winbond

2025 WINBOND SUSTAINABILITY REPORT

The Stream of Sustainability and Digitalization

Every choice shapes the future.

With sustainability as our source,
we respond to the climate, safeguard the Earth, and care for people,
allowing forests to flourish and all life to thrive together.

With digitalization as our current,
we gather intelligence, anticipate the future, and empower decisions,
driving continuous innovation and steady progress for the world.

Advancing along the dual axes of sustainability and digitalization,
source and current converge into a great river flowing toward the future,
leading us to a more resilient and hopeful tomorrow.

Winbond Group remains committed to enriching human life through green semiconductor technologies
and creating shared prosperity through sustainable innovation.

Coexisting with the environment,
prospering with society,
and moving forward with the world.

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Preface

About This Report

Winbond Electronics Corporation (referred to as "Winbond") publishes the 2025 Sustainability Report (hereinafter referred to as "this Report") to transparently and comprehensively disclose the impacts of its operations across the three ESG dimensions—Environmental, Social, and Governance—as well as its sustainability-related strategies and actions.
Through its business activities, communications, and stakeholder engagement, Winbond translates sustainability commitments into operational practices and responds to stakeholder expectations regarding sustainable development and long-term corporate value creation.

Reporting Framework

This Report has been prepared with reference to the following international and domestic sustainability reporting standards and guidelines:

- Global Reporting Initiative (GRI Standards)
- Sustainability Accounting Standards Board (SASB) – Semiconductors Sustainability Accounting Standard (2018)
- Task Force on Climate-related Financial Disclosures (TCFD)
- Taiwan Stock Exchange Regulations Governing the Preparation and Filing of Sustainability Reports by Listed Companies
- AA1000 Accountability Principles
- United Nations Global Compact

Management Procedures

Winbond has incorporated sustainability information compilation into its internal control and governance framework. Sustainability-related data is collected, reviewed, and approved in accordance with established procedures to ensure consistency, accuracy, and reliability.

1. Annual performance review.
2. Confirmation of disclosure priorities through cross-functional engagement, with material issues serving as the focus of data collection.
3. Report compilation led by the ESG Office, with sustainability practice content drafted by functional teams and reviewed by team leaders.
4. Third-party assurance: In April 2026, the Report was independently assured by BSI Taiwan in accordance with AA1000AS v3 Type II (High Assurance). For details, please refer to Appendix 9: Independent Assurance Statement.
5. Review and approval by the President, Chairman, and Sustainable Development Committee.
6. Board-level reporting: The Sustainable Development Committee, chaired by the Chairman, oversees five functional teams and reports sustainability progress to the Board on a quarterly basis.
7. Public disclosure through the Company' s ESG website.

Reporting Period, Boundary, and Scope

The reporting period covers January 1 to December 31, 2025.

The reporting boundary is consistent with the consolidated financial statements and includes Winbond (Taiwan) fabs and offices (Central Taiwan Science Park Fab, Kaohsiung Fab, Zhubei Building, Taipei Office, and Tainan Office), Winbond subsidiaries, Nuvoton Technology (Taiwan), Nuvoton Technology (Japan), and Nuvoton subsidiaries (collectively, the "Winbond Group"). Any deviation from this scope is disclosed in the relevant sections.

- Nuvoton publishes its own independent sustainability report. Please refer to the Nuvoton 2025 ESG Report

Information restatement

Because the reporting boundary has been expanded to cover the entire Group, the data differ slightly from previous periods. To enhance comparability, historical data has been updated accordingly.

Publication schedule

Winbond publishes its sustainability report annually. The 2025 report represents the 12th edition. To support energy conservation and carbon reduction, Winbond adopts a paperless approach and publishes this Report electronically.

- Current edition: August 2026
- Previous edition: August 2025
- Next scheduled edition: August 2027

Contact information

If you have any questions or suggestions regarding this Report, please feel free to contact us. Our contact details are as follows:

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- Website: www.winbond.com
- ESG website: esg.winbond.com

Website

Message from our Chairman

"Sustainability," for Winbond, is a multifaceted concept. It is an enduring corporate spirit to be passed down for a hundred years and beyond. It safeguards our ability to continuously create value in an ever-changing world, inspiring us to become a pillar of sustainable development for human society. It reminds us to use resources wisely and to cherish the only planet we have.

A Shifting Global Landscape: Prosperity and Trials in the Semiconductor Arena

In 2025, the global semiconductor market entered a new era driven by AI technology. From cloud servers to edge computing, the surging demand for high-speed data processing brought unprecedented challenges and opportunities to the memory market. Meanwhile, geopolitical risks and supply chain uncertainties persisted, and the imbalance between market supply and demand tested the resilience and strategic acumen of every enterprise. Facing a rapidly shifting market, Winbond takes a long-term perspective on industry cycles and technological revolutions. Guided by our dual axes of "Sustainability" and "Digital," we navigate change with steadiness and meet challenges head-on with innovation.

In 2025, Winbond continued to demonstrate resilience and innovation. On the technology front, our CMS 16 nm DRAM process and Flash 24 nm NAND products successfully completed CPR, while our 45 nm NOR and Secure Flash products expanded into new markets. Winbond continued to deepen its presence in the secure memory domain, with Secure Flash integrating Post-Quantum Cryptography (PQC) technology to enhance product security. Our process optimization efforts were recognized with the TCIA Gold Tower Five-Star Award, demonstrating steady improvement in manufacturing capabilities. We also launched 8Gb DDR4 DRAM on the 16 nm process node, delivering higher speed and improved power efficiency, further expanding our footprint in the industrial control and embedded markets.

Amid Transformation and Challenges, Winbond Strengthens Its ESG Foundations Across 3 Dimensions

Our vision has always been clear: "Be a hidden champion in providing sustainable semiconductors to enrich human life." From our SBTi net zero commitment and renewable energy deployment to green product innovation, Winbond is dedicated to creating a lower-carbon future. Through the collective efforts of all employees, we not only passed the SBTi greenhouse gas reduction target validation, but also achieved double "A" ratings in both "Climate Change" and "Water Security" from CDP for the first time, along with an "A" Leadership rating in the "Supplier Engagement Assessment"—elevating Winbond to the ranks of the world's top sustainability leaders.

Furthermore, we place great emphasis on the shared growth of employees and the company. All Winbond employees are the driving force behind our corporate sustainability practices. In 2025, we completed global human rights training and adopted a multi-pronged approach encompassing training and employee benefits to enhance employee satisfaction and engagement, building a solid talent foundation for our sustainability initiatives. On the governance front, Winbond was selected as one of the Top 100 Global Innovators for the third consecutive year, was included in the S&P Dow Jones Best-in-Class World Index for the first time, and secured a NT$25 billion sustainability-linked syndicated loan with the endorsement of 17 banks—closely aligning our financial strategy with ESG metrics, demonstrating robust governance and laying a strong foundation for future competitiveness.

Riding the Momentum: Envisioning a Future Where Sustainability and Digital Transformation Advance Together

Over the next 50 years, AI and industry transformation will bring tremendous innovation and change. Winbond will pursue a dual-axis transformation—empowering sustainability through technology and driving process advancement through sustainability goals. We will continue to align with international standards to enhance competitiveness, fully commit to SBTi's pathway toward net zero by 2050, and build an attractive workplace on the global stage. Winbond will advance alongside technology and sustainability, walking hand in hand with customers, suppliers, and all stakeholders, moving steadily forward through times of change, and building a cleaner, smarter future together with the world.

Chairman & CEO, Winbond Electronics

Message from our President

The global environment and industry landscape are undergoing rapid and dramatic change. Artificial intelligence technologies, geopolitical risks, and climate change continue to present significant challenges to corporate operations and governance. Guided by the vision of “Enriching human life through green semiconductor technologies,” Winbond is actively advancing its dual-axis transformation of “Sustainability” and “Digital.” Winbond demonstrates its sustainability commitments and achievements through five core pillars: from “Corporate Governance,” which strengthens integrity and risk management, to a “Sustainable Supply Chain” that partners with stakeholders to build a low-carbon ecosystem; from customer-centric “Green Product” innovation and “Environmental Sustainability” that delivers on net zero commitments, to “Human Rights and Social Inclusion” that safeguards employee well-being and promotes social welfare and nature conservation. Each pillar embodies Winbond’ s culture and vision, and is the crystallization of the joint efforts of all employees and partners.

In 2025, Winbond earned significant recognition across multiple dimensions of sustainable development: in the CDP global environmental disclosure platform, Winbond achieved the highest “A List” ratings for both “Climate Change” and “Water Security,” and was awarded the “Supplier Engagement Assessment” A Leadership level. Winbond was also included for the first time in the Dow Jones Best-in-Class Index (DJBIC), demonstrating significant progress in governance transparency and sustainability management. The Kaohsiung Fab won the Silver Award at the 7th National Enterprise Environmental Protection Award by the Ministry of Environment in its first participation, and also received the Energy Conservation Benchmark Award – Gold Award from the Ministry of Economic Affairs.

Looking ahead, we will continue to deepen our dual-axis transformation of “Sustainability” and “Digital,” working hand in hand with global supply chain partners to build a low-carbon ecosystem, deliver on ESG goals, and steadily advance our commitment to net zero emissions by 2050. We sincerely thank every employee, partner, and stakeholder who has placed their trust in Winbond, enabling us to break through challenges and move toward a more resilient and sustainable future.

President 陳沛銘

E Green Manufacturing Pioneer: Leading the Low-Carbon Future with Innovation

Extreme weather events have repeatedly impacted lives around the globe, placing greater demands on corporate social responsibility. In 2025, Winbond demonstrated its firm sustainability commitment through comprehensive decarbonization strategies and process optimization initiatives. We continued to advance intelligent energy-saving and efficiency improvement systems at our Central Taiwan and Kaohsiung Fabs, and successfully passed the Ministry of Environment’ s “Voluntary Emission Reduction Plan Review,” demonstrating outstanding achievements in energy management and low-carbon transformation.

Winbond also actively promoted green product innovation, launching PFAS-free products and creating a low-carbon supply chain through renewable-energy manufacturing. As of the end of 2025, shipments of products manufactured with renewable energy reached 451 million units, delivering total carbon reduction benefits of approximately 35,044 tCO_2e, contributing tangible momentum to global sustainable development. To enhance the accuracy of environmental management, Winbond adopted the UL 2799 standard (Zero Waste to Landfill Environmental Claim Validation) in 2025, establishing science-based, quantifiable strategies for improving resource utilization. Both the Central Taiwan and Kaohsiung Fabs achieved the highest Platinum-level certification, reflecting Winbond’ s strong commitment to waste resource recovery.

In response to the Ministry of Environment’ s “Green Cafeteria” initiative, Winbond integrated sustainability, health, and environmental principles into everyday meals. Both the Central Taiwan and Kaohsiung sites obtained certification, with the Kaohsiung site becoming the first employee cafeteria in Kaohsiung City to receive the certification.

Through these efforts, Winbond was awarded the “Net zero Industry Competitiveness Award” — Taiwan’ s first award centered on carbon neutrality and sustainability action — and ranked No. 1 in Taiwan’ s semiconductor industry on CommonWealth Magazine’ s “Corporate Carbon Reduction Thermometer” platform with an outstanding score of 1.421° C.

S People-Centric: Building a Resilient Workplace and Culture

In the semiconductor industry, talent is among the most critical competitive advantages and a key factor of corporate success. Winbond places strong emphasis on employee well-being and promotes a workplace that embraces Diversity, Equity, and Inclusion (DEI) in order to attract and retain top global talent.

In 2025, Winbond (Taiwan) and Nuvoton (Taiwan) jointly announced their participation in the “Taiwan Talent Sustainability Action Alliance,” taking concrete steps to advance human rights protection, diversity and inclusion, employee health, and career development. Internationally recognized human rights standards are embedded into daily management practices to ensure that every employee can work in a fair and respectful environment.

In terms of compensation, the average salary of Winbond’ s non-managerial employees ranks in the top 20% among listed semiconductor companies, leading the industry. Winbond also launched the “Sustainability Performance Platform,” integrating sustainability concepts into corporate culture and performance systems. In 2025, Winbond organized 55 sustainability-related courses and activities, attracting over 3,500 participations, enabling employees to practice sustainability at work and extending that influence into daily life.

Upholding the commitments of its Human Rights Policy, Winbond advanced its global human rights due diligence, with 100% completion of related education and training, institutionally safeguarding employee rights. In 2025, the“Core Values and Employee Engagement Survey” was extended to Winbond subsidiaries worldwide for the first time.

G Integrity-Driven Operations: Building the Foundation for Sustainable Value

Against the backdrop of supply chain risks and geopolitical fragmentation, corporate governance has moved beyond regulatory compliance to become the cornerstone of long-term value creation. Through innovation, transparency, and collaboration, Winbond has built a distinguished and resilient governance model.

In innovation and international recognition, Winbond has been recognized as one of the Clarivate Top 100 Global Innovators for three consecutive years, reflecting the long-term outcomes of its dedicated efforts in technology R&D and intellectual property management.

In energy strategy, Winbond is actively procuring diverse renewable energy sources. Onshore wind and floating solar power have been successfully delivered, and offshore wind procurement contracts have been signed, ensuring stable and low-carbon energy supply that lays a strong foundation for long-term sustainability goals.

Winbond is extending its governance throughout the entire supply chain to build a resilient and sustainable ecosystem. In 2025, Winbond partnered with supply chain stakeholders to complete a “Large Leads Small” decarbonization project, jointly reducing 19,995 tCO_2e of carbon emissions during the project. We also promoted the adoption of the PACT guidelines among outsourced manufacturers for carbon footprint information exchange, advancing carbon data transparency and collaboration—making low-carbon transformation not only an internal responsibility but a shared commitment across the entire industry chain. As a result of these efforts, Winbond was selected as a “Low-Carbon Achievement Demonstration Enterprise” by the Industrial Development Administration, Ministry of Economic Affairs, and was honored as a “Outstanding Green Procurement / Net zero Green Lifestyle Unit” by both the Kaohsiung City and Taichung City Environmental Protection Bureaus, highlighting Winbond’ s leadership in supply chain governance.

Winbond Group Overview

About the Winbond Group

Winbond Electronics Corporation ("Winbond") provides global customers with comprehensive niche memory solutions. Its core product portfolio comprises Code Storage Flash Memory, TrustME® Secure Flash, and Customized Memory Solutions (CMS).

Nuvoton Technology Corporation ("Nuvoton"), a subsidiary of Winbond, was established following the spin-off of Winbond's logic IC business. Nuvoton focuses on microcontrollers (MCUs) and logic ICs, strengthening the Group's overall solution capabilities.

The Winbond Group is committed to advancing green semiconductor technologies and represents a rare global combination of memory and logic businesses. It is the only semiconductor group in Taiwan with integrated capabilities across CMS, Flash, and Logic process development, product design, and marketing. By leveraging cross-product synergies, the Group delivers diversified and integrated solutions, reinforcing the stability and resilience of its operating foundation.

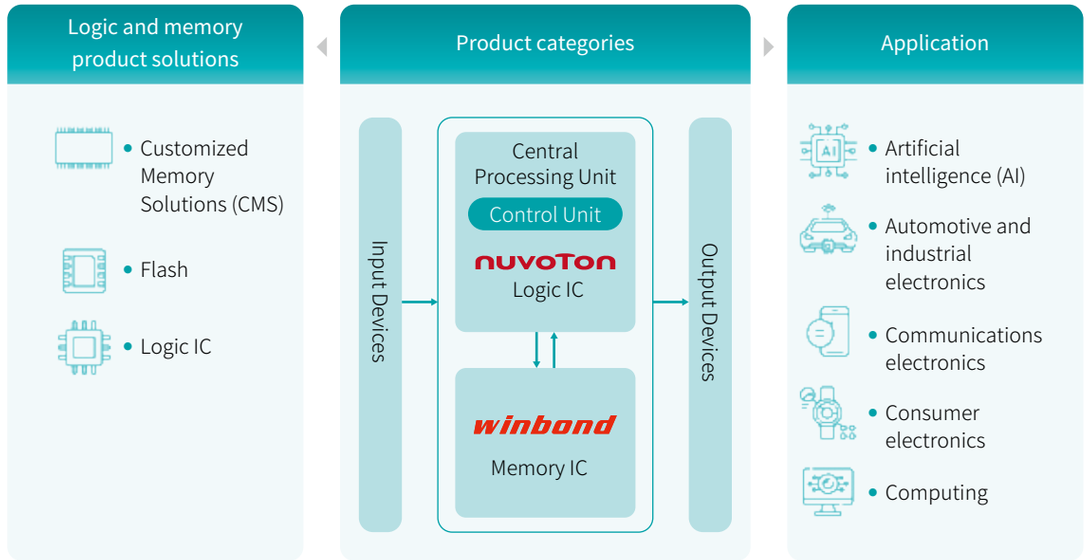
Winbond's memory business focuses on the design, manufacturing, servicing, and sales of niche memory products, offering customized specifications tailored to diverse customer requirements. The logic business spans a broad range of applications, including microcontroller and voice solutions, cloud security, image sensing, battery monitoring, Internet of Things (IoT) applications, semiconductor components, and wafer foundry services.

Culture: Integrity in operations | accountable teamwork | passionate learning | proactive innovation | sustainable contribution

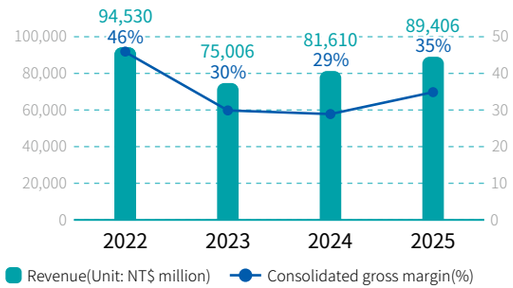
Vision: *Be a hidden champion in providing sustainable semiconductors to enrich human life.*

Industry Position

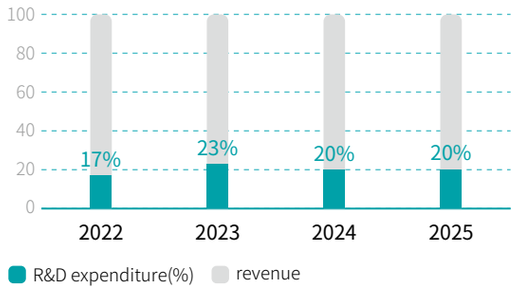
NOR Flash, QSPI NOR Flash, and MOSFET for mobile applications. ★ ranking **No. 1** ★



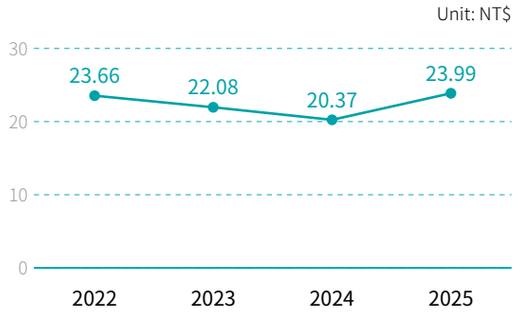
Logic and memory products operating performance



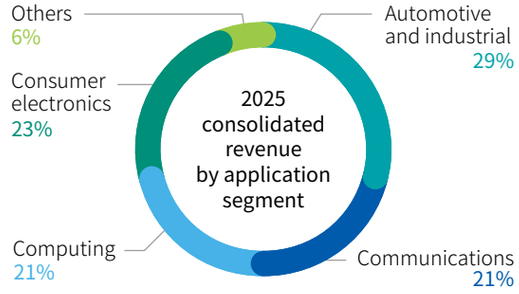
Investment in research and development – R&D expenditure as a percentage of revenue



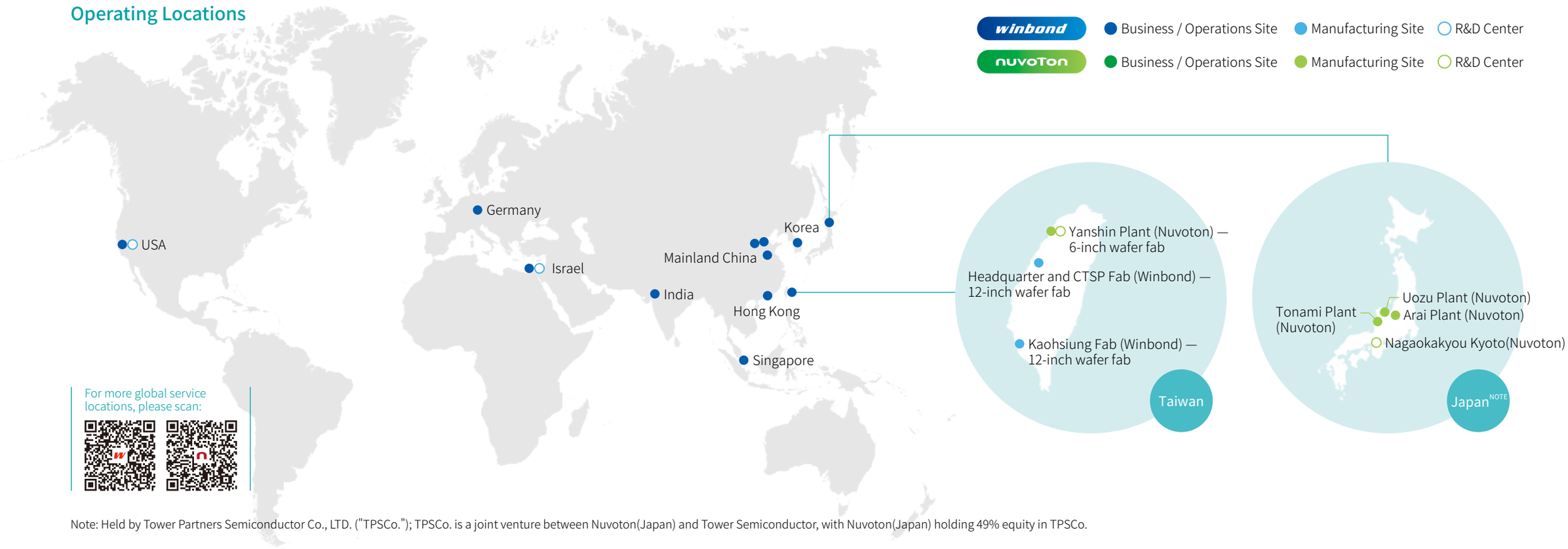
Company value – Net asset value per share



2025 consolidated revenue by application segment



Operating Locations



For more global service locations, please scan:

Note: Held by Tower Partners Semiconductor Co., LTD. ("TPSCo."); TPSCo. is a joint venture between Nuvoton(Japan) and Tower Semiconductor, with Nuvoton(Japan) holding 49% equity in TPSCo.

