupational Health and Safety management system	5.4.1 Occupational Safety and Health Management System	98	
	403-9	Work-related injuries	5.4.1 Occupational Safety and Health Management System	98	
	403-10	Work-related ill health	5.4.1 Occupational Safety and Health Management System	98	



GRI Standards	Disclosure		Corresponding Section	Page	Remarks
Training and Education*					
GRI 404 Training and Education 2016	404-1	Average hours of training per year per employee	5.2.2 Employee Learning Outcomes	95	
	404-3	Percentage of employees receiving regular performance and career development reviews	5.1.2 Talent Recruitment and Performance Evaluation	81	
Employee Relations*					
GRI 405 : Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	5.1.2 Talent Recruitment and Performance Evaluation	81	
			5.1.3 Compensation and Benefits	86	
Quality of Product and Service (Material Topic)					
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its boundary	1.3.2 Identification of Sustainability Topics 3. Vision and Value	32	
	103-2	The management approach and its components		46	
	103-3	Evaluation of the management approach			
GR 417 Marketing and Labeling 2016	417-2	Incidents of non-compliance concerning product and service information and labeling	2.2 Transparency and Integrity	39	
	417-3	Incidents of non-compliance concerning marketing communications	2.2 Transparency and Integrity	39	
Information Security and Personal Information Protection (Material Topic)					
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its boundary	1.3.2 Identification of Sustainability Topics 3. Vision and Value	32	
	103-2	The management approach and its components		46	
	103-3	Evaluation of the management approach			
GRI 418 Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	3.3 Customer Relationship Management	58	There were no customer grievances
Self-defined Topics Information Security			2.4 Information Security Management	44	
Legal Compliance (Material Topic)					
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its boundary	1.3.2 Identification of Sustainability Topics	32	
	103-2	The management approach and its components	2. Integrity and Stability 4. Green Environment and Devotion to Environmental Protection	34 64	
	103-3	Evaluation of the management approach			
GRI 419 Socioeconomic Compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area	2.2 Transparency and Integrity 2. Integrity and Stability	39 34	

GRI Standards	Disclosure		Corresponding Section	Page	Remarks
Research, Development and Innovation (Material Topic)					
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its boundary	1.3.2 Identification of Sustainability Topics 3. Vision and Value	32	
	103-2	The management approach and its components		46	
	103-3	Evaluation of the management approach			
Self-defined Topics Research, Development and Innovation			3.1 Research, Development and Innovation	49	
Risk Management (Material Topic)					
GRI 103 Management Approach 2016	103-1	Explanation of the material topic and its boundary	1.3.2 Identification of Sustainability Topics 2. Integrity and Stability	32	
	103-2	The management approach and its components		34	
	103-3	Evaluation of the management approach			
Self-defined Topics Risk Management			2.3 Risk Management	41	

Appendix 3 Sustainability Accounting Standards Board (SASB) Reference Table

Topic	Code	Category	Disclosure Metric	Corresponding Section	Page	Remarks
Greenhouse Gas Emissions	TC-SC-110a.1	Quantitative	(1) Gross global Scope 1 emissions (2) Amount of total emissions from perfluorinated compounds	4.2.2 Greenhouse Gas Management	69	
	TC-SC-110a.2	Qualitative disclosure	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	4.2.2 Greenhouse Gas Management	69	
Energy management in manufacturing	TC-SC-130a.1	Quantitative	(1) Total energy consumed (2) Percentage grid electricity (3) Percentage renewable	4.2.1 Energy Management	66	
Water Management	TC-SC-140a.1	Quantitative	(1) Total water withdrawal (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	4.3.1 Water Usage	71	
Waste Management	TC-SC-150a.1	Quantitative	Amount of hazardous waste from manufacturing, percentage recycled	4.4 Waste Management	74	
Employee health and safety	TC-SC-320a.1	Qualitative disclosure	Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards	5.1.3 Compensation and Benefits 5.4 Occupational Safety and Health	86 98	
	TC-SC-320a.2	Quantitative	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations	2.2 Transparency and Integrity	39	No penalties associated with Occupational Safety and Health violations
Recruiting and managing a global and skilled workforce	TC-SC-330a.1	Quantitative	Percentage of employees that are (1) foreign nationals and (2) located offshore	5.1.1 Workforce Structure	78	
				5.1.3 Compensation and Benefits	86	

Topic	Code	Category	Disclosure Metric	Corresponding Section	Page	Remarks
Product Lifecycle Management	TC-SC-410a.1	Quantitative	Percentage of products by revenue that contain IEC 62474 declarable substances	-	-	No IEC 62474 declarable products
	TC-SC-410a.2	Quantitative	Processor energy efficiency at a system-level for: (1) servers, (2) desktops, and (3) laptops ⁶	-	-	No production of servers, desktops or laptop products
Materials Sourcing	C-SC-440a.1	Qualitative disclosure	Description of the management of risks associated with the use of critical materials	3.4.2 Supplier Sustainability Audit	60	
Intellectual property protection and competitive behavior	TC-SC-520a.1	Quantitative	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	-	-	There were no violations of anticompetitive regulations
Total production	TC-SC-000.A	Quantitative		1.1 Introduction to Winbond	16	

Appendix 4 Third-Party Assurance Statement



獨立保證意見聲明書

華邦電子股份有限公司 2020 企業社會責任報告書

英國標準協會與華邦電子股份有限公司(簡稱華邦電子)為相互獨立的公司,英國標準協會除了針對華邦電子股份有限公司 2020 企業社會責任報告書進行評估和查證外,與華邦科技並無任何財務上的關係。