Global Operating Sites	Employees Worldwide	Manufacturing Sites
34	8,131	6

Manufacturing sites

The Winbond Group operates two 12-inch wafer fabs and one 6-inch wafer fab, complemented by three major manufacturing sites in Japan.

Global operations

Headquartered in Taiwan, the Group maintains operational presence across Taiwan, Mainland China/Hong Kong, Japan, Singapore, South Korea, India, the United States, Germany, and Israel.

Milestones

1987
Founded in Hsinchu Science Park

1995
Listed on the Taiwan Stock Exchange (stock code: 2344)

2006
Launched Multi I/O SpiFlash (Dual in 2006; Quad in 2007), achieving industry-leading performance

2008
Logic IC business spun off to establish Nuvoton Technology

2009
Mass production of the industry's first 16Mb QSPI Flash using 90 nm process technology

2010
Introduced wafer-level chip scale packaging (WLCSP) for serial NOR Flash

2013
Launched QSPI NAND with continuous read embedded ECC and bad block management

2014
Became the world's leading serial NOR Flash supplier and introduced SpiStack products

2017
Launched the first ultra-low-voltage 1.2V 8Mb QSPI NOR Flash

2018
Became the world's No. 1 NOR Flash supplier and introduced high-performance QSPI NAND for automotive applications

2020
Nuvoton acquired Panasonic Semiconductor Business in Japan and renamed it Nuvoton Technology Corporation Japan

2024
- Commercialized the first products manufactured with renewable energy
- Winbond (Taiwan) and Nuvoton (Taiwan) achieved RBA VAP Platinum certification
- Received multiple national sustainability awards

2025
- Selected for the S&P Global Sustainability Yearbook
- Achieved CDP A List ratings for Climate Change and Water Security, with Supplier Engagement Assessment Leadership
- Named among Clarivate Top 100 Global Innovators

⌘ Unless otherwise specified, the scope of disclosure refers to Winbond.

Winbond Group Value

Looking Ahead: Realizing the Long-Term Value of Semiconductors

Facing the global waves of digitalization, low-carbon transformation, and intelligent technologies, the Winbond Group continues to identify the key trends shaping next-generation semiconductor products. The Group sustains its investment in semiconductor design, process technology, and product innovation, striving to achieve the optimal balance among performance, energy efficiency, and sustainability.

Design and R&D Priorities

- Reducing the generation and emission of hazardous substances during manufacturing
- Shortening manufacturing cycle times
- Lowering production costs

Product Innovation Advantages

- Using low-carbon raw materials
- Enhancing product performance
- Improving energy efficiency in product use
- Reducing energy consumption in production
- Enabling smaller form factors

Driving R&D and Process Innovation to Build Efficient and Sustainable Semiconductor Products

Winbond Group's product development focuses on the following key directions:

Enhancing Product Performance	Manufacturing IC products with higher computational efficiency and enhanced performance.	1
Improving Quality	Continuously improving product quality through three major aspects: quality control, reliability assurance, and failure analysis.	2
Controlling Pollution	Reducing the use of consumables during the manufacturing process to lower carbon emissions. Establishing a hazardous substance management system for products, reducing or eliminating harmful substances contained in products through a "process-oriented" approach.	3
Layout of Patents and Intellectual Property Protection	Adopting international standards at the internal proposal stage of patent applications to enhance patent quality and application success rates. Strengthening the protection of intellectual property rights through internal education and training, signing of confidentiality agreements, and other measures.	4
Ensuring Information Security and Confidentiality	Strengthening information security technologies and continuously providing advanced product security function designs.	5
Achieving Smaller Size	Continuously developing process technologies to reduce wafer chip size compared to the previous generation of products.	6
Reducing Production Energy Consumption	Continuously scaling down processes to increase the number of dies produced per wafer, thereby reducing production emissions per die.	7

Technology-Driven Innovation for Everyday Life

Automotive Electronics

From vehicle body and power systems to infotainment systems, intelligent driving, and advanced safety systems, these technologies are applied in emerging electric vehicles to enable a safer, smarter, and more environmentally friendly transportation ecosystem.

Applications

- Vehicle-to-Everything (V2X)
- Advanced Driver-Assistance Systems (ADAS)
- Vehicle Instrument Clusters
- In-Vehicle Infotainment (IVI)
- Telematics
- Automotive Sensing Components
- Automotive Gateways
- Smart Vehicles / Electric Vehicles
- Obstacle Detection
- Human Behavior Recognition

Industrial Electronics

Enhances industrial systems with higher performance, information security, and advanced safety through intelligent connectivity, remote monitoring, human–machine interaction, and on-site machine learning capabilities.

Applications

- Real-Time Sales Information Devices
- Smart Factories
- Smart Meters
- Programmable Logic Controllers (PLC)
- Graphical Human–Machine Interfaces (HMI)
- Industrial Gateways
- Industrial Machine Vision
- Industrial Computers
- Unmanned Aerial Vehicles (UAV)
- Surveillance Cameras
- Medical Endoscopes
- Fan Motors
- Computer Hardware Monitoring

5G Communications

Provides higher data transmission speeds, forming a foundational platform for the Internet of Things and enabling seamless communication across locations to enhance work efficiency, entertainment, and learning experiences.

Applications

- Network Digital Video Converters
- High-Speed Ethernet Switches
- Wireless Terminal Access Devices and Customer Premises Equipment (CPE)
- Long-Term Evolution (LTE)
- LTE/5G Base Stations
- Optical Fiber Communications

Smart IoT

In an interconnected world, accelerates digital transformation while ensuring information security and functional safety, enabling greater energy efficiency, convenience, and enhanced levels of safety protection in daily life.

Applications

- Smart Cities
- Smart Transportation Systems
- Autonomous Vehicles
- Smart Factories
- Telemedicine
- Smart Homes
- Smart Meters
- Smart IoT
- Servers
- Edge Computing
- Conference Systems

Consumer Electronics

Delivers more powerful, energy-efficient, and feature-rich consumer products, enhancing overall user experience.

Applications

- Smartphones
- Smartwatches
- AR Smart Glasses
- Tablet Computers
- Smart TVs
- Smart Homes
- Satellite Navigation Systems
- Digital Cameras
- True Wireless Earbuds
- Set-Top Boxes
- Autonomous Service Robots (Obstacle Detection)
- Intelligent Interactive Toys (Human Behavior Recognition)

Awards and Recognition

⌘ Scope of coverage: Unless otherwise specified, the scope refers to Winbond. Items marked with * apply to the Winbond Group.

永續肯定

S&P Global Sustainability Yearbook

- Selected for the S&P Global Sustainability Yearbook for two consecutive years

FTSE4Good (Financial Times Stock Exchange Sustainability Index)

- Selected as a constituent of the FTSE4Good Emerging Index and the FTSE4Good TIP Taiwan ESG Index

CDP (Carbon Disclosure Project)

- Achieved A List ratings for Climate Change and Water Security, and received Supplier Engagement Assessment – Leadership level

EcoVadis

- Awarded Silver Medal by the global supply chain sustainability assessment platform

RBA (Responsible Business Alliance)

- Winbond (Taiwan) achieved – Platinum level, the highest certification

Ministry of Environment (Taiwan)

- Kaohsiung Fab received the 7th National Enterprise Environmental Protection Award – Silver Award; Central Taiwan Fab and Kaohsiung Fab recognized as Outstanding Green Procurement Units

Business Weekly

- Nuvoton (Taiwan) selected as one of Top 100 Carbon Competitive Enterprises
- Nuvoton (Taiwan) achieved Gold level

Southern Taiwan Science Park Administration, National Science and Technology Council

- Awarded Sustainable Management Award; Kaohsiung Fab awarded Outstanding Occupational Safety and Health Unit; Kaohsiung Fab awarded Outstanding Energy Conservation Unit

Ministry of Economic Affairs (Taiwan)

- Kaohsiung Fab awarded the Energy Conservation Benchmark Award – Gold Award

CommonWealth Sustainability – Carbon Reduction Thermometer

- Ranked No. 1 in Taiwan’ s semiconductor industry

Taiwan Institute for Sustainable Energy (TAISE)

- Winbond awarded TCSA Taiwan Corporate Sustainability Award – Sustainability Report Platinum Award; Nuvoton (Taiwan) awarded TCSA Taiwan Corporate Sustainability Award – Comprehensive Sustainability Performance Award, Taiwan Top 100 Sustainable Enterprises, and Sustainability Report Gold Award

Corporate Governance and Index Recognition

12th Corporate Governance Evaluation

- Ranked within the top 6%–20% among listed companies

Taiwan Index Company*

- Selected as a constituent of the Taiwan High Salary 100 Index, Corporate Governance 100 Index, and Taiwan Employment 99 Index

Innovation, Intellectual Property, and Excellence Awards

Clarivate*

- Selected for the Clarivate Top 100 Global Innovators for three consecutive years

International Convention on Quality Control Circles (ICQCC)

- Awarded the Highest Honor – Gold Award

Industrial Development Administration, Ministry of Economic Affairs*

- Passed TIPS A-Level Certification

EE Awards Asia

- Awarded EE Awards Asia 2025 – Technology Excellence Award and Technology Platform Award (Best Security Platform of the Year); Nuvoton (Taiwan): NuMicro® M2354 Chip-Level Physical Security MCU awarded EE Awards Taiwan – Best MCU of the Year

Taiwan Intellectual Property Office

- Ranked 18th in domestic corporate invention patent applications and 11th in domestic corporate invention patent grants in 2025

Taiwan Continuous Improvement Activity (TCIA)

- Awarded 1 Gold Tower Award, 3 Silver Tower Awards, and 1 Bronze Tower Award

International Standards and Certifications

Certification Item	Winbond CTSP	Winbond Kaohsiung Fab	Yanshin Plant	Nuvoton Japan
ISO 9001 Quality Management System	✓	✓	✓	✓
QC 080000 Hazardous Substance Process Management	✓	✓	✓	–
IATF 16949 Automotive Quality Management System	✓	✓	✓	–
ISO 26262 Road Vehicle Functional Safety	✓	✓	–	–
ISO 21434 Road Vehicle Cybersecurity	✓	✓	–	✓
ISO/IEC 27001 Information Security Management System	✓	✓	✓	✓
ISO 14001 Environmental Management System	✓	✓	✓	✓
ISO 50001 Energy Management System	✓	✓	✓	✓
ISO 46001 Water Efficiency Management System	✓	✓	–	–
ISO 14064-1 Greenhouse Gas Inventory	✓	✓	✓	✓
ISO 14067 Product Carbon Footprint	✓	✓	✓	✓
ISO 14046 Product Water Footprint	✓	✓	–	–
ISO 45001 Occupational Health and Safety Management System	✓	✓	✓	✓
TOSHMS Taiwan Occupational Safety and Health Management System	✓	✓	✓	–

For full certificates and verification statements, please refer to the ESG website download section.

Sustainability Highlights

- **SBTi** has validated Winbond Group's science-based emissions reduction targets.
- **63.14 Million** kWh total renewable energy consumption, representing a **43%** year-on-year increase.
- **100%** of Winbond's manufacturing sites are certified to the UL 2799 Platinum Zero Waste to Landfill standard.
- **PFAS-Free** product portfolio launched, delivering cumulative carbon reduction benefits of approximately **35,044 tCO_2e** through green power manufacturing.
- **Product Carbon Footprint Information** is available to customers through Winbond's corporate website, enhancing convenience and transparency.
- **38 species**：Established Taiwan's largest living Camellia germplasm conservation bank.
- **CDP A List** recognition for Climate Change and Water Security, plus an A (Leadership) rating in Supplier Engagement Assessment (SEA) within Winbond.

- **100%** completion rate of global human rights due diligence, with full employee training coverage.
- **Top 20%** average non-manager employee salary ranking among listed semiconductor peers.
- **NT$29.02 Million** total investment in social contribution programs.
- **3,197** volunteer service participations recorded.
- **3,691** hours of volunteer leave granted to employees.
- **1,002+ kg** of waste removed through **cumulative**

- **NT$1.2 Billion** Board-approved renewable energy investment plan to support long-term transition.
- **11,200+** cumulative approved patents, underscoring long-term technology leadership.
- **3 Years Selected consecutively as a Clarivate Top 100 Global Innovator**
- **240%** overachievement in "Large Leads Small" low carbon and smart transformation project, delivering **19,995 tCO_2e** emissions reduction.
- **100%** supplier sustainability due diligence completion rate.
- **100%** on-site audits and improvement guidance completed for Tier-1 critical suppliers, including third-party verification.
- **57** group-wide digital and AI training sessions to strengthen workforce digital capabilities.
- **NT$4.28 Million** annual interest expense savings achieved through sustainability-linked loans (SLL).

Winbond Story

Advancing the Path toward Sustainable Growth— Driving Long-term Value through a Sustainability-driven Growth Strategy

At a critical juncture marked by the accelerated global AI wave, the transition toward net zero emissions, and the rapid restructuring of industrial landscapes, the Winbond Group upheld its sustainability vision of "being a hidden champion in providing sustainable semiconductors to enrich human life." Sustainability was positioned as a core engine for long-term competitiveness and value creation, rather than mere regulatory compliance. As AI and digital technologies continued to profoundly reshape the industry, Winbond consistently delivered high-performance, low-power, and highly reliable semiconductor solutions to support the dual development of smart applications and sustainable transformation.

With a systems-oriented mindset, the Winbond Group integrated sustainability principles with AI- and data-driven decision-making, embedding them deeply into corporate strategy, operational management, and organizational culture. This approach enabled environmental responsibility, social value, and business growth to reinforce one another in a positive cycle. Through the synergistic advancement of technological innovation and sustainable governance, Winbond continued to enhance operational resilience and international competitiveness, steadily creating long-term value in a new era.

Sustainable Growth at Winbond: Driving Long-term Value through Three Core Pillars

The Winbond Group systematically advanced sustainable growth through three core pillars—Strategy × Digital × Culture—transforming sustainability from a vision into an executable, measurable, and scalable competitive advantage.

I. Strategy: Embedding Sustainability at the Core to Build Enduring Competitive Advantages

Low-carbon Business Models × Customer-centricity to Drive Long-term Competitiveness

Winbond' s sustainability strategy was deeply integrated with its core business from the outset. The Company continuously promoted the development of low-carbon, high-efficiency products and processes to respond to customer demand for energy-saving, low-carbon, and highly reliable semiconductor solutions. By embedding sustainability value directly into its products, Winbond helped customers reduce their overall environmental footprint while strengthening long-term partnerships.

Strengthening Supply Chain Resilience to Enhance Overall Operational Stability

In response to heightened uncertainty arising from climate change and geopolitical risks, Winbond regarded supply chain resilience as a critical component of its sustainability strategy. Through ESG assessments, data-driven management, and partner enablement programs, Winbond collaborated with suppliers to enhance sustainability capabilities and risk management maturity, thereby reducing the risk of operational disruptions and reinforcing the stability and competitiveness of the entire value chain.

From Capital Management to Sustainable Competitiveness: Green Finance Initiatives by the Finance Function

Guided by long-term corporate strategy, the finance function actively promoted green finance and sustainability-linked loans, incorporating sustainability performance into financing conditions with clearly defined and measurable targets to encourage enterprise-wide energy conservation and carbon reduction. By linking environmental responsibility with capital costs, Winbond not only reduced financing costs but also enhanced governance transparency and brand credibility, translating sustainability into tangible financial and competitive advantages.

II. Digital × Sustainability: Deepening ESG Digital Governance through Platformization and Scaled AI

The Digital Transformation Pathway: From Infrastructure to Governable and Replicable Capabilities

Winbond' s digital transformation was not a series of isolated projects, but a continuously scalable capability-building journey. Centered on trusted digital platforms, the transformation simultaneously supported operational efficiency, risk control, and sustainability objectives. By continuously upgrading core systems and data capabilities, Winbond reduced operational and cybersecurity risks and established a trusted and controllable foundation for data integration and AI applications.

Platform-based governance: establishing Group-wide Process and Governance Backbones

Through group-wide shared platforms that integrated previously fragmented systems, Winbond formed a closed loop spanning data collection, governance, analytics, and AI applications. By 2025, these platforms covered core domains including systems, data, business intelligence, intelligent application services, system monitoring, and Large Language Models (LLMs), supporting consistent governance and operational resilience across regions and subsidiaries.

In R&D and manufacturing, platform-based approaches advanced smart manufacturing through defect and yield analysis, automated engineering reports, reliability analysis, manufacturing data and AI platforms, and CMS & CUBE collaboration platforms. These initiatives accelerated data analytics and process optimization, enabling engineering teams to focus more on root-cause analysis and improvement, continuously enhancing quality and reliability while strengthening competitiveness.

Data-driven Decision-making: Enhancing Decision Quality with Consistent, Real-time, and Trusted Information

Through cross-system integration and shared reporting platforms, Winbond significantly reduced data silos and manual errors while improving decision timeliness. In 2025, daily data queries reached approximately 470,000, with 3.7 TB of data processed per day and 4,300 active reports. Employees were empowered to independently build analytical reports, comprehensively enhancing organizational productivity.

Scaling AI into Daily Operations: From Pilot Projects to a "Natural Assistant" in Workflows

With shared AI platforms and robust governance mechanisms, mature applications were rapidly replicated across finance, customer service, project collaboration, environmental health and safety compliance, and process equipment domains. AI was progressively embedded into daily workflows, becoming a critical enabler for improving efficiency and quality.

III. Culture: An Inside-out Engine for Transformation

For the Winbond Group, sustainability represented a multifaceted and deeply rooted concept.
It embodied a corporate spirit capable of enduring for generations.
It represented a core capability for creating value and sustaining competitiveness in a rapidly changing world, driving Winbond to become a pillar of sustainable development for human society.
It also served as a reminder to use limited resources wisely and to safeguard the planet we all share.
Winbond translated this sustainability ethos into five core values: Integrity, Accountability, Passion for Learning, Proactive Innovation, and Sustainable Contribution.
Integrity formed the foundation of conduct.
Accountability ensured that principles were translated into action.
Learning continuously expanded horizons and capabilities.
Innovation enabled the Company to evolve with the times and respond to societal needs.
Most importantly, Winbond people were constantly reminded that contributing to society through their own efforts was the essence of corporate sustainability. By embedding safe and low-carbon technical practices into daily work, Winbond treated sustainability as a core competitive strength and advanced step by step to meet society' s high expectations for environmental sustainability.

Low-carbon Business Models × Customer-centricity to Drive Long-term Competitiveness

Winbond embedded customer-centricity into its daily operations. Similar to Thomas Edison' s deep insight into real societal pain points—recognizing the limitations of kerosene lamps in safety, brightness, and durability, and inventing electric lighting capable of long-term safe use—this philosophy aligned closely with the core spirit of Winbond' s CMS (Customized Memory Solution). CMS addressed highly diversified and in-depth customer requirements on a daily basis, ranging from memory dimensions and interfaces to 3D packaging architectures, far exceeding the complexity of standard products. To meet these demands, product design, process development, and testing workflows required exceptional flexibility to respond to evolving technical challenges.

In advancing cultural transformation, Winbond translated "always putting customers at the center" into three concrete actions:

- Jointly Defining Success
- Jointly Sharing Development Costs
- Transforming Delivery Into A Replicable Capability.

Jointly Defining Success and Alleviating Carbon Anxiety by Turning Energy Efficiency into Competitive Advantage

Amid the global decarbonization trend, Winbond recognized the intense ESG supply chain scrutiny and carbon footprint audit pressures faced by customers. Success was no longer defined solely by component performance, but by enabling customers to achieve their carbon targets. Winbond explicitly incorporated low-voltage and low-power designs into its development roadmap, launching products such as 1.2V NOR Flash and 16nm DDR4, which enabled up to 37% energy-saving and carbon-reduction performance at the application level.

In parallel, Winbond proactively promoted Product Carbon Footprint (PCF) disclosure and supplied renewable-energy-manufactured products, providing transparent and auditable carbon information that enabled customers to compete with confidence in sustainability-driven markets.

Winbond first launched the world' s first 1.2V ultra-low-power NOR Flash, reducing power consumption by 50% and driving nearly tenfold sales growth during 2024–2025. In 2025, the portfolio expanded to a full range of 8Mb–256Mb products. Through optimized circuitry and leakage detection technologies, overall power consumption was further reduced by 40%, helping customers enhance energy efficiency and achieve end-application decarbonization goals, while reinforcing Winbond' s leadership in the low-carbon memory market.

Products manufactured with renewable energy began mass shipment in December 2024 to key ESG-focused customers, marking a significant milestone in aligning with ESG market trends and addressing growing demand for green, energy-efficient products. Compared with conventionally manufactured products, these offerings reduced product carbon emissions by at least approximately 60%. By the end of 2025, Winbond shipped 451 million renewable-energy-manufactured products, reducing approximately 35,044 tCO_2e—equivalent to the annual carbon sequestration capacity of 91 Daan Forest Parks.

Winbond believed that the future of the planet and corporate sustainability were inextricably linked. Ensuring that innovation and environmental responsibility advanced together was essential for long-term growth. The launch of renewable-energy-manufactured products represented a major milestone in Winbond' s sustainability journey.

Creating Platforms and Sharing Development Costs to Safeguard Long-term Stable Supply and System Security

In automotive and industrial control applications, product lifecycles often spanned 10 to 20 years, where even minor changes or security vulnerabilities could lead to severe consequences. In edge AI applications, extensive innovation also required rigorous validation. To ensure customers could innovate confidently while maintaining long-term supply stability, Winbond shared the cost increases associated with high customization and established CMS and CUBE collaboration platforms to reduce overall development costs.

At the same time, Winbond embedded cybersecurity at the foundational level of its products by developing the Secure Flash product line, proactively mitigating potential threats at the source. By jointly shouldering system validation and security risks, Winbond safeguarded customer brand trust.

Making Delivery a Replicable Capability : Pioneering AI Services to Eliminate End-of-Life Risks

When key components reached end-of-life (EOL), customers often faced high costs and production line shutdown risks associated with redefining requirements. To address this critical pain point, Winbond subsidiary Miraxia pioneered the "MCU EOL Requirement Definition" AI service. By mobilizing internal technical resources, the service enabled customers to quickly identify alternative solutions and shorten development timelines. This award-winning innovation transformed one-off problem-solving into standardized, replicable empowerment services, ensuring uninterrupted customer operations.

True customer-centricity resided in every R&D decision and service detail. Guided by this belief, Winbond continued to move forward alongside all stakeholders, transforming customer challenges into driving forces for progress.

A Resilient Supply Chain Framework to Enhance Overall Operational Stability

Winbond positions the supply chain as a critical domain for scaling sustainability impact and sustaining operational resilience. Starting in 2022, Winbond advanced low-carbon governance in sequence — beginning with capability co-learning and cross-sector initiatives, then progressing toward a sustainable value chain anchored in data, systems, and measured decarbonization outcomes.

2022–2024 | 2024–2025 | 2025-

Phase 1: Building Consensus and Capability

Resource and expertise gaps defined the early stage of supply chain sustainability transformation. Winbond addressed these gaps through supplier co-learning as the entry point. Between 2022 and 2024, Winbond hosted Supplier ESG Co-Learning Workshops and Sustainable Supply Chain Management Forums, drawing thousands of cumulative participants. Learning topics included: SBTi reduction targets, Facility energy conservation, Low-carbon raw materials, Data center decarbonization, Hydrogen applications, Collaborative supply chain decarbonization

Winbond also connected suppliers to government resources, hosting supply chain transformation diagnostic subsidy briefings to help small and medium-sized suppliers navigate policy tools and lower transition barriers. Winbond promoted certifications such as iPAS Net zero Planning Manager to close the sustainability talent gap. Sustained engagement established a shared low-carbon vocabulary across the supply chain, reframing low-carbon from a compliance requirement into a strategically managed and actively discussed business topic.

Phase 2: Institutionalization and Digitalization

With foundational capabilities in place, Winbond accelerated the institutionalization of low-carbon governance from 2024 and completed key milestones in 2025. Winbond deployed a carbon accounting management system across Scopes 1, 2, and 3. Because Scope 3 emissions originate largely from the supply chain, Winbond embedded product carbon information — including Product Carbon Footprint (PCF) — directly into the supplier quotation process, requiring suppliers to submit carbon data alongside pricing. Carbon information now circulates within the transaction mechanism. Winbond established supplier capacity-building and training mechanisms for carbon data to enhance partners' capabilities in system operations and data interpretation. By the end of 2025, the system held more than 13,000 product and service carbon records, providing a foundation for supply chain decarbonization decisions.

Winbond reinforced supply chain resilience at the source through a rigorous New Supplier Evaluation Mechanism. The mechanism covers core indicators across quality and delivery, and integrates the RBA Code of Conduct and corporate sustainability requirements. As an ICP member of the Ministry of Economic Affairs, Winbond cross-references international sanctions lists at the sourcing stage to secure the supply chain. Compliant suppliers must additionally submit: Third-party quality verification, Process change notification management principles, Hazardous substance management questionnaires.

For security products, outsourced manufacturing suppliers must additionally provide third-party verification certificates and complete the "Security Product Outsourced Processing Safety Control Audit Questionnaire." Among the 13 new suppliers added in 2025, 100% passed environmental, social, and economic standard evaluations, strengthening supply chain risk resilience at the foundation.

Phase 3: Full Realization of Decarbonization Outcomes

With institutional and data foundations in place, 2025 marked the year of measurable outcomes for Winbond's low-carbon value chain. During the project period, Winbond deepened the "Large Leads Small" low-carbon collaboration model across upstream transportation, back-end packaging and measurement services, and waste treatment. Key progress included: More than 30 decarbonization initiatives completed, and cumulative reductions of 19,995 tCO_2e, 240% above the original target. These results demonstrate the multiplier effect of collaborative supply chain decarbonization.

In logistics and procurement, Winbond completed multi-source qualification for critical materials and converted selected items to local sourcing, lowering transportation emissions. Winbond introduced shared logistics models, advanced paperless import/export shipping, and optimized packaging. In 2025, Winbond deployed energy-efficient testing equipment in back-end packaging and testing, lowering emissions from energy consumption. In packaging and resource circularity, Winbond drove packaging reduction, recycling and reuse, and alternative solutions, and lowered the IPA waste-liquid incineration ratio — converting multiple waste streams from incineration to reuse and embedding low-carbon principles into manufacturing processes and daily operations.

Winbond adopted ISO 31000 risk management thinking to mitigate climate-related supply chain threats. Under climate change scenarios, Winbond assessed biodiversity impacts across global supplier locations and used emergency response systems to monitor global natural disaster impacts in real time. In 2025, Winbond conducted rigorous ESG sustainability due diligence on all Tier-1 suppliers for the first time, identifying 11 high-risk suppliers based on scoring results — 100% of which were required to submit improvement plans. Through "preventive controls" and "active coaching," Winbond reduced supply chain disruption risks from climate change and external events, strengthening overall supply chain resilience.

Please refer to Section "2.3 Supply Chain Engagement and Impact"

Deepening ESG Digital Governance through Platformization and AI at Scale

I. Advancing the Winbond Group's Digital Transformation

Winbond's digital transformation is not a single project but a continuously scalable capability-building pathway. Winbond progressively internalizes digital capabilities as the operational foundation, enabling technology investments to sustain operational efficiency, risk control, and sustainability objectives over the long term. The pathway covers four core domains:

1. **System Modernization:**
   Building a Reliable, Compliant, Security-Hardened, and Agile Foundation

   Winbond continuously upgrades core operational systems, including ERP and data and analytics platforms. New architectures deliver higher security, stability, and availability — reducing operational disruption and information security risks, and establishing a trusted foundation for downstream data integration and AI applications.

2. **Platformization:**
   Establishing a Globally Consistent Operations and Governance Backbone

   Winbond consolidates application systems distributed across business units into shared digital platforms, including digital collaboration, project management, customer service, and system monitoring platforms. This strategy supports global operations with consistent processes, reduces duplicated build costs, and strengthens governance transparency. By 2025, the Winbond Group had established core platforms across the following domains:

   - Data integration and system development platform: unifies application development and deployment environments, raising system delivery efficiency and operational consistency.
   - System monitoring platform: provides real-time visibility into critical systems and service status, detects anomalies proactively, and lowers operational disruption risk.
   - Data platform: integrates manufacturing, R&D, sales, finance, and ESG data to support analytics and AI model training.
   - Business intelligence platform: delivers standardized dashboards and reports to support management meetings and operational decisions.
   - Knowledge management platform: structures organizational knowledge to enable cross-team collaboration and knowledge reuse.
   - AI application intelligence platform: serves as the shared foundation for Group-wide AI and automation applications, enabling rapid replication of validated use cases across business domains.

   Platformization enables Winbond to establish consistent processes and governance standards across subsidiaries and regions. The strategy reduces duplicated build and maintenance costs and accelerates the sharing and accumulation of knowledge and data.

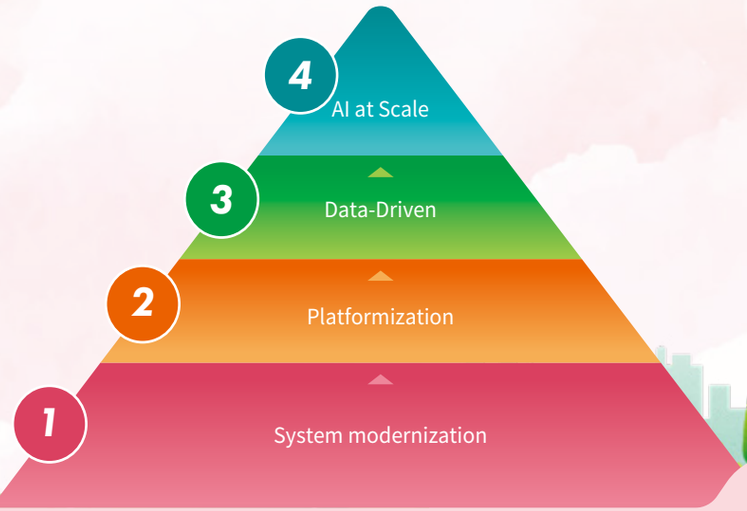
3. **Data-Driven:**
   Elevating Decision Quality through Real-Time Information

   Winbond establishes cross-functional and cross-system data integration mechanisms. Visualization dashboards give management and front-line employees real-time access to consistent and trusted information for daily operations and management decisions. Data applications span finance, manufacturing, R&D, and ESG indicators, shifting the management model from after-the-fact reporting to forward-looking management and risk early warning — elevating decision quality and response speed.

4. **AI at Scale:**
   From Isolated Projects to Pervasive Adoption

   Shared AI platforms and governance mechanisms enable Winbond to replicate validated success patterns across business domains, including financial analysis, customer service, process parameter optimization, knowledge search, and workflow automation. Application depth and breadth expand progressively. The core objective: embed AI into daily operations and decision processes as a long-term enabler that helps employees and equipment deliver higher efficiency.

| Digital Transformation Framework Across Four Strategic Domains |



II. 2025 Key Progress

1. R&D and Manufacturing Excellence (Systematic Tools and Platforms):

The Group accelerates data analytics and process optimization through critical digital systems, helping engineering teams focus on root-cause analysis and improvement while elevating product quality and reliability.

Defect and Yield Analysis System:
automates collection and classification of defect images, enabling engineers to focus on root-cause analysis more rapidly.

Automated Engineering Report Generation System:
uses templates and automated data ingestion to help engineers generate standardized reports rapidly.

Memory Component Reliability Analysis System:
integrates test data systematically to improve product life and reliability assessment efficiency.

Manufacturing Data and AI Platform:
integrates multi-site manufacturing data, reports, and monitoring with AI knowledge assistants for real-time analysis and decision support.

CMS & CUBE Collaboration Platform:
delivers a system platform supporting customized memory operations, maintaining close customer engagement and co-creating value through collaboration.

2. Smart Manufacturing Implementation:

Group companies integrate "digital platforms, talent empowerment, and project execution" to embed smart manufacturing into daily operations.

Platform dimension:
Centered on a digital platform integrating "manufacturing data, reports, monitoring, deployment, and AI knowledge assistants," Winbond deploys unified manufacturing data governance and information security mechanisms. The platform hosts more than 600 knowledge bases and 200 AI assistants, providing real-time decision support on the shop floor.

Talent dimension:
Tiered certification programs and hands-on workshops advance widespread adoption of data and AI capabilities. Certification penetration reaches 45% for data analytics, 27% for foundational AI, and 15% for advanced AI, cultivating cross-domain smart manufacturing talent.

Project dimension:
Winbond has completed more than 150 major projects, improved the process capability index (Cpk) by approximately 10–20%, and reduced approximately 1,388 metric tons of carbon emissions — delivering manufacturing efficiency and environmental sustainability in parallel.

Process Defect Analysis and Quality Optimization Automation:
Systematic and automated approaches integrate process, measurement, and defect data, upgrading defect analysis from manual interpretation to data- and visualization-driven decision mechanisms. Systematic Defect MAP analysis and early-stage automated electrical-characteristic defect analysis enable engineering teams to identify defect distribution and root causes with greater precision, reducing over-kill risk and accelerating problem localization and improvement. Annual outcomes:

- Operating cost savings of approximately NT$22 million
- Engineering hour savings of approximately 2,484 hours (covering defect map creation and electrical-characteristic preliminary analysis)
- Improved yield and process stability
- Reinforced product reliability and overall operational effectiveness

3. Customer Service Value Enhancement (CRM × AI):

To meet high customer expectations for delivery, quality, and technical support, Winbond combines CRM systems with AI applications to elevate service efficiency and quality, develop value-added service models, and reinforce customer trust through intelligent services and rigorous information security and compliance management — expanding service-based business models.

Intelligent Chatbot and D365 Customer Service Module Integration:
delivers 24-hour global real-time response, handling routine inquiries and document lookups, enabling customer service and technical staff to focus on high-value topics.

Embedded System EOL Service Innovation:

When MCUs reach end-of-life (EOL), system vendors typically must invest substantial engineering resources in redevelopment. Insufficient design documentation — for example, a lack of systematic design processes or high dependence on individual engineer experience — drives resource requirements significantly higher. Winbond subsidiary METC combines years of embedded design experience with generative AI, formally launching the MCU EOL "Requirement Definition" service in 2025. As long as original source code remains available, the service rapidly completes the system requirement definition needed for MCU replacement. This can shorten customer development timelines, lower production-line shutdown risk, faster product generation evolution for component suppliers, excellence award at Japan's Edgetech+ exhibition.

III. Continuing to Expand Impact

Looking ahead, the Winbond Group will continue to position "building sustainable competitiveness" as the core objective, deepening the connection between digital transformation and ESG strategy. Building on existing outcomes, Winbond will progress from "tool adoption" toward "value focus and scaled expansion" — using more precise, measurable, and governable approaches to elevate operational resilience, efficiency, and transparency in response to stakeholder expectations on sustainability and growth.

1

Focusing on High-Impact Domains: Aligning Digital Investment with Operational Effectiveness and Sustainability Metrics

Building on the widespread deployment of digital and AI capabilities, Winbond will focus the next phase on high-ROI and highly replicable core processes. Winbond will strengthen the value management closed loop of "requirement definition → deployment validation → scaled replication → outcome measurement," ensuring digital projects link directly to: efficiency improvements, cost optimization, delivery and quality improvements, carbon reduction, compliance transparency

This approach ensures every investment delivers measurable operational and sustainability benefits.

2

Strengthening Group-Level Platforms and Digital Governance: Supporting Global Operational Resilience with Consistent Standards

As operations continue to scale across regions and subsidiaries, Winbond will expand the coverage and governance maturity of Group-shared platforms, standardizing critical processes and data to establish a more resilient and controllable global operations backbone.

3

Advancing AI Deep Application: Evolving from "Efficiency Tools" to "Operational Agents and Decision Capabilities"

Winbond will continue to advance AI applications at scale, shifting future focus from "expanding usage" toward "deepening application value." AI will integrate more closely into workflows and decision mechanisms as a long-term enabler of productivity and operational resilience. Guided by the principles of "governable, measurable, and replicable," Winbond will prioritize application scenarios with clearly defined benefits, progressively expanding to more real-time and proactive operational support models. Outcomes: higher cross-functional collaboration efficiency, shorter information retrieval time, faster shop-floor problem localization and improvement

4

Deepening Talent and Culture: Making "Participate, Learn, and Lead" a Continuously Evolving Organizational Driver

The endpoint of digital transformation is not deploying more tools but building organizational capabilities that continuously evolve. Winbond will continue to deepen the "Participate, Learn, and Lead" cultural mechanism. Through the deepening of talent and culture, Winbond will extend digital capabilities beyond a few teams to become the shared language and source of resilience across the entire organization in the face of uncertainty.

5

Advancing "Robust Governance × Rapid Innovation" in Parallel: Responding to Stakeholder Expectations on Trust and Compliance

As AI and digital technologies evolve rapidly, Winbond will continue to refine its governance architecture, balancing innovation speed with risk control across information security, data privacy, model risk, and compliance requirements.

Winbond will establish traceable and auditable management mechanisms through more systematic approaches, ensuring digital transformation outcomes accelerate growth while elevating trust and transparency — responding to expectations from investors, customers, regulators, and society on corporate governance and sustainability responsibility.

For details, please refer to Section "1.3 Productivity and Business Performance."

Leading a Sustainable Pathway

Sustainability Governance

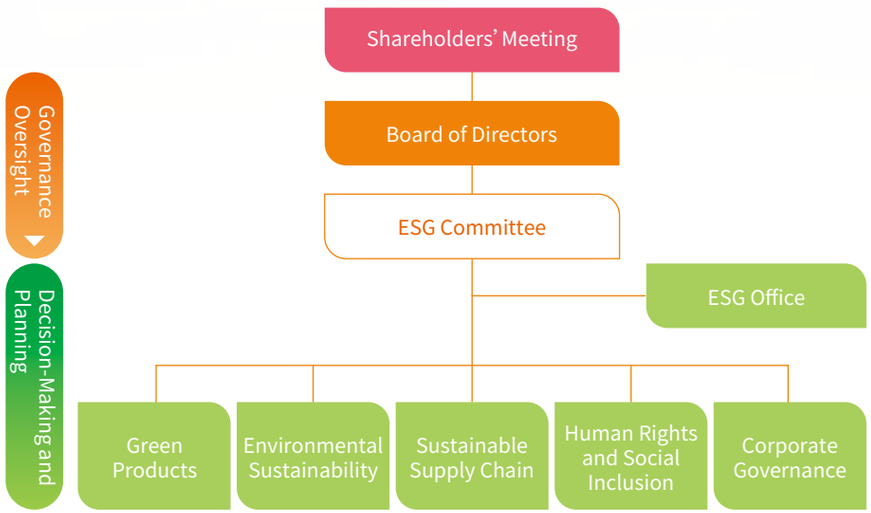
Winbond positions the Board of Directors as the highest body for sustainability governance, responsible for overseeing and guiding sustainability strategy and regularly reviewing its progress, and, when necessary, prompting the management team to make adjustments. The effectiveness of ESG governance is overseen by the Sustainable Development Committee, which is composed of the Chairman and all independent directors.

Winbond is committed to becoming the "hidden champion in providing sustainable semiconductors to enrich human life." The Chairman personally shapes the ESG vision, while the ESG Office and five functional teams are responsible for planning and executing the sustainability strategy. The organization is chaired by the President, and is composed of the Chief Sustainability Officer (CSO) and several core executives (the C-Suite), who jointly review and decide on ESG governance strategies and goals, and convene quarterly to ensure effective execution of the sustainability strategy.

The CSO and the five functional teams report annually to the ESG Committee and the Board of Directors on the execution outcomes of sustainability initiatives, the annual work plan, and material issues of stakeholder concern and corresponding response measures, ensuring that ESG governance and related policies are effectively implemented from the top down.

In 2025, a total of 34 key material matters were communicated with the Board of Directors as the highest governing body, covering topics such as business integrity, productivity and business performance, energy and greenhouse gases, talent management, and sustainable development.

| ESG Committee Organizational Chart |



Winbond ESG Strategy Framework

	E	S	G
Sustainability Vision	Measure innovative contributions with carbon footprint.	To be kind, righteous, proper, wise and trustworthy in everything we do. We would treat others as ourselves and extend that to all people and even everything	Conduct business with integrity and ethical behavior
Strategy	**Green Products** • Energy-efficient product planning and promotion. • Development of green manufacturing process. **Environmental Sustainability** • Formulate energy conservation and carbon reduction strategies, and disclose information in accordance with regulations. • Plan and promote energy management and resource utilization enhancement schemes. • Promote environmentally friendly actions.	**Human Rights and Social Inclusion** • Ensure human rights protection. • Recruit, develop, and retain diverse talents. • Establish a friendly and harmonious workplace. • Ensure occupational safety and health. • Care for society and participate in community development.	**Sustainable Supply Chain** • Continuously drive the transformation of supply chain relationships. • Implement sustainable procurement strategies and initiatives. • Implement sustainable supply chain risk assessment and management. • Promote the digitalization of sustainable supply chain management. **Corporate Governance** • Identify climate change risks and opportunities. • Plan and procure green energy. • Implement corporate governance in compliance with relevant laws and regulations. • Innovate and manage intellectual property. • Manage information and ensure security.
People	E S G ESG Awareness Building	E S G ESG Sustainability Capacities Building	
Process	G Risk management process	G Sustainability governance process	G Compliance disclosure
	E S G Sustainability innovation culture		
Technology	E S G Digital transformation	E S G Sustainability data establishment and application	
	G Carbon accounting system		

Value Creation and Six Capitals

Unit: as stated

Capital Type	Key Inputs	2025 Sustainability Outputs	Value Creation
Financial capital	• Strengthen financial structure, expand cost-competitive capacity, and adjust product mix	• Consolidated revenue: NT$89.406 billion • Consolidated net profit after tax: NT$3.177 billion	Financial management provides the foundation for R&D, production, and related services
Manufactured capital	• Capital expenditures for production tools/equipment and CMS process R&D equipment: NT$6.496 billion	• 12-inch wafers: 802,000 • 6-inch wafers: ~531,000	Investment in and operation of manufacturing and R&D assets to deliver products that meet customer needs
Human capital	• Employee training: NT$62.38 million; Employee welfare: NT$18,453,400 thousand	• Average training hours Winbond (Taiwan): 71 hours • Global retention rate: 91%	Support employees through competitiveness, DEI, and improved quality of life
Intellectual capital	• R&D investment reached 20% of revenue; Industrial AI-enabled digital transformation systems	• Over 11,200 granted patents • 57 digital transformation activities and trainings	Knowledge-based intangible assets enabling innovation, convenience, and security
Natural capital	• Afforestation; process improvements; energy-saving equipment; abatement; renewable energy	• Afforestation on national forest land totaling nearly 25 hectares • All global manufacturing fabs obtained ISO 14001 Environmental Management System certification	Minimize operational impacts on natural ecosystems
Social & relationship capital	• Social contribution: NT$29.02 million; Childcare subsidies > NT$430 million	• Three core strategies: talent development; social contribution & environmental education; nature-based solutions	Strengthen community relationships and social participation

Materiality Analysis and Stakeholder Engagement

In response to rapid changes in the global political and economic environment, industry competition, and sustainability transition trends, Winbond systematically analyzed internal and external environmental changes as a critical basis for operational decision-making, risk management, and sustainability strategy formulation. Upholding the principles of transparency and openness, the Winbond Group continuously engaged with stakeholders to identify sustainability topics of concern, incorporated these topics into the Group's sustainability strategy framework, and published the Winbond Electronics Materiality Analysis Report, disclosing identified material issues and their corresponding management approaches.