本獨立保證意見聲明書之目的,僅作為對華邦電子股份有限公司 2020 企業社會責任報告書所界定範圍內的相關事項進行保證之結論,而不作為其他之用途。除對查證事實提出獨立保證意見聲明書外,對於其他目的之使用,或閱讀此獨立保證意見聲明書的任何人,英國標準協會並不負有或承擔任何有關法律或其他之責任。

本獨立保證意見聲明書係英國標準協會審查華邦電子提供之相關資訊所作成之結論,因此審查範圍乃基於並侷限在這些提供的資訊內容之內,英國標準協會認為這些資訊內容都是完整且準確的。

對於這份獨立保證意見聲明書所載內容或相關事項之任何疑問,將由華邦電子一併回覆。

查證範圍

華邦電子與英國標準協會協議的查證範圍包括:

1. 本查證作業範疇與華邦電子股份有限公司 2020 企業社會責任報告書揭露之報告範疇一致。
2. 依照 AA1000 保證標準 v3 的第 1 應用類型評估華邦電子遵循 AA1000 當責性原則(2018)的本質和程度,不包括對於報告書揭露的資訊/數據之可信賴度的查證。

本聲明書以英文作成並已翻譯為中文以供參考。

意見聲明

我們總結華邦電子股份有限公司 2020 企業社會責任報告書內容,對於華邦電子之相關運作與績效則提供了一個公平的觀點。基於保證範圍限制事項、華邦電子所提供資訊與數據以及抽樣之測試,此報告書並無重大之不實陳述。我們相信有關華邦電子 2020 年度的經濟、社會及環境等績效資訊是被正確無誤地呈現。報告書所揭露之績效資訊展現了華邦電子對識別利害關係人的努力。

我們的工作是由一組具有依據 AA1000 保證標準 v3 查證能力之團隊執行,以及策劃和執行這部分的工作,以獲得必要之訊息資料及說明。我們認為就華邦電子所提供之足夠證據,表明其依循 AA1000 保證標準 v3 的報告方法與自我聲明符合 GRI 永續性報導準則核心選項係屬公允的。

查證方法

為了收集與作成結論有關的證據,我們執行了以下工作:

- 對來自外部團體的議題相關於華邦電子政策進行訪談,以確認本報告書中聲明書的合適性
- 與管理者討論有關利害關係人參與的方式,然而,我們並無直接接觸外部利害關係人
- 訪談 19 位與永續性管理、報告書編製及資訊提供有關的員工
- 審查有關組織的關鍵性發展
- 審查內部稽核的發現
- 審查報告書中所作宣告的支持性證據
- 針對公司報告書及其相關 AA1000 當責性原則(2018)中有關包容性、重大性、回應性及衝擊性原則之流程管理進行審查

結論

針對 AA1000 當責性原則(2018)之包容性、重大性、回應性及衝擊性與 GRI 永續性報導準則的詳細審查結果如下：

包容性

2020 年報告書反映出華邦電子已持續尋求利害關係人的參與，並建立重大永續主題，以發展及達成對企業社會責任具有責任且策略性的回應。報告書中已公正地報告與揭露經濟、社會和環境的訊息，足以支持適當的計畫與目標設定。以我們的專業意見而言，這份報告書涵蓋了華邦電子之包容性議題。

重大性

華邦電子公布對組織及其利害關係人之評估、決策、行動和績效會產生實質性影響與衝擊之重大主題。永續性資訊揭露使利害關係人得以對公司之管理與績效進行判斷。以我們的專業意見而言，這份報告書適切地涵蓋了華邦電子之重大性議題。

回應性

華邦電子執行來自利害關係人的期待與看法之回應。華邦電子已發展相關道德政策，作為提供進一步回應利害關係人的機會，並能對利害關係人所關切之議題作出及時性回應。以我們的專業意見而言，這份報告書涵蓋了華邦電子之回應性議題。

衝擊性

華邦電子已鑑別並以平衡和有效之量測及揭露方式公正展現其衝擊。華邦電子已經建立監督、量測、評估和管理衝擊之流程，從而在組織內實現更有效之決策和結果管理。以我們的專業意見而言，這份報告書涵蓋了華邦電子之衝擊性議題。

GRI 永續性報導準則

華邦電子提供有關依循 GRI 永續性報導準則之自我宣告，與相當於「核心選項」(每個涵蓋特定主題 GRI 準則之重大主題，至少一個特定主題的揭露項目依循其全部的報導要求)的相關資料。基於審查的結果，我們確認報告書中參照 GRI 永續性報導準則的社會責任與永續發展之相關揭露項目已被報告、部分報告或省略。以我們的專業意見而言，此自我宣告涵蓋了華邦電子的社會責任與永續性主題。

保證等級

依據 AA1000 保證標準 v3 我們審查本聲明書為中度保證等級，如同本聲明書中所描述之範圍與方法。

責任

這份企業社會責任報告書所屬責任，如同責任信中所宣稱，為華邦電子負責人所有。我們的責任為基於所描述之範圍與方法，提供專業意見並提供利害關係人一個獨立的保證意見聲明書。

能力與獨立性

英國標準協會於 1901 年成立，為全球標準與驗證的領導者。本查證團隊係由具專業背景，且接受過 AA1000AS、ISO 14001、ISO 45001、ISO 14064 及 ISO 9001 之一系列永續性、環境及社會等管理標準的訓練，具有主導稽核員資格之成員組成。本保證係依據 BSI 公平交易準則執行。



For and on behalf of BSI:

Peter Pu, Managing Director BSI Taiwan

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