The Winbond Group adopted GRI 3: Material Issues (2021) under the Universal Standards of the Global Reporting Initiative to conduct its materiality analysis and defined its material issue assessment principles as follows:

- High level of stakeholder concern
- Significant impact on company operations
- Priority alignment with Winbond's sustainability management and development objectives

To align with the spirit of material issue management, topics with similar attributes were consolidated, resulting in the identification of eight material issues, which were reviewed annually together with related items.

Materiality analysis process

Collecting Sustainability Topics → **Compiling Priority Topics** / **Identifying actual and potential impacts** → **Assessing Impact Topics** → **Approving Material Topics**

Understanding the Organizational Context

Sustainability Topic List

Sources for Collecting Sustainability Topics：

- GRI Sustainability Reporting Standards
- SASB Standards
- United Nations Sustainable Development Goals (SDGs)
- Semiconductor Industry Indicators
- Peer Disclosures and Industry Development Trends
- Dow Jones Best-in-Class Index (DJBIC)

Consolidation of Sustainability Topics

- Identifying the impacts and challenges of operating activities and business relationships on the economy, environment, and people (including human rights), and integrating stakeholder profiles
- With confirmation by senior management, consolidating ***21*** ESG topics relevant to Winbond for use in the materiality survey

Stakeholder concern questionnaire and positive/negative impact assessment questionnaire

Stakeholder concern topic assessment questionnaire

Distributed by Winbond's sustainability department to stakeholders, inviting stakeholders to assess their level of concern for each topic to understand stakeholder priorities

2,343
stakeholder concern questionnaires

Positive/negative impact topic assessment questionnaire

Completed by members of Winbond and Nuvoton's ESG Committee and senior executives to assess the degree of positive and negative impacts on operations and the economy, society, and people (including human rights)

44
senior executive impact assessment questionnaires

Stakeholder identification results

Stakeholders
1 Employees
2 Customers
3 Suppliers / Contractors
4 Government
5 Shareholders / Investors
6 Community / Society
7 Media

Stakeholder priority topics

Issues
1 Regulatory Compliance
2 Occupational Safety and Health
3 Ethical Management and Corporate Governance
4 Information Security and Privacy Protection
5 Risk Management
6 Human Rights and Equality
7 Productivity and Business Performance
8 Green Products and Services
9 Customer Relationship Management
10 Labor Relations
11 Supply Chain Management

Materiality matrix for positive/negative impact significance and likelihood

List of material topics

Confirming material topics

Senior executives identified ***eight*** material topics based on the importance of sustainability development to the Company

Completeness disclosure

Confirming ***100%*** alignment with sustainability context and completeness disclosure requirements

Establishing management policies

Group senior management established management policies

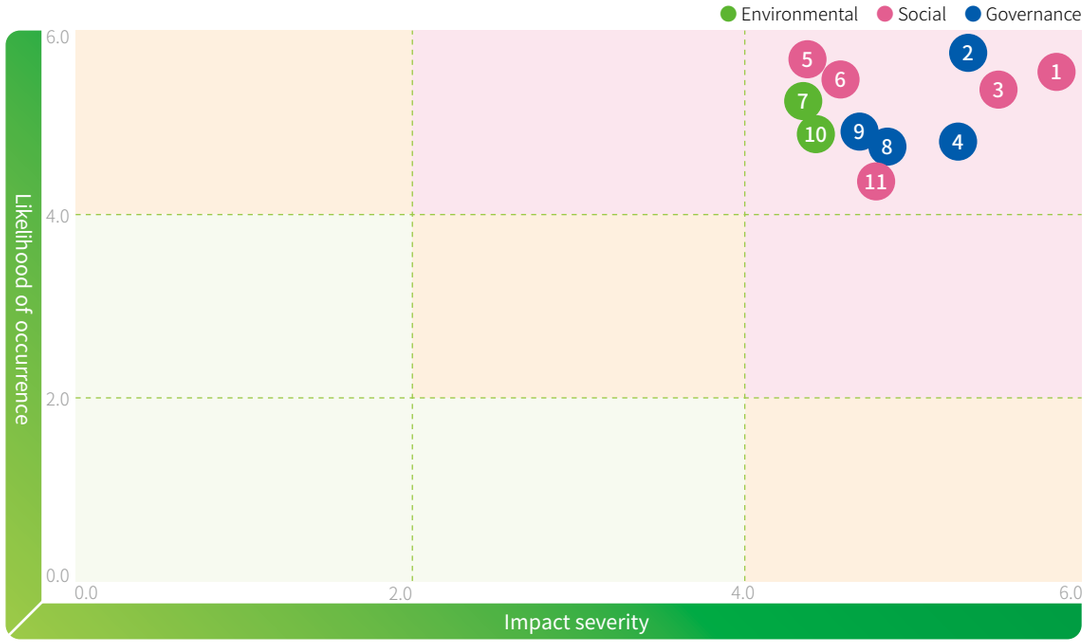
Material topics approved by the Sustainability Development Committee

Preparing the Sustainability Report

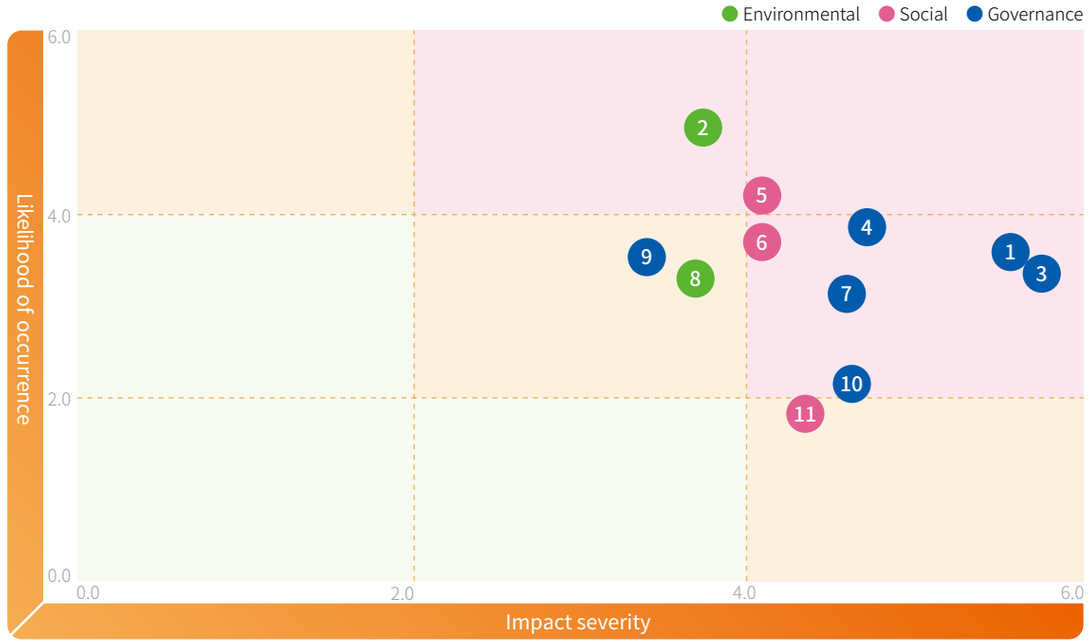
Material matrix of positive and negative impact severity and likelihood

In accordance with the definition of materiality under the GRI Standards (2021), the Winbond Group' s senior management conducted impact severity assessment questionnaires, considering the principle of Double Materiality, to evaluate the positive and negative impacts of 21 sustainability topics on the economy, the environment, and people (including their human rights). Each topic was assessed and scored based on both likelihood of occurrence (actual or potential impact) and impact severity.

Matrix of Positive Impact Severity and Likelihood of Occurrence



Matrix of Negative Impact Severity and Likelihood of Occurrence



Topics from positive impact analysis			
1	Talent Recruitment and Development	7	Energy and Greenhouse Gas Management
2	Research, Development and Innovation	8	Information Security and Privacy Protection
3	Compensation, Benefits, and Employee Care	9	Customer Relationship Management
4	Business Integrity and Corporate Governance	10	Air Pollution Control
5	Occupational Safety and Health	11	Human Rights and Equality
6	Labor Relations		

Topics from negative impact analysis			
1	Information Security and Privacy Protection	7	Research, Development and Innovation
2	Energy and Greenhouse Gas Management	8	Water Resource Management
3	Customer Relationship Management	9	Climate-Related Risks and Opportunities
4	Productivity and Business Performance	10	Supply Chain Management
5	Talent Recruitment and Development	11	Occupational Safety and Health
6	Compensation, Benefits, and Employee Care		

Confirmation of material issues

The Winbond Group confirmed its material issues based on: • High stakeholder concern • Significant impact on company operations • Priority for corporate sustainability development

Dimension	Sustainability topic	Stakeholder concern	Operational impact	Sustainability priority	Material issue (8 in total)
Economic	Business Integrity and Corporate Governance	✓	✓	✓	Business Integrity and Corporate Governance
	Regulatory Compliance	✓		✓	
	Risk Management	✓		✓	Risk Management
	Information Security and Privacy Protection	✓	✓	✓	
	Supply Chain Management	✓	✓	✓	
	Research, Development and Innovation		✓	✓	Research, Development and Innovation
	Productivity and Business Performance	✓	✓	✓	Productivity and Business Performance
	Customer Relationship Management	✓	✓	✓	Green Product
Environmental	Green Product and Services	✓		✓	
	Energy and Greenhouse Gas Management		✓	✓	Energy and Greenhouse Gas Management
	Climate-Related Risks and Opportunities		✓	✓	(Risk management)
	Waste management				
	Water Resource Management		✓	✓	Water Resource Management
	Air Pollution Control		✓		
	Biodiversity				
People (including human rights)	Compensation, Benefits, and Employee Care		✓	✓	Talent Management
	Talent Recruitment and Development		✓	✓	
	Human Rights and Equality	✓	✓	✓	
	Labor Relations	✓	✓	✓	
	Occupational Safety and Health	✓	✓	✓	
	Social engagement				

* In response to changes in international trends and requirements compared with the previous reporting period, the topics “Business integrity and Corporate Governance” and “Regulatory Compliance” were consolidated into “Business integrity and Corporate Governance”; the topics “Supply Chain Management” and “Climate-Related Risks and Opportunities” were consolidated into “Risk Management”; and “Water Resource Management” was newly added.

Relationship between material issues and Winbond' s value chain

The Winbond Group placed strong emphasis on its material issues. For each of the eight material issues, positive and negative impacts were described and linked to the value chain to identify impact boundaries across the Winbond Group, customers, and the supply chain. Specific performance outcomes were tracked annually.

⊕ Positive impact ⊖ Negative impact ● Actual impact (occurred) ● Potential impact (not yet occurred)

Material Issue	Impact aspects	Impact description	Value chain coverage			Corresponding chapter	GRI topic / Self-defined topic	SASB	SDGs
			Winbond Group	Customers	Supply Chain				
Business Integrity and Corporate Governance	⊕● Culture of integrity ⊕● Transparent governance ⊖● Corruption incidents ⊖● Insufficient awareness of regulations	• Strengthen culture of integrity and compliance operations to reduce risk of illegal acts and corruption, and maintain investor confidence and customer stability. • Actively conduct compliance training to prevent employee non-compliance arising from insufficient regulatory awareness.	✓	✓	✓	1.1 Corporate Governance 1.1.2 Business integrity	• GRI 205: Anti-corruption • GRI 206: Anti-competitive behavior	—	—
Risk Management	⊕● Comprehensive risk control ⊕● Information security ⊕● Climate resilience ⊖● Cyberattack ⊖● Supply disruption	• Establish risk management policies integrating financial, information security, operational, supply chain, and climate risks to reduce losses and disruptions and enhance resilience. • Strengthen climate change response measures to reduce disaster-induced production interruptions and environmental impacts. • Provide group-wide cybersecurity training to enhance incident reporting and response capabilities, safeguarding employee and customer data.	✓	✓	✓	1.2 Risk management 2.1 Supply Chain Overview 2.2 Sustainable Supply Chain Management	• GRI 204: Procurement Practices • GRI 308: Supplier environmental assessment • GRI 408: Child labor • GRI 414: Supplier social assessment	• TC-SC-440a.1 Materials sourcing	SDG 8.4 SDG 9.1 SDG 13.1 SDG 13.2 SDG 13.3 SDG 17
Research, Development and Innovation	⊕● Green design ⊕● Technology breakthroughs ⊖● Lagging process technology ⊖● Insufficient patents	• Adopt artificial intelligence and digital transformation to improve productivity and service quality across the Company while reducing inefficiencies and errors. • Retrain employees and provide customers with customized services; short-term costs may rise, but long-term returns are higher.	✓	✓		3.1 R&D and Innovation	• Self-defined topic: R&D and innovation	• TC-SC-520a.1 IP protection and competitive behavior	SDG 7.3 SDG 8.2 SDG 8.4 SDG 9.4 SDG 9.5 SDG 17
Productivity and Business Performance	⊕● Digital transformation ⊕● AI empowerment ⊖● Technology renewal cost	• Improved productivity reduces costs and enhances operating efficiency and capability. • Automation and digital transformation may displace traditional roles, and rapid technological change may bring uncertainty and financial risk. • Strengthen employee training and incentives to help employees adapt to new technologies and reduce transformation pressure.	✓	✓		1.3 Productivity and Business Performance	• GRI 201: Economic performance		SDG 8.1 SDG 8.2 SDG 8.4 SDG 8.5 SDG 17

Material Issue	Impact aspects	Impact description	Value chain coverage			Corresponding chapter	GRI topic / Self-defined topic	SASB	SDGs
			Winbond Group	Customers	Supply Chain				
Green Product	⊕ Low-power design ⊕ Carbon footprint disclosure ⊖ Insufficient understanding of customer needs ⊖ Quality below standard ⊖ Customer privacy breaches	• Develop high-performance, low-power products to enhance market competitiveness and customer satisfaction. • Promote low-power processes, carbon emission reduction, and renewable-energy manufacturing to reduce environmental impact across the product life cycle. • Implement hazardous substance management to protect employee and community health and improve product safety.	✓	✓	✓	3.2 Product and Service Quality Management 3.3 Customer Relationship Management	• GRI 418: Customer privacy	• TC-SC-410a.1 • TC-SC-410a.2 Product lifecycle management	SDG 7.3 SDG 9.4 SDG 13.2
Energy and Greenhouse Gas Management	⊕ Energy efficiency ⊕ Carbon emissions management ⊖ Rising energy costs ⊖ Carbon emissions exceeding targets	• Effective energy management systems improve energy efficiency, lowering operating costs and carbon fee risks. • Reducing greenhouse gas emissions and improving waste recycling rates support net zero emission goals. • Stable energy supply safeguards employee safety and mitigates the impact of global warming on communities.	✓	✓	✓	4.2 GHG and Energy Management	• GRI 302: Energy • GRI 305: Emissions	• TC-SC-110a.1 • TC-SC-110a.2 GHG emissions • TC-SC-130a.1 Energy management in manufacturing • TC-SC-150a.1 Waste management	SDG 7.2 SDG 7.3 SDG 12.2 SDG 13.1 SDG 13.2
Water Resource Management	⊕ Water-saving actions ⊕ Alternative water sources ⊖ Water shortages ⊖ Wastewater pollution	• Effective water management reduces water consumption and wastewater treatment costs, improves process efficiency, and reduces the risk of shutdowns due to water shortages, thereby maintaining supply chain stability. • Reduces competition for local water resources, preserves community quality of life, and prevents over-consumption from affecting residents' basic water rights.	✓	✓	✓	4.3 Water Stewardship	• GRI 303: Water and effluents	• TC-SC-140a.1 Water management;	SDG 6.3 SDG 6.4 SDG 6.5
Talent Management	⊕ DEI diversity and inclusion ⊕ Compensation competitiveness ⊖ Talent attrition ⊖ Recruitment difficulty ⊖ Occupational safety risk ⊖ Labor disputes	• Attract and retain top talent to enhance technological strength and operational stability and maintain industry competitiveness. • Implement human rights and labor ethics training, and promote a DEI and non-discriminatory workplace to safeguard employee rights and workplace fairness.	✓	✓	✓	5.1 Human Rights Management 5.2 Talent Management 5.3 Employee Communication and Relations 5.4 Occupational Safety and Health	• GRI 401: Employment • GRI 403: Occupational Health and Safety • GRI 404: Training and education • GRI 405: Diversity and equal opportunity • GRI 406: Non-discrimination	• TC-SC-320a.1 • TC-SC-320a.2 Employee health and safety • TC-SC-330a.1 Recruitment and management of global and skilled labor	SDG 3.4 SDG 3.7 SDG 3.8 SDG 4.3 SDG 4.4 SDG 8.5 SDG 8.8 SDG 15.1 SDG 15.5 SDG 17

Material issues management approach

Material Issue	Significance for Winbond	Strategy	Commitment
Business Integrity and Corporate Governance	• In the knowledge economy era, high-tech companies depend on a solid governance foundation. Upholding the corporate spirit of sustainable development, Winbond fulfills its duties as a responsible enterprise and places regulatory compliance at the top of its operating priorities.	• Regulatory Compliance is the basic threshold; "Business integrity" is the Company' s highest ethical standard. Building on these, Winbond pursues mutual prosperity for the Company and society. Operations comply fully with all regulations relating to corporate governance, finance, trade, environmental protection, occupational safety and health, information security, intellectual property, labor and human rights, internal controls, and risk management.	• Trust through integrity; authorization through trust; enabling every employee to deliver the value of their wisdom and experience. Comply with regulations in each operating jurisdiction. Comprehensively comply with all regulations and standards relevant to operations. Reduce direct and indirect operational risks. Meet the basic expectations of stakeholders.
Risk Management	• Winbond is customer-centric. Natural disasters, geopolitical changes, the emergence of new technologies, and regulatory or policy changes can all disrupt customer service or affect technology competitiveness and profitability. A robust risk management framework forms the basis for Winbond' s sustainable operations and high-quality customer service.	• Establish a "Risk Management Policy and Procedures" that proactively manages the four major risk categories facing modern enterprises—strategic, operational, financial, and information security. Develop comprehensive plans and processes for ex-ante assessment, hedging, loss prevention, and crisis response across operating activities, and report regularly to management and the governance body to ensure enterprise risk control objectives are met. The Risk Management Team continuously monitors international and domestic risk management practices.	• Upholding the goal of sustainable corporate operations, establish risk management mechanisms to integrate and manage potential risks that may affect operations and profitability, including but not limited to financial, environmental, information security, operational, supply chain, and climate risks.
Research, Development and Innovation	• Continued R&D and innovation in products, technologies, and business models is the core driver of Winbond' s competitiveness. It creates optimal value for customers, shareholders, and employees and is the most efficient pathway to sustainable operations and energy conservation and carbon reduction.	• Actively adopt AI and digital transformation to enhance overall productivity and R&D efficiency, empower employee innovation potential, and strengthen leadership in memory technology. Reinforce industry–academia collaboration and technology introduction, bringing in forward-looking technologies and professional talent to build an open innovation ecosystem. Protect intellectual property and trade secrets through patent strategies, technology confidentiality, and internal training, ensuring the exclusivity and commercial value of innovation outcomes.	• Deepen internal R&D capabilities, actively collaborate with academia, and introduce forward-looking technologies and innovative thinking to enhance R&D capacity and technological depth. Provide competitive products and services, and develop innovative products focused on energy efficiency and low-carbon production.
Productivity and Business Performance	• Productivity and Business Performance are the foundation of Winbond' s development, particularly in cost control. Improved productivity means more output from the same resources, directly reducing per-unit production costs and enhancing profitability and competitiveness.	• Targeting higher productivity, economic performance, and corporate value, Winbond advances digital transformation, introduces advanced technologies, and broadens the use of data and AI to continuously optimize operating strategies and management models. Through training and incentives, Winbond optimizes production processes, introduces automation, improves yields, and adopts lean management to strengthen overall operating efficiency and outcomes. Manage costs and risks related to automation investments, technology updates, and workforce transformation to ensure that cost optimization and digital transformation strategies are sustainable in the long term.	• Through sustained digital transformation, the introduction of advanced technologies, and AI applications, reduce costs, improve efficiency, and achieve greater operating performance.

Material Issue	Significance for Winbond	Strategy	Commitment
Green Product	• Guided by the vision of being the "hidden champion in providing sustainable semiconductors to enrich human life," Winbond delivers products that combine performance and environmental friendliness. By upholding information security and privacy protection principles, Winbond co-creates long-term value with customers and enables a sustainable and forward-looking technological future.	• Continue advancing low-power processes and low-voltage designs to reduce end-use energy consumption and the overall environmental impact of end applications. Embed green design into product development and disclose product environmental performance assessments (such as carbon footprint). Ensure the use of raw materials complies with international environmental regulations and customer green product requirements.	• Develop high-performance, small-form-factor, low-power, and high-quality green memory products to meet customer needs.
Energy and Greenhouse Gas Management	• Improving energy management effectively reduces carbon footprint, mitigates global warming, and lowers operating costs.	• Combine data science with technical expertise, working with facility system providers and equipment suppliers to continuously improve energy efficiency. Progressively increase the share of renewable energy each year to reduce greenhouse gas emissions.	• Combine expertise and data science to identify ways to improve energy efficiency, develop concrete energy-saving and carbon-reduction implementation plans, and regularly review results.
Water Resource Management	• Water is a critical input to Winbond' s production. Winbond fulfills its responsibility for green manufacturing by reducing environmental impacts during operations, in line with its commitment to social responsibility and sustainable operations.	• Establish a "Water Efficiency Policy." Implement water-saving action plans. Reduce process wastewater sources. Implement water pollution prevention. Develop diversified alternative water sources. Increase the reuse rate of recycled water.	• Continuously identify internal water-saving and circular reuse opportunities, minimize the use of hazardous substances, reduce or eliminate pollutant discharges, and safeguard the safety of drinking water in operating communities. Use water-saving measures and recycled water reuse to protect and reasonably utilize water resources to ensure sustainability.
Talent Management	• The semiconductor industry is technology-intensive and innovation-driven, and key talent is a primary source of competitive advantage. Effective talent management enhances innovation, reduces turnover risk, and strengthens global operations and organizational agility. Through talent development and retention, Winbond strengthens technological capability, maintains operational stability, and enables AI-driven innovation to continuously sharpen its competitive edge in a highly competitive market.	• Expand recruitment and internal training to strengthen recruitment outcomes and employability. Enhance employees' AI capabilities, using empowerment to boost productivity and share the Company' s success. Implement DEI principles together with education and training, aligning employee and Company needs.	• Commit to providing high-quality work environments and competitive compensation and benefits to attract, develop, and retain top talent and enhance employee engagement.

Stakeholder engagement

The Winbond Group references the five principles of the AA1000 Stakeholder Engagement Standard (SES 2015)—dependency, responsibility, influence, tension/concerns, and diverse perspectives—to identify and prioritize the relevance of stakeholders. In 2025, 44 senior managers conducted stakeholder identification, confirming the level of relevance between stakeholders and the Winbond Group, and identifying seven key groups: employees, customers, suppliers/contractors, government agencies, shareholders/investors, communities, and the media. Through stakeholder engagement, the Winbond Group actively responds to stakeholder concerns and works to achieve its business objectives. A stakeholder section on the Company's website provides communication contact details, allowing stakeholders with questions or suggestions on related topics to reach out to the corresponding contact based on their identity, ensuring effective engagement. In December 2025, the engagement outcomes for the year were reported to the Board of Directors, and the feedback was integrated into business decision-making to ensure stakeholders' rights and interests were respected.

- For Nuvoton's 2025 communication, please refer to the Nuvoton 2025 Sustainability Report.

seven key groups

- Employees
- Shareholders/ Investors
- Customers
- Community/ Society
- Suppliers/ Contractors
- Media
- Government

Employees

Highlights

- 97% of employees in Taiwan are willing to give their best efforts to help make Winbond a better company and continue their careers with Winbond over the next five years.
- Attendance rate at the supervisor management discussion meetings reached 76%

Definition

Employees are among Winbond's most important assets and the key stakeholders enabling Winbond's continued breakthroughs and innovation.

Material Topics

- Regulatory Compliance
- Information Security and Privacy Protection
- Occupational Safety and Health
- Human Rights and Equality
- Business Integrity and Corporate Governance

Engagement Methods / Frequency

Real-time:	Regular:	Ad hoc:
internal hotline; "I want to complain" Care channel; employee suggestion box; Unlawful Infringement Employee Complaint Review Committee; health consultations	functional communication meetings (periodic); company-philosophy articles on the employee homepage (weekly); occupational safety monthly meetings (monthly); labor–management and supervisor communication meetings (quarterly); plant-level EHS committee (quarterly); health/stress/pain surveys (annual); core-values and engagement survey (every two years); human rights due diligence (every three years)	medical and wellness activities; Employee Welfare Committee; internal website bulletin board

2025 Communication

- Supervisor management discussion meetings: 4 sessions, attendance approximately 76%
- 97% of employees in Taiwan are willing to give their best efforts to help make Winbond a better company and continue their careers with Winbond over the next five years.
- Chairman's thematic talks with employees: 1 session
- Internal complaint cases (excluding sexual harassment): 7 cases
- Sexual harassment cases: 0 cases
- Total cases handled through internal communication channels: 30
- Daily-issue feedback mailbox: 29 cases
- Labor–management meetings: 12 sessions
- Articles on company philosophy published on the internal employee homepage: 49 articles
- Internal TO ALL announcements published

Chairman's thematic talk with employees

Customers

Highlights	✓ Customer interactions reached 7,150 occasions ✓ Recognized as a Top 10 winner of the Hon Hai/Foxconn Sustainability Award – Sustainable Excellence Supply Chain Award
Definition	Customers are the primary source of Winbond' s economic value and stakeholders who pay close attention to Winbond' s operations and ESG performance.
Material Topics	• Regulatory Compliance • Customer Relationship Management • Supply Chain Management • Risk Management • Information Security and Privacy Protection
Engagement Methods / Frequency	Real-time: corporate website; phone; email; Microsoft Teams Regular: business meetings (periodic); ESG questionnaire (annual); technical seminars (annual); internal audits (annual) Ad hoc: customer audits
2025 Communication	• Awarded Top 10 of Hon Hai/Foxconn Sustainability Award – Sustainable Excellence Supply Chain Award • Customer interactions: 7,150 occasions • Site visits: Samsung, Amazon, Apple, and other customers visited Central Taiwan Fab and Kaohsiung Fab • Supplier conferences: attended Samsung and Pegatron supplier conferences, Toshiba (JSC Visit) • Exhibitions: Electronica India 2025 – discussed current market conditions, product roadmap, and potential solutions • Conferences: shared market and future trends and Winbond' s relevant strategies (India Sales Conference; Taiwan, Korea, and Japan distributor conferences) • Routine outreach, visits, and distributor networking events

JSC Visit

Suppliers/Contractors

Highlights	✓ ESG ecosystem engagement: 6,951 hours added ✓ ESG ecosystem engagement activities: 10 new sessions added
Definition	Suppliers provide materials and services essential to Winbond' s production and sustain Winbond' s normal operations and long-term sustainability — they are key stakeholders in our journey toward sustainable development.
Material Topics	• Regulatory Compliance • Information Security and Privacy Protection • Occupational Safety and Health • Human Rights and Equality • Business Integrity and Corporate Governance
Engagement Methods / Frequency	Real-time: supplier reporting channel; supplier ESG interaction platform Regular: Winbond ethics and integrity policy briefings (semi-annual); major supplier sustainability assessments (semi-annual); supplier sustainability audits (annual); supplier sustainability due diligence (annual); supplier energy and resource surveys (annual); face-to-face safety-agreement meetings with contractors (monthly)
2025 Communication	• ESG ecosystem engagement activities added: 10 sessions • ESG ecosystem engagement hours added: 6,951 hours • 100% of suppliers signed the Letter of Integrity Commitment and Supplier Code of Conduct • 100% of key suppliers signed the Conflict-free Minerals Statement • 100% of key suppliers signed the Hazardous Substances Non-Use Statement • Supplier complaint cases: 0 • New suppliers passing sustainability standards (economic, environmental, social): 100% pass rate • Tier-1 significant suppliers covered by sustainability due diligence: 100% coverage

2025 Sustainable Supply Chain Management Forum and Large Leads Small Award Ceremony

Government

Highlights	✓ Kaohsiung Fab received the Ministry of Environment's National Enterprise Environmental Protection Award
Definition	Government agencies focus on outcomes related to business integrity and regulatory compliance and are important stakeholders influencing industry development and policy initiatives.
Material Topics	• Regulatory Compliance • Occupational Safety and Health • Human Rights and Equality • Labor Relations • Water Resource Management
Engagement Methods / Frequency	Real-time: corporate website Regular: attendance at industrial park association meetings (quarterly) Ad hoc: government policy briefings; regulatory briefings; visits and inspections by regulators; consultations on industry standards drafts; communication meetings, forums, seminars, and public hearings hosted by government agencies
2025 Communication	• Awarded the National Enterprise Environmental Protection Award by the Ministry of Environment • Awarded the Energy Conservation Benchmark Award by the Ministry of Economic Affairs • Awarded "2025 Outstanding Occupational Safety and Health Management Unit at the Southern Taiwan Science Park" by the Southern Taiwan Science Park Administration • Each site engaged with the government on fire safety, environmental protection, occupational safety, and emergency response • Supported the Industrial Development Administration of the Ministry of Economic Affairs in promoting low-carbon and smart transformation demonstration site visits • Voluntarily disclosed information aligned with the Financial Supervisory Commission's "Sustainable Economic Activity Reference Guidelines" • Participated in the 2025 ESG Summit in response to government initiatives

Kaohsiung Fab receiving the National Enterprise Environmental Protection Award

Shareholders/Investors

Highlights	✓ 86 shareholder/investor communication meetings held ✓ Corporate governance evaluation ranking: top 6%–20%
Definition	As Winbond's primary source of capital, shareholders and investors are stakeholders most concerned with Winbond's operating performance and sustainable development.
Material Topics	• Regulatory Compliance • Business Integrity and Corporate Governance • Occupational Safety and Health • Information Security and Privacy Protection • Risk Management
Engagement Methods / Frequency	Real-time: phone; email Regular: investor conferences (quarterly, with additional sessions when special events occur); institutional investor one-on-one meetings (quarterly); brokerage investor forums (quarterly); annual general meeting (annual) Ad hoc: Winbond corporate website; TWSE Market Observation Post System
2025 Communication	• Corporate governance evaluation ranking: top 6%–20% • Annual general meetings held: 1 • Shareholder/investor communication meetings held: 86 • Institutional investor conferences held: 4 • Institutional investor meetings held: 81 • Consolidated financial statements disclosed: 4 • Revenue reports disclosed: 12

2025 Winbond Stakeholders' Meeting

Community/Society

Highlights	✓ Total of 1,208 donors ✓ 893 instances of volunteering or instructor participation
Definition	Communities are adjacent to Winbond' s operating sites and are most directly affected by Winbond' s operations — they are stakeholders of strong concern to Winbond.
Material Topics	• Occupational Safety and Health • Regulatory Compliance • Social engagement • Human Rights and Equality • Climate-Related Risks and Opportunities
Engagement Methods / Frequency	Ad hoc: volunteer services; project collaborations and visits
2025 Communication	• Total donors: 1,208 people • Volunteer service and instructor participations: 893 • Total social contribution investment: NT$29.02 million • Rural School Happy Breakfast Program supported 103 students with breakfast resources • Scholarships for disadvantaged students benefited 1,028 students • Environmental protection: protected Fazi River, beach cleanup at Nanliao, and Kaohsiung Yuanzhonggang Wetland cleanup; collected approximately 792 kg of waste • Nature-based solutions: 42 species of Camellia plants for seed conservation (38 already collected and cultivated; 1 evaluated as critically endangered, 1 endangered, 7 vulnerable, and 5 near threatened on the Red List) • Published the "Climate and Nature Report (TCNFD)"

Environmental conservation activities with Society of Wilderness

Media

Highlights	✓ 2 media press conferences held ✓ 25 press releases issued	
Definition	The media serves as the bridge between Winbond and other stakeholders, helping to convey Winbond's latest information promptly and supporting the disclosure of positive sustainability outcomes.	
Material Topics	• Business Integrity and Corporate Governance • Productivity and Business Performance • Research, Development and Innovation • Regulatory Compliance • Supply Chain Management	
Engagement Methods / Frequency	Real-time: phone / email; press releases (periodic)	Regular: media interview activities (annual); ESG questionnaire (annual)
2025 Communication	• Press releases issued: 25 • Media press conferences: 2 • Phone or email communications: 65 • Winbond operational reports provided: 4	

Zero-Carbon Family Day media interview activity

01

Corporate Governance

1.1 Corporate Governance 35

1.2 Risk Management 41

1.3 Productivity and Business Performance 60

1.4 Tax Management 65

1.5 From Capital Management to Sustainable Competitiveness 67

SDG 8.1: Sustain inclusive and sustainable economic growth
SDG 8.2: Enhance economic productivity through innovation and digital transformation
SDG 8.4: Improve resource efficiency in consumption and production
SDG 8.5: Achieve full and productive employment and decent work
SDG 17: Global partnerships

2025 Performance Highlights

- Selected as a constituent of the Dow Jones Best-in-Class World Index.
- Ranked consistently among the top 20% of listed companies in Taiwan's Corporate Governance Evaluation since its first edition
- Sustainability-Linked Loans (SLL) saves NT$4.28 million in annual interest expense
- CEO & Executive Succession
  Strengthened leadership pipeline and senior development program, with Board members serving as mentors to senior management.
- Continuously included in the FTSE4Good Emerging Index and the FTSE4Good TIP Taiwan ESG Index
- Core manufacturing process stability was improved through AI deployment, with Cpk indicators increasing by 10–20%
- Expanded the scope of ISO 27001 certification to include wafer production systems and obtained ISO 27001:2022 certification
- The Zero-Carbon Family Day has been held for four consecutive years, generating a cumulative carbon offset benefit of 732 tCO_2e

Targets and Progress of Material Topics

	2025 Target	2025 Progress	2026 Target	2030 Target
Business Integrity and Corporate Governance	• Major legal violations: 0 cases	✓ 0 cases	• 0 cases	• 0 cases
	• Major corruption incidents: 0 cases	✓ 0 cases	• 0 cases	• 0 cases
	• Compliance-related training courses: >12 per year	✓ 13 courses	• >12 per year	• >15 per year
Risk management	• No major violations	✓ No major violations	• No major violations	• No major violations
	• 0 days of production interruption due to climate disasters	✓ 0 days	• 0 days	• 0 days
	• Information security training completion rate: 100%	✓ 100%	• 100%	• 100%
	• 0 case of major cybersecurity incidents	✓ 0 case	• 0 case	• 0 case
Productivity and Business Performance	• ≥ 24 digital transformation sessions	✓ 57 sessions	• 45 sessions	• 72 sessions

Note 1: ✓ indicates that the target was achieved, while "⊖" indicates that the target was not achieved.
Note 2: In 2025, employees demonstrated strong interest in training and capability-building programs related to digital and AI tools. Accordingly, a higher number of sessions were delivered to meet employee learning needs.
Note 3: The scope of the targets covers the Winbond Group.

Winbond continued to strengthen corporate governance as the foundation of sustainable operations by refining governance structures and enhancing the Board's supervisory functions to safeguard shareholder rights. In alignment with corporate strategy, the Group integrated digitalization and artificial intelligence to advance enterprise risk management and operational oversight mechanisms, improve decision-making quality, and enhance overall organizational productivity. Winbond also established sound business conduct and ethical standards to embed integrity and honesty as core corporate values.

"Business Integrity" is our core value. It drives continuous enhancement of corporate governance, prudent operations, and sustainable development. By leveraging artificial intelligence and digital technologies for empowerment, Winbond improves operational efficiency and overall productivity while actively responding to stakeholder expectations, working together to create a better future for society.

Convener
Head of Finance Division | **Yen-Chieh Tai**

1.1 Corporate Governance

1.1.1 Board of Directors

Winbond upholds a corporate culture and ethical standards rooted in integrity-based management. The Group believes that a Board characterized by independence, professionalism, and diversity is a cornerstone of sound corporate governance and sustainable development. As the highest governance body, the Board oversees management operations, ensures transparent disclosure of operational and financial information, and provides guidance and supervision on major business strategies and risk matters to safeguard the long-term interests of the Company and all shareholders.

Building on this governance philosophy, the Board established five functional committees in accordance with applicable regulations and best practices. Each committee operates independently and reports regularly to the Board on meeting outcomes, key issues, and resolutions, enhancing decision rigor and governance effectiveness.

Note: When the Board of Directors or any functional committee reviewed proposals involving a director's personal interests, the relevant director fully disclosed the reasons for recusal and, in accordance with applicable laws and regulations, abstained from both discussion and voting to prevent and mitigate conflicts of interest. For details, please refer to the Winbond 2025 Annual Report.

Organization

Board composition

- The 13th Board comprises 11 directors, including four independent directors and three female directors.
- More than two-thirds of seats are held by directors who do not concurrently serve as executives of Winbond or its subsidiaries.
- Three directors have spousal or second-degree familial relationships, which does not exceed half of Board seats and complies with relevant regulations.

Election of the Board

- Winbond established procedures governing director nomination and election, defining nomination methods, qualification criteria, and evaluation processes. Selection considers professional expertise, industry and management experience, business judgment, alignment with long-term development and core values, ethical conduct, leadership reputation, and overall Board independence and diversity.
- Independent director candidates undergo qualification and independence reviews before Board approval.
- Directors are elected through a candidate nomination system for a three-year term by shareholders at the shareholders' meeting.

Board attendance

- In 2025, the Board convened eight meetings with an overall attendance rate of 99% (93% in-person and 6% by proxy).

Material issue communication

- To strengthen corporate governance, all critical and material matters were reported to the Board of Directors by the chairs of the respective functional committees and the executives with delegated authority and responsibility.
- In 2025, 34 material issues were communicated to the Board via functional committee chairs and responsible executives, covering topics such as business integrity, productivity and business performance, energy and greenhouse gas management, human capital management, and sustainability.

Board members

Board members are elected by shareholders at the shareholders' meeting in accordance with applicable laws and the Articles of Incorporation. Members of the functional committees are nominated and appointed by Board resolution in accordance with their respective charters. All independent directors meet the professional qualifications, work experience, concurrent appointment restrictions, and independence requirements under relevant regulations.

Position	Name	Gender	Age	Background					Area				Independent director ratio	Executive director ratio
				Business management	Leadership & decision-making	Industry expertise	Finance & accounting	IT	Environmental	Economic	Social	Risk Management		
Chairman	Arthur Yu-Cheng Chiao	Male	61–70	●	●	●	●	●	●	●	●	●	36%	18%
Vice Chairman	Chin-Hsin Investment Co., Ltd. (Representative: Tung-Yi Chan)	Male	61–70	●	●	●		●	●	●	●	●		
Independent Director	Allen Hsu	Male	71–80	●	●	●	●			●	●	●		
Independent Director	Stephen T. Tso	Male	71–80	●	●	●		●	●		●	●		
Independent Director	Chung-Ming Kuan	Male	61–70		●		●		●	●	●	●		
Independent Director	Jong-Peir Li	Male	61–70	●	●	●	●	●	●	●	●	●		
Director	Yung Chin	Female	61–70	●	●	●	●	●	●	●	●	●		
Director	Walsin Lihwa Corporation (Representative: Fred Pan)	Male	61–70	●	●	●	●		●	●	●	●		
Director	Jamie Lin	Male	41–50	●	●	●	●	●		●	●	●		
Director	Wei-Hsin Ma	Female	51–60	●	●	●	●	●	●	●	●	●		
Director	Elaine Shihlan Chang	Female	41–50	●	●		●	●	●	●	●	●		

Notes: 1. Director term: May 30, 2023 – May 29, 2026.
2. Detailed Board member information is available on the Winbond Board of Directors website.

Professional development

All 11 Board members possess extensive industry and management experience. Winbond regularly organizes seminars and professional development programs. In 2025, directors participated in training on environmental sustainability, risk management (including climate change, sustainable finance, geopolitical risk, and human rights), global economic trends, macro outlooks, semiconductor industry topics, and legal compliance. Total training hours included 36 hours on sustainability and risk management topics, 48 hours on industry and business-related subjects, and 6 hours on legal compliance. Average training hours per director amounted to 8 hours.

Sustainability and risk management topics
36 hours

Industry and business-related subjects
48 hours

Legal compliance
6 hours

Average training hours per director
8 hours

Board performance and remuneration

Policies, frameworks, criteria, and structures governing the performance evaluation and remuneration of directors and managerial personnel are established and periodically reviewed by the Compensation committee. The Committee is composed entirely of Independent Directors and convenes at least twice a year to review and ensure the competitiveness and reasonableness of remuneration arrangements.

In determining performance evaluations and remuneration for directors and managerial personnel, the Committee benchmarks against peer industry practices and takes into account individual performance, overall corporate operating performance, and the linkage between remuneration and future risk exposure. This approach is designed to align incentives with longterm value creation and prudent risk management.

Winbond has adopted the Rules for Directors' Remuneration and Board Performance Evaluations, which clearly define the basis for directors' remuneration. These rules are submitted annually to the Compensation committee for review to assess whether adjustments are warranted. Information relating to directors' and managerial remuneration is disclosed in the Winbond' s 2025 Annual Report.

Through the Rules for Directors' Remuneration and Board Performance Evaluations, Winbond has established a comprehensive Board performance evaluation framework. This framework periodically assesses the effectiveness of the Board across key dimensions, including strategic direction setting, oversight of operational management, sustainability strategy governance, and risk management.

These evaluations are intended to safeguard the quality of Board decisionmaking, support sound corporate operations, and enhance longterm shareholder value. Evaluation outcomes serve not only as a basis for continuous improvement of Board operations and the professional development of directors, but also as a key reference for the Compensation committee in reviewing policies on performance evaluation and remuneration for directors and managerial personnel.

On a quarterly basis, the Board, through the ESG committee, provides integrated oversight of the five functional teams under its supervision. These teams are responsible for monitoring and managing economic, environmental, and peoplerelated issues, including human rights.

The Board defines annual and medium to longterm performance targets and requires regular reporting on implementation progress and outcomes. This governance structure ensures the effective execution and integration of the Company' s sustainability strategy.

In addition, the Compensation committee periodically reviews the achievement of managerial performance targets and the structure of managerial remuneration. This review process ensures that remuneration mechanisms maintain a reasonable linkage with corporate operating performance, risktaking responsibilities, and sustainability objectives, thereby strengthening governance effectiveness and supporting Winbond' s longterm sustainable development.

Note: Stakeholders may express their views through multiple channels, including participation in shareholders' meetings and employee engagement surveys. The Compensation committee regularly incorporates such feedback as one of the considerations in its remuneration deliberations. At the 2025 Annual Shareholders' Meeting, no shareholder raised questions regarding directors' or employees' remuneration. The relevant matters have been duly recorded in the minutes of the Annual Shareholders' Meeting.

Boards' remuneration and performance evaluation

- Winbond established the "Board of Directors' Remuneration and Performance Evaluation Measures."
- The Compensation Committee regularly reviewed the Board of Directors' performance evaluation framework to ensure its effectiveness, transparency, and alignment with corporate governance objectives.

Annual self assessment of the Board of Directors' performance

- Annual self assessments were conducted on the overall effectiveness of the Board of Directors, the performance of individual directors, and the operating performance of the Compensation Committee and the Audit Committee. The assessment results were reported to the Compensation Committee and the Board of Directors for review and follow up.

Performance evaluation of the Board conducted by an external independent professional institution

- Every three years, an external independent professional institution was engaged to conduct an evaluation of the Board' s effectiveness. In 2025, the Chinese Corporate Governance Association was commissioned to perform the Board of Directors' performance evaluation.

Nomination of the Board

- The results of the Board of Directors' performance evaluation were used as one of the reference criteria for the nomination of directors.

2025 Board performance self-evaluation results

Board self-evaluation results		Functional committee self-evaluation results	
Key finding: "degree of participation in company operations" scored relatively lower.	Improvement actions: • Full Board re-election at the 2026 shareholders' meeting with adjustments reflecting company scale, major shareholder structure, and diversity. • Invite directors to attend shareholders' meetings in person or via videoconference.	Evaluation Results: • Audit Committee: all items full score except "degree of participation in company operations." • Compensation committee: lower scores for "degree of participation in company operations" and "enhancement of decision-making quality."	Improvement actions: • Provide meeting schedules in advance. • Improve information completeness and invite relevant executives/personnel when necessary.

The 2025 evaluation results were submitted to the Compensation committee and the Board on March 10, 2026.

Note: For information on the performance evaluation of the board of directors, please refer to the website, as well as the Annual Report.

Operations and key responsibilities of functional committees

To strengthen the Board' s oversight effectiveness and enhance management functions, Winbond established multiple functional committees under the Board of Directors, including the Audit Committee, Compensation Committee, ESG committee, Risk and Information Security Management Committee, and Senior Executive Development Committee. Each committee is accountable to the Board and submits proposals for Board deliberation and resolution.

Audit Committee

Composed entirely of independent directors, with Mr. Allen Hsu serving as the convener.

- In 2025, the Audit Committee convened eight meetings, achieving a 100% attendance rate (91% actual attendance and 9% proxy attendance).
- Through regular meetings, the committee reviewed annual and interim financial statements, supervised the operation of internal audit and internal control systems, and maintained a dedicated communication mechanism with external auditors twice a year to ensure the transparency and reliability of financial information and the sustained effectiveness of internal controls.
- With respect to information security, the committee received quarterly reports on the information security management framework, systems, and implementation effectiveness, and established audit control points to ensure the effectiveness of information security controls.

Compensation Committee

Composed entirely of independent directors, with Mr. Stephen T. Tso serving as the convener.

- In 2025, the Compensation Committee held five meetings, with a 100% attendance rate (90% actual attendance and 10% proxy attendance).
- The committee formulated and periodically reviewed the performance evaluation and remuneration policies, systems, standards, and structures for directors and managerial officers, and assessed and recommended individual remuneration packages based on performance outcomes to ensure regulatory compliance, market competitiveness, and appropriate alignment with operating performance and long term risk.

ESG committee

Composed of the Chairman and all independent directors, with Chairman Arthur Yu Cheng Chiao serving as the convener.

- In 2025, the ESG committee convened four meetings, achieving a 100% attendance rate (95% actual attendance and 5% proxy attendance).
- The committee established the ESG Office and five functional groups—Environmental Sustainability, Green Products, Human Rights and Social Inclusion, Sustainable Supply Chain, and Corporate Governance—and reported execution results to the Board on an annual basis to ensure the effective advancement of sustainability initiatives.
- Chaired by the Chairman and supported by independent directors, the committee met quarterly, with each functional group reporting annual progress and outcomes and submitting execution plans for the subsequent year.

Note: For more information, please refer to the Annual Report.

Risk and Information Security Management Committee

Composed of the Chairman and all independent directors, with Chairman Arthur Yu Cheng Chiao serving as the convener.

- In 2025, the Risk and Information Security Management Committee held two meetings, achieving a 100% attendance rate (80% actual attendance and 20% proxy attendance).

Senior Executive Development Committee

Committee members consist of board members from Winbond and Nuvoton serving as mentors; the committee chair is elected by the directors, with independent director Chung-Ming Kuan serving as Chair.

- Mentees are senior executives from Winbond and Nuvoton, with the Board reviewing and adjusting the mentee list annually.
- Objectives include enhancing participants' knowledge beyond their core professional domains, expanding participants' international perspectives, and enabling directors to gain deeper insight into the company' s internal operations.
- Implementation comprises seminar courses for all participants and a structured mentor–mentee mechanism.
- In 2025, a total of six seminar courses were held, with Independent Director Chung Ming Kuan , the Committee Chair, recommending the speakers. The course topics, including the international economic environment, technology and business innovation, leadership and management, and history and humanities literacy, were delivered through in person and synchronous online formats, as well as digitally developed course materials, providing senior executives with flexible learning options

Shareholder relations and protection of shareholder rights

To maintain shareholder relations and rights, Winbond primarily manages through the following four measures, ensuring smooth communication processes with shareholders that comply with due procedures, transparency of information, and effectively maintaining positive and proactive interactions between the company and shareholders.

External communication channels

Designated spokespersons, investor relations, and share administration functions are in place.

Regular disclosure

Monthly revenue, financial reports, and annual reports are disclosed on the corporate website; Board meeting dates for financial report approvals are announced in advance.

Insider trading prevention

Monthly awareness communications are conducted; directors are prohibited from trading shares during closed periods prior to financial report announcements.

Investor and shareholder meetings

Four investor conferences and one shareholders' meeting were held in 2025.

For more information on the rights and interest of shareholders, please refer to the videos and presentations from the institutional investor conferences.

1.1.2 Business Integrity

Business integrity represents the highest ethical standard of the Winbond Group. The Human Resources function is responsible for establishing and strengthening a culture of business integrity, as well as conducting ethics compliance audits, which are carried out quarterly in conjunction with internal control operations. Through the formulation of policies, continuous improvement, oversight and control mechanisms, and education and training, employees are enabled to fully understand and practice the principles of business integrity.

To embed business integrity into corporate culture, the Group has established and implemented a comprehensive framework of policies and codes, including the Corporate Governance Best Practice Principles, Procedures for Ethical Management and Guidelines for Conduct, Sustainable Development Best Practice Principles, Responsible Business Alliance (RBA) Code of Conduct Management Procedures, Code of Ethics and Professional Conduct for Directors, Employee Code of Conduct, and the Winbond Anti-Corruption Commitment. The Human Resources function reports annually to the Board of Directors on the outcomes of business integrity communications and training programs for the year.

To further strengthen the implementation of labor human rights, environmental protection, occupational health and safety, ethical conduct, and the prevention of insider trading, the Group conducts ongoing training and awareness initiatives. These efforts are delivered through internal culture promotion activities, as well as weekly corporate philosophy articles and policy announcements published on the employee portal. This integrated approach reinforces professional ethics awareness across the organization, ensures compliance with corporate ethical standards and applicable laws and regulations, and supports the effective operation of a robust business integrity management system.

2025 Highlights

In 2025, the Winbond Group conducted online courses on Human Rights and Labor Ethics Education and Training and Business Integrity Practices and Sustainable Development Code Promotion. Course content covered business integrity topics, including the prevention of insider trading, fair trade practices, anti-corruption and anti-bribery measures, advertising and competition, identity protection and non-retaliation mechanisms, as well as the use of whistleblowing channels and labor rights.

- No incidents of corruption, anti-competitive behavior, or violations related to marketing and labeling occurred in 2025.
- No substantiated complaints related to violations of business integrity were reported through whistleblowing channels in 2025.
- No violations involving money laundering, insider trading, or conflicts of interest occurred in 2025.

Business integrity-related training

- Training participation overview

Employees completion rate	100 %
Completion rate for all directors	100 %

- Total number of employees trained **8,030**
- Total training hours completed by employees **4,015**

Employee completion rates for business integrity-related training courses

Region	Item	Direct employees	Indirect employees	Management	Non-management	Total	Course hours	Total training hours
Winbond (Taiwan)	• Employees Required to Receive Training	461	3,084	553	2,992	3,545	0.5 hr	1,772.5 hr
	• Employees Who Have Received Training	461	3,084	553	2,992	3,545		
	• Training Coverage (%)	100%	100%	100%	100%	100%		
Winbond (Subsidiaries)	• Employees Required to Receive Training	N/A	814	117	697	814	0.5 hr	407 hr
	• Employees Who Have Received Training	N/A	814	117	697	814		
	• Training Coverage (%)	N/A	100%	100%	100%	100%		
Winbond Group	• Employees Required to Receive Training	1,644	6,386	1,166	6,864	8,030	0.5 hr	4,015 hr
	• Employees Who Have Received Training	1,644	6,386	1,166	6,864	8,030		
	• Training Coverage (%)	100%	100%	100%	100%	100%		

Note: Consultants and employees unable to attend training for special reasons (such as unpaid leave or pending resignation) are not included in the table above.

Internal control and audit

The internal audit function at Winbond reports directly to the Board of Directors. The appointment and dismissal of the chief audit executive are subject to the approval of the Audit Committee and the Board of Directors. In addition to reviewing the self-assessment results of internal control systems conducted by individual departments and subsidiaries, the internal audit function evaluates control activities across all operational processes within the internal control framework to assess the effectiveness, level of compliance, and impact of existing internal controls. The frequency and scope of audit cycles are determined in accordance with regulatory requirements and risk assessments. Significant processes or special cases may be subject to an ad hoc audit as necessary.

In accordance with the annual audit plan approved by the Board of Directors, the internal audit function evaluates both the design and operational effectiveness of internal control activities. Any audit findings are tracked until corrective actions are completed, ensuring that responsible units have implemented timely and appropriate improvements. Upon completion of audit and follow-up reports, the chief audit executive reports monthly to the independent directors (the Audit Committee convener). Audit reports are also provided to all independent directors for review by the end of the month following the completion of each audit item and audit activities are reported quarterly to both the Audit Committee and the Board of Directors. The 2025 audit plan was executed in accordance with regulatory requirements, and audit results and follow-up improvement status were duly reported to the Audit Committee and the Board of Directors.

Winbond has established whistleblowing channels for stakeholders. If internal or external parties identify unfair business practices, bribery or improper benefits, fraud, coercion, or other illegal conduct by employees, reports may be submitted anonymously or with identification. The identity of whistleblowers and the content of reports are kept strictly confidential. All reported cases are handled directly by the internal audit function and simultaneously submitted to the Audit Committee. Case handling procedures are conducted in accordance with the Procedures for Handling Violations of Ethical Corporate Management.

1.2 Risk Management

1.2.1 Risk Management System

As a semiconductor manufacturing company, Winbond is exposed to a broad spectrum of risks, including natural disasters, unexpected incidents, human-induced accidents, shifts in international political and economic conditions, emerging technologies, and changes in policies and regulations. These factors may result in material impacts on operations and financial performance.

To strengthen enterprise-wide risk governance, Winbond established the Risk and Information Security Management Committee under the Board of Directors in 2023. As one of the Board's functional committees, the Committee leverages existing organizational units and risk-responsibility functions to enhance the overall risk management framework. Each unit formulates sound internal management policies and operating procedures within its scope of responsibility to systematically manage risks.

Following Board approval in 2023, Winbond revised the Organizational Charter of the Risk and Information Security Management Committee and formulated the Risk Management Policy and Procedures. These frameworks provide a structured approach to proactively managing four principal categories of risk—strategic, operational, financial, and information security risks. Comprehensive plans and processes were established to address ex-ante risk assessment, risk avoidance, loss prevention, and crisis response across all operational activities. Relevant outcomes are regularly reported to management and governance bodies to ensure the achievement of enterprise risk control objectives.

The Risk Management Task Force continuously monitors developments in domestic and international risk management practices, as well as changes in internal and external operating environments. Control mechanisms are adjusted accordingly and submitted to the Risk and Information Security Management Committee and the Board of Directors for approval to enhance execution effectiveness.

Winbond's Internal Audit function reports directly to the Board of Directors. Based on risk assessment results, audit scope and frequency are determined and annual audit plans are formulated. Upon Board approval, audits are conducted to evaluate the effectiveness of internal control systems. Audit findings and recommendations are documented, and follow-up reports are prepared until corrective actions are fully implemented, thereby strengthening the effectiveness of the risk management framework.

In addition, the Internal Audit function ensures that all departments and subsidiaries conduct periodic self-assessments of internal control effectiveness. Risk management factors are incorporated into the annual internal control effectiveness review, covering organizational operations and risk management practices. In 2025, Winbond completed internal control self-assessments and corresponding internal audit reviews.

Risk management organizational structure

Board of Directors — The highest governance unit | Approves the risk management mechanism and ensures its effective operation.

Risk and Information Security Committee — Members | Chairman (convener) and all independent directors comprehensively review the risk management mechanisms and other matters.

Risk Management Team — Responsible for identifying and evaluating risks, implementing risk control plans, establishing qualitative and quantitative management standards and improving risk control practices, and regularly reporting risk management results to the Risk Management and Information Security Committee.

Functional Units and Subsidiaries — The heads of various functional units and subsidiaries of our company are responsible for risk management. They are tasked with identifying, assessing, and monitoring relevant risks within their respective units to ensure the effective implementation of risk control mechanisms and procedures.

All Members — Winbond emphasizes comprehensive risk control for all employees and daily implements layer by layer prevention.

Risk management policy and procedures

This policy and its supporting procedures cover, including but not limited to, the following components:

1. Risk management objectives
2. Risk management organizational structure and responsibilities
3. Risk management processes

Risk management objectives

Winbond has established a comprehensive risk management framework to identify and manage a broad range of risks that may affect the achievement of corporate objectives. By embedding risk management into operational activities and day-to-day management processes, the Group seeks to achieve the following objectives:

1. Achieve corporate objectives
2. Enhance management effectiveness
3. Provide reliable information
4. Allocate resources efficiently

4 Scopes of Risk Management

1 Strategic risk

1. Geopolitical conflict risk
2. Technological change
3. Product strategy and technology roadmap risk
4. Climate change

2 Operational risk

1. Operational planning and execution
2. Product quality management
3. Environment, health and safety
4. Supply chain management
5. Global sales & marketing operations risk
6. Intellectual property (IP) management
7. Internal control management

3 Financial Risk

1. Financial operations
2. Investment management
3. Capital management

4 Information Security Risk

1. Information management
2. Information security
3. Data privacy and security
4. AI application

Risk management process

Winbond' s risk management process comprises five key elements: risk identification, risk analysis, risk assessment, risk response, and supervision and review mechanisms. The actual procedures and methodologies implemented for each element are outlined below:

1. Risk identification

Each functional team and subsidiary identifies short-, mid-, and long-term risks related to objectives and operations in accordance with the Company' s risk management policies and procedures. Identification leverages tools such as process analysis, scenario analysis, questionnaires, and PESTLE analysis, integrating top-down and bottom-up perspectives while considering internal and external factors and stakeholder concerns.

2. Risk analysis

Identified risks are analyzed by assessing the likelihood of occurrence and potential impact, taking into account existing control measures, historical experience, and industry practices, to determine the corresponding risk value.

Risk Analysis Measurement Criteria

- The risk management team establishes appropriate qualitative and quantitative measurement criteria based on the Company' s risk characteristics as the basis for risk analysis.
- Qualitative criteria describe the likelihood and impact of risk events using narrative scales, while quantitative criteria use measurable indicators (e.g., number of days, percentages, monetary amounts, or headcount) to evaluate the likelihood and impact of risk events.

Risk Appetite

The risk management team should establish the risk appetite (risk tolerance) and submit it to the Risk and Information Security Management Committee and the Board of Directors to determine the company's acceptable risk limits. Based on the risk appetite, the risk management team should also formulate the risk levels corresponding to various risk values, as well as the risk response methods for each risk level, to serve as the basis for subsequent risk evaluation and risk response.

3. Risk assessment

Based on risk analysis results, risks are evaluated against the risk appetite approved by the Risk and Information Security Management Committee and the Board of Directors. Risk response plans are prioritized and implemented according to defined risk levels, with results documented and reported to the Risk and Information Security Management Committee.

4. Risk response

Each functional unit and subsidiary shall propose response strategies, implement appropriate control measures for their identified business risks, and submit these risks and strategies to the risk management team for reporting to the Risk and Information Security Management Committee.

5. Supervision and review mechanism

The risk management team regularly reports the implementation and effectiveness of risk management procedures to the Risk and Information Security Management Committee. Significant risk events are escalated to the Risk and Information Security Management Committee and the Board of Directors as necessary.

In addition, climate change risks have been incorporated into Winbond' s long-term operational management framework. To better understand their impacts on the environment and operations, Winbond has adopted the Task Force on Climate-related Financial Disclosures (TCFD) framework since 2021. Based on observations of international regulatory trends and market developments, climate-related risks and opportunities are identified annually, and their quantitative and qualitative financial impacts are disclosed. Management strategies are reviewed accordingly to strengthen operational resilience, advance decarbonization initiatives, and improve energy efficiency.

For details, please refer to 1.2.3 Climate Change Management.

Strategic risks

Risk item	Impact assessment description	Mitigation measures
Geopolitical conflict risk	• Heightened tensions between the U.S. and China and cross-strait instability have increased uncertainty for Taiwan' s semiconductor sector. As trade frictions and technology competition escalate, Taiwan has become a focal point for both countries, and cross-strait security has become a key concern for global enterprises. Many international companies are closely monitoring the stability of Taiwan' s supply chain; political uncertainty could disrupt semiconductor production in Taiwan. • Against this evolving geopolitical backdrop, Winbond needs to consider a more global footprint and strengthen risk management and contingency capabilities to remain competitive in future market dynamics.	• Identify wafer foundry and assembly/testing sites outside Taiwan and Mainland China, and establish strategic partnerships to reduce the concentration of manufacturing in Taiwan. • Monitor policy directions across jurisdictions and implement localization strategies, including localized product development and manufacturing. • Establish a secondary warehousing and distribution center in Southeast Asia to diversify logistics concentration in Taiwan and provide customers with additional response time. • Proactively cultivate local suppliers to build shorter, more resilient supply chains.
Technological change	• Rapid advances in semiconductor technologies and AI applications could widen competitive gaps if the Company falls behind in technological development. • The threat landscape for cybersecurity has continued to evolve; disruptions to core systems could lead to operational interruptions and reputational risks. • Insufficient progress in digital transformation could reduce R&D and manufacturing efficiency and amplify cost pressures.	• Advance process and product innovation milestones (e.g., progress in advanced-node DRAM/Flash and Secure Flash adoption of PQC). • Modernize and platform core systems through stronger governance to enhance stability, availability, and controllability. • Promote Group-wide digital and AI empowerment training, including AI certification and an internal expert network, to accelerate adoption and deployment. • Strengthen information security governance and expand ISO 27001 certification coverage to critical production systems to reduce the risk of major information security incidents. • Apply AI and automation in manufacturing processes (e.g., yield/defect analysis and automated reporting) to improve process stability.
Product strategy and technology roadmap risk	• If the Company is unable to effectively execute a customer-centric product strategy and continuously launch upgraded products, application-customized products, and innovative products integrating heterogeneous memory in line with the product roadmap, competitiveness with leading customers and in emerging application markets may weaken. • If customer needs are not deeply understood and products with innovative features and superior specifications are not delivered, customer stickiness may decline. Customers may shift to competitors, affecting order sources and long-term partnerships. This could also delay entry into emerging application markets, reduce the effectiveness of R&D and market investments, and negatively affect overall operating performance.	• Adhere to a customer-centric product strategy and execute the product roadmap by launching product upgrades, application-customized products, and innovative products integrating new technologies and heterogeneous memory to expand business with leading customers, target customers, and emerging applications. • Deepen customer insight and deliver innovative features and superior specifications to strengthen customer stickiness based on required capabilities and specifications.
Climate change	• More frequent extreme weather could increase risks related to water shortages, heat stress, and disasters, potentially constraining production and disrupting supply. • Tightening carbon fee/carbon tax regimes and disclosure requirements could increase energy and carbon costs and weaken competitiveness. • Customers and financial institutions have raised expectations for decarbonization performance; failure to meet targets could affect order intake and financing terms.	• The Group has obtained SBTi validation of science-based targets, institutionalizing the decarbonization pathway within governance and tracking mechanisms. • All manufacturing fabs achieved UL 2799 Zero Waste to Landfill certification at the highest Platinum level, reducing environmental impacts and operational risks. • Increase renewable energy usage and investment deployment to strengthen power resilience and reduce Scope 2 emissions. • Implement energy-saving initiatives and process optimization to improve energy efficiency and reduce exposure to carbon costs. • Strengthen water stewardship (e.g., water recycling and reuse, alternative water sources, and efficiency management) to reduce the risk of production stoppages from water constraints. • Expand climate scenario analysis to subsidiaries and the supply chain, and enhance disclosure quality in alignment with IFRS S2.

Operational risks

Risk item	Impact assessment description	Mitigation measures
Operational planning and execution	• Disaster risk: Semiconductor fabs rely on highly precise equipment and cleanroom production, require stable water and power supplies, use costly equipment with long lead times, and are therefore highly sensitive to disasters such as fires, earthquakes, water shortages, and power outages. Semiconductor processes also use multiple flammable gases and chemicals. Taiwan' s seismic conditions and persistent concerns over power and water supply further elevate hazard factors. If such disasters occur, they may cause major damage to buildings and equipment and lead to business interruption; supply disruptions may also result in customer loss.	• Fire: Establish fire compartments; use non-combustible materials for buildings and equipment as far as practicable; deploy automatic fire protection systems in accordance with international property insurance standards; conduct regular ERT training and drills; and perform periodic maintenance and testing of fire protection systems as planned. In 2025, emergency drills covered scenarios including earthquakes, fires, gas leaks, chemical spills, and earthquake evacuation drills, totaling 229 drill sessions for both employees and non-employees. • Earthquake: Apply seismic building design, implement vibration-resistant anchoring for tools, and maintain spare parts inventory. • Power outage: Deploy emergency generators and uninterruptible power supply (UPS) systems, and perform periodic maintenance and testing as planned. • Water shortage: Maintain backup water storage and continue implementing process water-saving measures.
Product quality management	• Quality risk: Product failures during customer use may reduce customer satisfaction and damage corporate reputation.	• Promote Quality Excellence 2.0 ("Do it right the first time," "precise description," and "improving customer satisfaction") to strengthen quality culture and reduce defect rates. • In 2025, Winbond (Taiwan) received one Gold, three Silver, and one Bronze awards at the Taiwan Continuous Improvement Awards (TCIA). Award-winning projects covered key topics including yield improvement, defect reduction, and operational decarbonization.
Environment, health and safety	• Water stewardship: Failure to meet park discharge control standards may result in additional sewerage system usage fees.	• Install multiple continuous monitoring instruments at effluent discharge points; set stricter internal limits based on discharge control standards and establish recirculation mechanisms. • Engage external laboratories to conduct periodic sampling and testing to ensure monitoring effectiveness. • In 2025, total water withdrawal at Winbond' s manufacturing fabs was approximately 4,432 megaliters. Water intensity was 143 liters per mask layer. Compared with 2024' s average of 147 liters per mask layer, unit water intensity decreased by approximately 2.7% year-on-year. Winbond will continue to optimize reclaimed water systems and enhance water-use efficiency.
	• Circularity: If opportunities to reuse, recycle, or reduce waste are not continuously pursued, disposal costs may continue to rise.	• Reduce fab waste generation by minimizing waste, reusing materials where feasible, and increasing recycling rates. • Mid- to long-term target: Achieve an annual waste recycling rate of 90% or above at Taiwan fabs by 2030.
	• Major occupational injuries and occupational diseases could affect production continuity.	• Under EHS management system procedures, Winbond strengthened workplace safety through semiannual internal audits, reviews and updates, and annual external audits and oversight. This approach reduced potential risk factors and supported continuous improvement. In 2025, no occupational disease incidents occurred due to chemical or physical exposure.
Supply chain management	• Supply chain disruption risk: Suppliers may face increased costs or supply interruptions due to raw material availability, political disruptions, natural disasters, transportation, or other factors. Supply interruptions or delays could postpone shipments, prevent meeting customer lead-time requirements, and result in penalties and reputational damage.	• Increase internal inventory levels for key raw materials assessed as high risk. • Add second or third sources to reduce single-source dependence and constraints. • Increase localization to reduce cross-border transportation risks and costs. In 2025, local procurement ratios were 37.3% for Winbond (Taiwan), 30.3% for Nuvoton (Taiwan), and 43.7% for Nuvoton (Japan), each remaining above 30%. Looking ahead, Winbond will continue multi-sourcing for key raw materials, strategically expand localized procurement to production equipment, critical spare parts and components, and evaluate localization feasibility across supply resources to build a more flexible and reliable supply chain system. • Enhance digital system development and performance to enable real-time monitoring, early detection, and timely resolution of potential issues.

Risk item	Impact assessment description	Mitigation measures
Global Sales & Marketing Operations Risk	As the global semiconductor market changes rapidly, inadequate scale, language capability, or technical familiarity within regional sales locations or Marketing teams could lead to: • Delayed customer response: Inability to promptly capture customers' product roadmaps, lead times, and specification changes, resulting in lost orders. • Technical communication gaps: Insufficient Marketing technical capability relative to customers' application needs could lower product adoption success rates. • Regional competitive disadvantage: If competitors maintain stronger FAE/marketing networks locally, Winbond' s visibility in emerging markets could decline.	• Establish a global customer relationship management (CRM) and market intelligence mechanism. • Strengthen regional marketing technical capability (techenabled marketing) and set dualsite backup coverage for highrisk countries (e.g., crosssupport between responsible sales regions). • Adopt a "regional + standardization" risk management model. • Strengthen global talent hiring, retention, and crossborder succession planning.
Intellectual property (IP) management	Risks of increased royalty expenses and reputational impact: • Competitors may initiate IP claims or litigation against Winbond. • Non-Practicing Entities (NPEs) may initiate IP claims/litigation against Winbond. • Misappropriation of Winbond' s business secrets by competitors could weaken competitiveness.	• Encourage and support employees in generating high-value patents. • Reinforce awareness of the importance of business secrets and Winbond' s protection measures. • Winbond (Taiwan) and Nuvoton (Taiwan) obtained TIPS A-level certification, demonstrating maturity in institutionalized IP governance.

Financial risks

Risk item	Impact assessment description	Mitigation measures
Financial operations	• Foreign exchange risk: Exchange rate fluctuations during the settlement period for foreign-currency import/export receipts and payments may affect final settlement amounts and create foreign exchange gains or losses. • Interest rate risk: Changes in market interest rates may affect borrowing interest expenses and returns on interest-bearing financial assets, resulting in volatility in finance costs and profit or loss.	• Apply natural hedging by balancing foreign-currency assets and liabilities to reduce net exposure volatility. • Use spot or forward FX contracts as needed to mitigate the impact of short-term exchange rate movements on profit or loss. • Optimize debt tenor and fixed/floating rate structure to reduce interest-rate impacts on cash flows. • Use a placement logic combining time deposits and demand deposits to balance yield and liquidity.
Investment management	• Investment risk: Strategic and financial investments may face uncertainty in investment returns and impairment risks due to market and valuation fluctuations.If investment deployment is not aligned with mid- to long-term strategy, capital occupation may increase and reduce resource allocation flexibility.	• Implement rigorous investment decision-making processes, including pre-investment benefit and risk assessments to reduce decision bias. • Conduct regular post-investment monitoring of investee operations and valuation changes to identify impairment indicators early and take management actions. • Allocate resources through sustainability strategy-oriented investment themes, including renewable energy investment planning and evaluation of green energy opportunities. • Use Board-approved renewable energy investment planning as a governance constraint to ensure major investments align with risk appetite.
Capital management	Funds management risk primarily arises from financing decision bias, which may create significant funding shortfalls and lead to credit risk such as inability to repay borrowings or interest on time.	• Use Sustainability-Linked Loans to link financing terms with ESG performance, reducing financing costs and strengthening funding access resilience; in 2025, interest expenses decreased by NT$4.28 million. • Establish internal periodic tracking and management mechanisms to monitor the achievement of sustainability indicators and feed performance results back into credit terms and fund drawdown arrangements. • Participate in sustainable finance through sustainable fixed deposits, with maturities of at least three months, to enhance stability of cash deployment and support the use of proceeds for green financing purposes.

Information security risks

Risk item	Impact assessment description	Mitigation measures
Information management	• Information management risk arises from vulnerabilities and threats across each stage of the data lifecycle, potentially leading to data leakage, compromised data integrity, and reduced data availability. These risks may further result in legal liabilities, financial losses, reputational damage, and reduced competitiveness.	• People: Provide regular data security awareness training and strengthen employee behavior monitoring. In 2025, information security training reached more than 8,500 participant-times and included 13 information security awareness campaigns throughout the year. • Technology: Build multi-layer protection, apply data encryption, implement access control mechanisms, and conduct regular vulnerability scans. • Process: Classify and grade data based on purpose, sensitivity, and criticality; store data in different network segments and apply corresponding protection and control measures.
Cybersecurity protection	• Cybersecurity protection risk originates from external threats (e.g., cyberattacks, malware, supply chain attacks) and internal threats (e.g., human error, malicious behavior, system vulnerabilities). These threats may cause system outages, service interruptions, data corruption, or data theft, resulting in financial losses, legal liabilities, reputational damage, and reduced competitiveness.	• People: Provide cybersecurity training for all employees, strengthen phishing prevention, and reinforce incident reporting and response. • Technology: Enhance system protection, apply security patches, deploy firewalls and intrusion detection, and adopt multi-factor authentication. • Process: Establish an information security management system, maintain ISO 27001 certification, and conduct regular security testing. • In 2025, no information security incidents occurred that affected company operations.
Data privacy and security	• Data privacy and security risk stems from failures or improper use in protecting customer privacy, employee personal data, and business secrets (including intellectual property rights) during operations. These risks may lead to leakage or theft of sensitive information and trigger lawsuits arising from privacy regulations and product liability laws, financial penalties, loss of customer trust, and reputational and competitive impacts.	• Policies and standards: Strictly comply with Winbond' s Privacy Policy and implement the principle that customer data will not be used for secondary purposes. Maintain ISO 27001 information security management system certification. Use systematic management and technical controls to protect information assets and business secrets. • Oversight and response: Convene annual information security meetings to review management performance. Establish a robust incident reporting process; upon notification, promptly assess scope and severity, isolate affected systems, and formulate countermeasures.
AI applications	• AI application risk spans technology, operations, governance, compliance, ethics, and strategy. It may lead to unstable model performance, security incidents, decision errors, resource waste, and stalled transformation progress, resulting in financial losses, reputational damage, and reduced competitiveness.	• Training: Provide professional training for AI developers and users to strengthen awareness of decision risk, privacy protection, and governance risk. • Data management: Strengthen data quality controls to ensure accuracy and integrity. • Risk assessment: Conduct comprehensive risk assessments and reviews throughout AI system development and deployment.

Emerging risks

Risk type	Risk description	Potential impacts	Mitigation measures
New forms of AI-enabled cybersecurity risk under smart manufacturing	• As Winbond advances smart manufacturing and process automation, adversarial-AI-driven cybersecurity risks have become an emerging area of concern for core assets, including proprietary memory IP and the fab operational technology (OT) environment. This risk mainly arises from malicious actors using AI to increase attack sophistication and bypass existing protections. • Generative AI may be used to plan targeted attacks to steal critical business secrets (e.g., circuit designs) or manipulate AI models supporting fab automation through data poisoning. In highly automated manufacturing environments, inadequate management could result in abnormal equipment operations, physical asset damage, or yield degradation that is difficult to detect in time, weakening operational stability.	• Risk of theft and replication of intellectual property: AI-driven espionage activities may accelerate leakage of critical process and technology know-how accumulated by Winbond in niche DRAM/Flash, allowing competitors to replicate products more quickly and eroding Winbond' s technology moat. • Risk of smart fab operational disruption: If management systems used in fabs involve AI components, adversarial attacks may cause physical logistics disorder or safety incidents, disrupting stable line operations and leading to production interruptions and major operational impacts. • Customer trust and brand reputation risk: If AI-related factors prevent timely detection of process or quality defects and defective chips reach customers, subsequent liabilities and reputational damage could be severe and long-lasting.	• Winbond implemented dedicated equipment- and network-level cybersecurity management mechanisms for wafer fab operational technology (OT) and aligned its practices with the SEMI E187 semiconductor equipment cybersecurity standard. The Company enforced network segmentation and protection between IT systems and manufacturing equipment networks to mitigate the impact of cybersecurity incidents on stable production line operations. • Winbond established a governance framework for AI adoption and digital transformation and, through institutionalized management mechanisms and personnel training, ensured that AI applications in operations and process optimization operated in a controlled and reliable manner within the existing internal control framework.
Product Manufacturing and Compliance Risks under the Spillover Effects of Geopolitical Tensions	• As an IDM manufacturer headquartered in Taiwan and focused on niche DRAM and NOR Flash products, Winbond is not a primary target of sanctions related to advanced process technologies or AI semiconductors amid the U.S.–China technology conflict. However, as a memory manufacturer with in-house wafer fabrication capabilities, Winbond is inevitably affected by the spillover effects of geopolitics and the restructuring of the global supply chain. • Compared with fabless IC design peers, Winbond continues to rely on critical lithography, etching, and related process equipment provided by suppliers from the United States, Japan, and Europe to sustain its mature and cost-competitive process nodes (such as 25nm and 20nm, with a gradual transition toward 16nm). As the global semiconductor industry moves toward "semiconductor sovereignty" and "de-risking," standards and compliance requirements are becoming increasingly fragmented. In particular, automotive and industrial customers in Europe and the United States place growing emphasis on supply chain transparency, regulatory compliance, and geopolitical risk management. At the same time, Winbond remains deeply engaged in consumer electronics and communications markets in Greater China, creating operational balancing challenges under a diversified market structure. • Against this backdrop, Winbond continues to address an increasingly complex export control and compliance landscape and prudently manage potential policy risks to ensure that future capacity expansion and process upgrade plans, including those at the Kaohsiung Fab, can maintain operational flexibility and long-term competitiveness while remaining compliant with applicable regulations	• Constraints on the technology roadmap: As export controls on semiconductor manufacturing equipment (WFE) became increasingly stringent, Winbond' s flexibility to advance toward more advanced process nodes (e.g., below 20 nanometers) may be constrained. Any delay or obstruction in process upgrades would have directly affected the cost structure and technological competitiveness of its core products relative to competitors not subject to similar restrictions. • Risks of market segmentation and revenue volatility: Supply chain "decoupling" trends may compel Winbond to maintain parallel "red" and "non-red" supply chain systems, increasing operational complexity and reducing overall efficiency. In practice, the loss of distribution channels with key Chinese module makers due to manufacturing origin or geopolitical concerns, or restrictions imposed by Tier-1 automotive suppliers in Europe and the United States, could result in significant impacts on revenue performance. • Amplified risks inherent in the IDM operating model: As a capital-intensive IDM centered on owned wafer fabs, Winbond was highly sensitive to the stability of supplies of critical spare parts and electronic-grade chemicals, which were often concentrated in specific geographic regions. Any supply disruption could immediately affect capacity utilization and, given the high fixed depreciation costs, exert greater pressure on profitability compared with fabless competitors (pure IC design companies).	• Strategic localization and multi-sourcing: Winbond actively increased the proportion of local procurement in Taiwan to mitigate cross-border logistics risks and the impact of geopolitical tariffs. For critical semiconductor materials that were difficult to localize (such as photoresists and specialty gases), Winbond implemented a stringent second-source policy by qualifying suppliers from geopolitically neutral regions to avoid reliance on any single country. • Strategic inventory buffers: For critical spare parts and raw materials, Winbond shifted from a "Just-in-Time (JIT)" model to a "Just-in-Case" approach. The Company maintained higher safety stock levels for items identified as high risk in geopolitical assessments. • Export control compliance systems: Winbond established a dedicated trade compliance team to monitor evolving entity lists (U.S./China). The Company used digital supply chain management tools to screen customers and end users to ensure that products did not inadvertently flow to restricted entities, thereby safeguarding Winbond' s access to Western technologies and markets. • In-house technological autonomy: Winbond strengthened internal R&D in process integration to reduce reliance on external IP licenses that could be subject to future sanctions.

1.2.2 Information Security Management

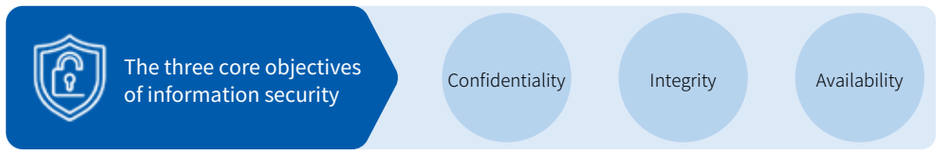
Winbond recognizes that information security and the protection of confidential information are critical to sustaining market competitiveness and safeguarding the interests of customers and business partners. The Company issued the Information Security Statement, committing to the continuous enhancement of information security mechanisms, the adoption of international standards, and the integration of institutionalized governance and technical safeguards. These measures are designed to ensure operational stability and the security of information assets, thereby fostering long-term, trust-based partnerships.

Winbond has appointed a Chief Information Security Officer and information security managers, and established a cross-functional information security organization composed of representatives from all departments. This organization is responsible for the planning, implementation, promotion, and auditing of information security management. Regular meetings are convened to address issues related to human resources, physical security, information security, and logical security, with ad hoc meetings held in response to major incidents. Business Continuity Plan (BCP) drills are conducted annually to test emergency response capabilities. Access control and information system authorization management have been strengthened to strictly regulate personnel entry and data access. In 2025, Microsoft Information Protection (MIP) and Data Loss Prevention (DLP) mechanisms were deployed to further prevent the theft or leakage of trade secrets and intellectual property.

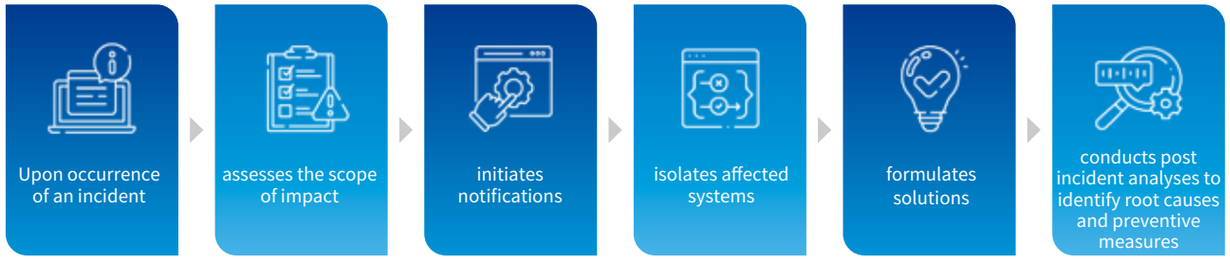
Winbond has established the Information Security Policy and the Technical and Confidential Information Management Regulations to govern the protection of confidential corporate information, including trade secrets and intellectual property, while ensuring robust protection of customer privacy. To comprehensively enhance its information security management framework, Winbond applied for ISO 27001 certification in 2020 and obtained certification in February 2021, covering the CTSP Fab, the Jhubei building data center, and core information systems. The certification scope was extended to the Kaohsiung Fab in 2022. In 2024, Winbond referenced the SEMI E187 standard to develop information security specifications for production equipment, further strengthening equipment security. In 2025, the Company completed the transition to ISO 27001:2022 and expanded the certification scope to include wafer production systems.

Based on the ISO 27001:2022 framework, Winbond identified information assets across all units and conducted risk assessments, integrating internal control mechanisms and existing regulatory documents to establish a comprehensive Information Security Management System (ISMS). Internal audits are performed annually to ensure effective implementation of information security practices and to maintain the validity of certification. The Company continues to pursue the three core objectives of information security—confidentiality, integrity, and availability—to ensure that data is not accessed or altered without authorization and that system services remain continuously available.

For information security incident management, Winbond has established a structured incident response process that enables cross-departmental coordination and external communication. Response actions are directed based on incident severity and are subject to regular review. Upon occurrence of an incident, the Company assesses the scope of impact, initiates notifications, isolates affected systems, formulates solutions, and conducts post-incident analyses to identify root causes and preventive measures.



Information Security Incident Response Process



Winbond places strong emphasis on information security awareness and training. Information security communications are issued monthly, and formal awareness training programs are conducted annually. In 2025, information security training reached more than 8,500 participant-sessions, supported by 13 information security awareness campaigns. A total of 92 new or modified systems were launched during the year, with both the highrisk code remediation rate and source code scanning coverage achieving 100%.

With respect to product and supply chain information security, TrustME ™ memory products and related operating environments achieved Common Criteria EAL 5+ certification in 2015, meeting advanced international security standards. With respect to supply chain information security management, Winbond requires suppliers that provide information services or have access to information assets to sign the Supplier Information Security Assurance Declaration and implement corresponding information security management measures according to the nature and scope of their engagement. Suppliers are required to ensure that delivered products are free from information security concerns, provide corrective patches and security updates, and implement effective solutions in the event of security incidents.

In terms of customer privacy protection, Winbond has established the Personal Data File Security Maintenance Plan to strictly control customer information. All documents and data are stored within highly protected systems, with access rights managed in accordance with defined procedures. The Company also complies with the General Data Protection Regulation (GDPR), ensuring that websites and member data meet regulatory requirements. In 2025, 100% of newly hired employees completed personal data protection training. Winbond does not use customer personal data for secondary purposes, and no customer privacy complaints or regulatory penalties were recorded during the year.

Note: For information security management practices at Nuvoton, please refer to the Nuvoton 2025 Sustainability Report.

2025
high risk code remediation rate and source code scanning coverage
100 %

2025
newly hired employees completed personal data protection training
100 %

2025
customer privacy complaints or regulatory penalties
0 cases

1.2.3 Climate Change Management

Overview of the climate change management framework (TCFD)

In response to accelerating global warming, the increasing frequency of extreme weather events, and the growing use of policies and regulations worldwide to drive low-carbon transitions, climate change has become a critical factor affecting corporate operational resilience and long-term competitiveness. International research institutions have identified climate-relatedrisks as among the most impactful global risks over the next decade. At the same time, net zero emissions, the circular economy, and energy transition are creating new technological breakthroughs and business opportunities. The Group regards climate action as a fundamental pillar for maintaining operational resilience, strengthening stakeholder trust, and enhancing long-term competitiveness.

To enhance the transparency of climate-related information and systematize climate issue management, the Winbond Group has adopted the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) issued by the Financial Stability Board (FSB). Since 2023, the Group has implemented the TCFD framework and published its first standalone TCFD report, assessing climate-related risks and opportunities from a financial perspective and evaluating the Group' s resilience to climate change.

The Winbond Group continues to advance energy conservation and carbon reduction initiatives, supply chain collaboration, low-carbon product development, and water resource management, while strengthening operational resilience. These efforts aim to ensure competitiveness during the global low-carbon transition, fulfill corporate responsibilities, and create positive social and environmental impacts. Looking ahead, the Group will continue to enhance its climate change management capabilities and, in line with international trends and stakeholder expectations, progressively move toward more comprehensive climate resilience and sustainable development objectives.

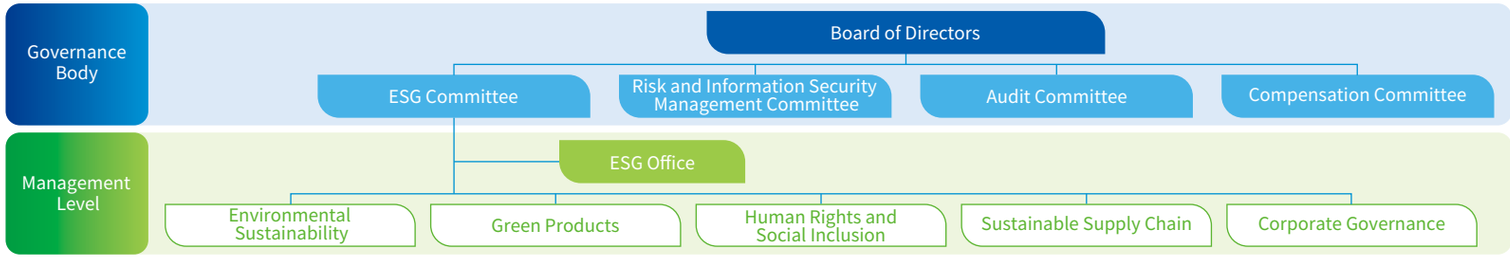
For details, please refer to the Winbond 2025 TCFD Report.

	Governance	Strategy	Risk management	Metrics and targets
Strategies and actions	The Board of Directors serves as the highest oversight body for climate-related governance and decision-making, providing oversight and direction for climate-related responses and decision-making. The ESG Committee and other functional committees have been established under the Board to support the Board in carrying out oversight and management responsibilities. The ESG Committee is chaired by the Chairman, convenes at least twice annually, and reports execution outcomes, including climate change matters, to the Board to ensure effective implementation of sustainability initiatives.	• Senior executives of the parent company and subsidiaries identify short-, medium-, and long-term climate-related risks and opportunities. • Potential financial and operational impacts are assessed for key risks and opportunities with high impact and high likelihood. • Scenario analyses are conducted for major transition and physical risks.	• Climate-related risks are managed and integrated into the Group' s enterprise risk management framework. • Climate risk identification processes are established with reference to the TCFD framework. • Relevant units are requested to review and develop mitigation and adaptation measures for material risks and opportunities.	• Climate change management objectives are defined. • Climate-related key performance indicators (KPIs) are established and monitored annually. • Group-wide greenhouse gas emissions are included in the inventory boundary and verified annually by third parties in accordance with ISO 14064-1.
Implementation	The Board approved multiple major climate-related proposals and reports, including renewable energy planning progress, increased committed investment in KaiHong Energy Co., Ltd., and greenhouse gas inventory execution reports, demonstrating proactive responses to climate-related risks and challenges.	• Five major climate risks and three major climate opportunities were identified. • Qualitative and quantitative analyses of financial and operational impacts were conducted for key risks and opportunities. • Transition risks were analyzed under scenarios including government net zero pathways, IPCC AR6 SSP1-1.9, and the SBTi Net zero pathway. • Physical risks were assessed using four IPCC AR6 scenarios (SSP1-2.6, SSP2-4.5, SSP3-7.0, SSP5-8.5) to evaluate disaster exposure and water risks across domestic and overseas sites and suppliers.	• A Risk and Information Security Management Committee operates under the Board, integrating climate change risks into long-term operational management through established governance mechanisms. • Senior executives identify climate risks and opportunities and assess related financial and operational impacts. • Assessment results and response measures are consolidated for review and tracking by the ESG Committee and departmental representatives, and disclosed in the TCFD report to support climate mitigation and adaptation actions.	• Management targets have been established for renewable energy usage, greenhouse gas reduction, emissions intensity, and water recycling rates. • Greenhouse gas reduction targets aligned with SBTi have been set and officially validated by SBTi. • Annual inventories and performance tracking have been completed based on climate-related KPIs, with detailed data disclosed in subsequent sections.

Climate Governance Structure

The Board of Directors serves as the highest governance body for climate change, providing oversight and direction for climate-related responses and decision-making. To strengthen the Board' s oversight function and enhance management effectiveness, the Board has established the ESG Committee, the Risk and Information Security Management Committee, the Audit Committee, and the Compensation Committee. Each committee is accountable to the Board within its defined scope of responsibilities and submits proposals to the Board for resolution.

The ESG Committee is chaired by the Chairman and convenes at least twice annually. Under the ESG Committee, an ESG Office has been established, together with five functional teams covering environmental sustainability, green products, human rights and social inclusion, sustainable supply chains, and corporate governance. Execution outcomes are reported regularly to the Board to ensure effective implementation and continuous advancement of sustainability initiatives.



Climate-related Risk and Opportunity Identification Process

In 2025, Winbond convened senior executives from the parent company and subsidiaries to identify key climate-related risks and opportunities. These risks and opportunities were evaluated based on impact severity, likelihood of occurrence, and time horizon, resulting in the development of climate risk and opportunity matrices. The assessment results were approved by the CSO and reported to both the ESG Committee and the Board of Directors.

| Climate risk management process |

1 Establish a list of climate risks and opportunities	Climate risks and opportunities were identified with reference to the TCFD framework and SASB disclosure topics, in conjunction with domestic and international regulatory trends and industry developments.
2 Define assessment criteria	Risks and opportunities were evaluated based on impact severity, likelihood of occurrence, and time horizon.
3 Identify climate risks and opportunities at the company level	Each company identified material short term (within 1 year), medium term (2–5 years), and long term (over 5 years) risks and opportunities based on the magnitude of impact[1] and likelihood of occurrence[2], while considering business relevance and existing response measures.
4 Develop consolidated risk and opportunity matrices	Aggregate company level results and consolidate them into group level climate risk and opportunity matrices.
5 Assess financial and operational impacts	The financial and operational impacts of key risks and opportunities were assessed qualitatively or quantitatively across own operations and the upstream and downstream value chain.
6 Discuss response measures	Relevant units reviewed and developed mitigation and adaptation measures for material risks and opportunities.

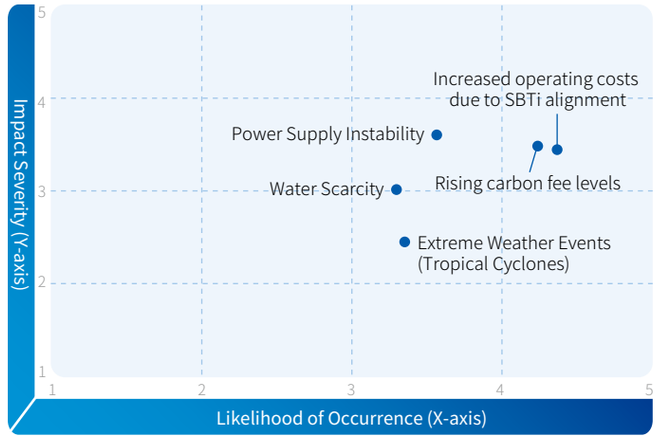
Note 1: Impact severity is classified into five levels, ranging from high to low, based on the potential effects on the company in terms of financial performance, production capacity, employee health and safety, regulatory compliance, and reputation.

Note 2: Likelihood of occurrence is classified into five levels based on probability, ranging from "Very Likely" to "Very Unlikely."

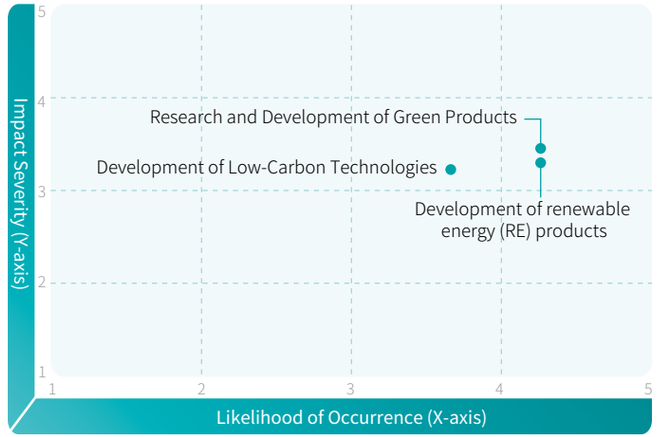
Climate Risk and Opportunity Matrices

Winbond assessed and prioritized climate-related risks and opportunities based on their impact and likelihood, identifying five major climate risks and three major opportunities.

| Climate Risk Matrix |



| Climate Opportunity Matrix |



Material Climate Change Impacts and Responses

Climate risk issues

	Climate risk	Timeframe of impact	Impact boundary	2025 / potential financial or operational impacts	Response measures
Transition risk	Increased operating costs due to SBTi alignment	Short-term Medium-term Long-term	• Own operations	• Increased operating expenses and capital expenditures associated with decarbonization actions	• Implement decarbonization measures, including process improvements, replacement of energy-efficient components, and energy-saving projects • Procure and invest in renewable energy • Install on-site renewable energy generation systems • Actively develop low-carbon and energy-efficient products to reduce use-phase emissions • Collaborate with key suppliers on carbon inventories, target setting, and improvement actions
	Rising carbon fee levels	Short-term Medium-term Long-term	• Upstream • Own operations • Downstream	• Increased carbon fees and operating costs • Additional operating expenses and capital expenditures for decarbonization actions undertaken in response to rising carbon fees • Increased procurement costs due to cost pass-through from upstream suppliers	• Establish a carbon accounting system to effectively manage emissions data • Apply for and implement voluntary reduction programs to lower applicable rates • Implement decarbonization measures and energy-saving projects • Procure and invest in renewable energy • Install on-site renewable energy generation systems • Participate in carbon credit markets and monitor offset mechanism developments
Physical risk	Power supply instability	Short-term	• Upstream • Own operations • Downstream	• Production losses or equipment downtime due to power disruptions • Increased operating costs for maintaining backup power systems	• Install emergency generators and uninterruptible power supply systems, with regular maintenance
	Water scarcity	Short-term	• Upstream • Own operations • Downstream	• Capacity constraints due to restricted water intake during prolonged shortages • Increased water procurement costs due to the adoption of alternative water sources during water shortages • Increased operating and capital expenditures for water management and backup systems	• Maintain backup water reservoirs • Identify alternative water sources or deploy water trucks during rationing periods • Implement water conservation and recycling measures to enhance efficiency
	Tropical cyclones	Short-term	• Upstream • Own operations • Downstream	• Increased labor costs due to overtime payments required to maintain production operations during typhoon leaves • Potential asset damage and operational disruptions at company and supplier facilities • Potential long-term increases in catastrophe insurance premiums	• Increase production automation to reduce manual operations • Use digital tools to enhance remote working efficiency • Promote disaster preparedness measures among suppliers, including facility reinforcement and drainage improvements • Establish 24-hour emergency response teams and monitor supplier locations for disaster impacts

Financial impacts and management costs arising from climate risks in 2025:

1. Estimated carbon fees: NT$17 million
2. Greenhouse gas emission reduction initiatives:
   - Capital expenditures on energy-saving and carbon reduction equipment: NT$332 million, resulting in depreciation expenses of NT$20 million
   - Energy-saving and carbon reduction expenses: NT$151 million
   - Additional costs for renewable energy procurement and supply chain green electricity promotion: NT$125 million
   - New renewable energy investments: NT$69 million
   - Capital expenditures for on-site renewable energy generation systems: NT$4 million
   - Maintenance costs for on-site renewable energy generation systems: NT$1 million
   - Expenses for supplier decarbonization guidance and activities: NT$0.4 million
3. Maintenance costs for emergency generators and uninterruptible power systems: NT$54 million, with depreciation expenses of NT$66 million
4. Water resource system maintenance costs: NT$228 million, with depreciation expenses of NT$250 million
5. Increased labor costs due to typhoon leaves: NT$11 million

Climate opportunity issues

Climate opportunity	Timeframe of impact	Impact boundary	2025 / potential financial or operational impacts	Response measures
Research and development of green products	Medium-term Long-term	• Upstream • Own operations • Downstream	• Enhanced product competitiveness and expanded market opportunities with sustainability and low-carbon requirements • Continued R&D investment requirements	• Continue developing high-performance, low-energy-consumption green products to meet market demand
Development of renewable energy (RE) products	Short-term Medium-term Long-term	• Upstream • Own operations • Downstream	• Meeting customer demand for green electricity supports order retention and revenue growth • Increased operating costs from using green electricity during manufacturing, packaging and testing	• Procure and invest in renewable energy • Install on-site renewable energy generation systems • Promote green electricity products and develop new customers with green electricity demand
Development of low-carbon technologies	Medium-term Long-term	• Upstream • Own operations • Downstream	• Reduced carbon intensity in manufacturing to meet low-carbon supply chain requirements • Process optimization improves production efficiency and reduces operating costs • Ongoing process R&D investment requirements	• Develop low-carbon-footprint process technologies • Collaborate with the supply chain to reduce emissions during packaging and assembly stages

Financial impacts and management costs arising from climate opportunities in 2025:

1. Revenue from green electricity products: NT$3,906 million
2. Revenue from Sustainable Economic Activities: NT$59,317 million.
3. Management costs related to additional costs for renewable energy procurement and supply chain green electricity promotion, renewable energy investments, and the construction and maintenance of on-site renewable energy generation systems are detailed under item 2 in the preceding section.

Scenario Analysis

Transition risk scenario analysis

Winbond applied three scenarios to simulate transition risks. In addition to assessing risks arising from current domestic regulations, the analysis incorporated the potential impacts of international decarbonization trends. Climate change may affect Winbond's financial performance through regulatory, technological, market, and reputational channels. Among these factors, carbon taxes / carbon fees and the use of renewable electricity were estimated to result in financial impacts of approximately NT$ 0.3–3.7 billion by 2030, equivalent to approximately 0.4%–4% of 2025 revenue.

Scenario descriptions

External scenario	Description	Assessed emission sources[1]
Government net zero pathway	Based on Taiwan's 2050 Net zero Emissions Pathway, assuming the government guides industries toward long-term national climate targets through climate regulations, carbon pricing mechanisms, and energy management policies.	Scope 1 + Scope 2
SSP1-1.9	Referencing the IPCC AR6 1.5° C pathway, assuming a high level of global cooperation to accelerate the low-carbon transition, with increased market requirements for green and low-carbon products and value-chain decarbonization.	
SBT-NZ	Based on the Science Based Targets initiative (SBTi) Net zero Standard, assuming global companies follow rigorous science-based decarbonization pathways and continuously strengthen emissions management across operations and value chains.	

Carbon tax imposition

External scenario[2]	Assumptions	Estimated financial impact in 2030[3]
SSP1-1.9	Carbon price parameters aligned with the SSP1-1.9 pathway, reaching US$ 651/tCO_2e by 2050	> NT$ 2.5 billion
SBT-NZ		

Carbon fee imposition

External scenario[2]	Assumptions	Estimated financial impact in 2030
Government net zero pathway	General rate of NT$ 300/tCO_2e; single-fab exemption of 25,000 tCO_2e/year	< NT$ 0.2 billion
	Preferential Rate A of NT$ 50/tCO_2e; single-fab exemption of 25,000 tCO_2e/year	< NT$ 0.05 billion

Use of renewable electricity

External scenario	Assumptions	Estimated financial impact in 2030
Government net zero pathway	Procurement costs estimated based on Taipower's average wholesale price for renewable electricity plus supply costs; O&M costs for solar PV installations estimated using average values reported by IRENA	≈ NT$ 0.3 billion
SSP1-1.9		
SBT-NZ		

Note 1: Scope 1 and Scope 2 carbon emissions from 2026 onward are estimated figures. These estimates were calculated based on a comprehensive assessment of actual emissions in 2025, projected medium- to long-term average emission growth trends, and forecast parameters for electricity emission factors.

Note 2: In light of Taiwan's official announcement and implementation of a carbon fee mechanism, and considering that carbon taxes are the predominant carbon pricing instrument globally, different scenario sources were applied for the analysis of carbon fees and carbon taxes. Carbon fee scenarios were assessed based on the Taiwan government's net zero transition pathway, while carbon tax scenarios were evaluated using the internationally recognized SSP1-1.9 and SBT Net zero (NZ) scenarios.

Note 3: The financial impact for 2030 was calculated by applying the projected carbon emissions under each scenario for 2030 and estimating the corresponding carbon tax levels based on the applicable carbon price pathways.

Physical climate risk scenario analysis

Physical risk scenario analysis for global fabs, offices, and suppliers

Extreme weather events driven by climate change have posed tangible challenges to the semiconductor industry, which relies heavily on stable electricity supply, water availability, and global supply-chain operations. These challenges may affect business continuity and long-term competitiveness. To assess operational resilience under different climate scenarios, Winbond followed IPCC AR6 SSP pathways to evaluate potential physical climate risks faced by global self-owned sites and supplier locations across four emissions scenarios (SSP1-2.6, SSP2-4.5, SSP3-7.0, and SSP5-8.5) and four time horizons (short-term, medium-term, medium-to-long-term, and long-term). The results serve as key inputs for resilience assessment, long-term planning, and the strengthening of supply-chain risk management.

For domestic operating sites and key suppliers, Winbond conducted physical climate risk assessments based on Taiwan' s climatic characteristics and the availability of high-resolution data, covering critical hazards such as extreme rainfall, drought, and extreme heat.

- Extreme rainfall risks were evaluated using rainfall return-period data, combined with publicly available flood potential and geological hazard maps to assess site vulnerability. Overall risk levels were determined using the hazard-exposure-vulnerability framework.
- Drought risks were assessed using the Standardized Precipitation Index (SPI), comparing historical baseline observations with projected future trends to identify water-scarcity risk levels.
- Extreme heat risks were evaluated based on definitions issued by the Central Weather Administration, assessing event frequency and potential impacts.
- The aforementioned climate hazards were further assessed by integrating the geographical exposure of each operational site to identify potential impacts on operational stability.

For global operating sites and key suppliers, Winbond systematically assessed water-related physical risks to ensure cross-country data consistency and comparability. Baseline analyses applied the WRI Aqueduct Overall Water Risk indicator, covering water quantity, water quality, regulatory, and reputational risks. Future analyses assessed changes in water stress levels under SSP1-2.6, SSP3-7.0, and SSP5-8.5 scenarios to identify potential impacts on operational sites and global supply-chain stability under different warming pathways.

Notes:
- SSP1-2.6: Low-emissions scenario, with an estimated global temperature increase of approximately 1.8° C by the end of this century.
- SSP2-4.5: Medium-emissions scenario, with an estimated global temperature increase of approximately 2.7° C by the end of this century.
- SSP3-7.0: High-emissions scenario, with an estimated global temperature increase of approximately 3.6° C by the end of this century.
- SSP5-8.5: Very high-emissions scenario, with an estimated global temperature increase of approximately 4.4° C by the end of this century.
- Short term: 2021–2040; Medium term: 2041–2060; Medium-to-long term: 2061–2080; Long term: 2081–2100.
- Overall Water Risk is a composite indicator developed under the Aqueduct platform of the World Resources Institute (WRI). The indicator integrates 13 water-related risk metrics across three dimensions—water quantity, water quality, and regulatory and reputational risks—to reflect the overall level of water risk faced by operational sites or the supply chain.
- Baseline Water Stress measures the ratio of total annual water withdrawals to available renewable surface water and groundwater supply within a specific region. This indicator reflects the degree of tension between water supply and demand. Higher baseline water stress indicates more intense competition among users for limited water resources and a correspondingly higher risk of water scarcity or supply disruption in the region.

Scenario analysis results

Physical risk scenario analysis results for domestic self-owned sites and suppliers

The results indicate that water scarcity and extreme heat represent the primary physical climate risks for domestic self-owned sites and suppliers. Risk levels increase significantly with higher emissions scenarios and over longer time horizons. In contrast, disaster risks associated with extreme rainfall—such as flooding, landslides, and debris flows—pose relatively limited impacts on overall operations.

Assessment scope：Winbond Group – Taiwan self-owned sites

Climate risk		Extreme rainfall	Water scarcity	Extreme heat
Assessment results[1]	SSP1-2.6	Scenario analysis results indicate that the Kaohsiung site is exposed to potential flooding risk. Under the SSP1-2.6 scenario, the site is assessed as low risk. Under SSP5-8.5, the risk is assessed as low in the short and medium-to-long term, increasing to medium risk in the long term. For the remaining six self-owned sites, the risk levels for flooding, debris flow, and landslides are assessed as no risk across all time horizons under both SSP1-2.6 and SSP5-8.5 scenarios.	Water-scarcity risks were concentrated at the Tainan and Kaohsiung sites, remaining at medium-high to high risk from short- to long-term. Taipei, Hsinchu, and Taichung sites remained at low risk across all horizons.	Overall, among the seven self-owned sites, only one site in Taipei City presented a medium risk in the medium to long term, while the remaining sites maintained low risk from the short to the long term.
	SSP5-8.5		Water-scarcity risks remained concentrated at Tainan and Kaohsiung at medium-high to high risk. Taipei, Hsinchu, and Taichung sites increased from low-to-medium risk in the short- to medium-term to medium risk in the medium-to-long term and beyond.	In the short and medium term, all sites were predominantly assessed as low risk; in the medium-to-long term, the risk level of the Taipei site increased to high risk, while the Hsinchu, Tainan, and Kaohsiung sites increased to medium risk; in the long term, all sites were assessed as high risk.

Climate adaptation measures and strategies

- Drainage facilities, flood barriers, and pumping systems were installed during fab construction
- Water recycling and reuse rates were continuously increased
- Multiple alternative water sources were developed
- On-site water storage reservoirs were constructed to maintain fab operations during water shortages and supply restrictions

Note1: The assessment presented only the representative low-emissions scenario (SSP1-2.6) and the very high-emissions scenario (SSP5-8.5) to illustrate the range of risk impacts under different climate pathways. The analysis results of the remaining scenarios were incorporated as reference inputs to the overall risk assessment

SSP5-8.5 long-term scenario –
overall risk assessment results for extreme rainfall

●High risk ●Medium risk ●Low risk ●No risk

SSP5-8.5 long-term scenario –
water scarcity risk assessment results

●High risk ●Medium-high risk ●Medium risk ●Low risk

SSP5-8.5 long-term scenario –
extreme heat risk assessment results

●High risk ●Medium risk ●Low risk

Assessment scope: Winbond Group – Taiwan supplier sites

Climate risk		Extreme rainfall	Water scarcity	Extreme heat
Assessment results	SSP1-2.6	Across short- to long-term time horizons, high-risk supplier sites account for less than 1%. The high-risk sites mainly concentrated in Hsinchu, Kaohsiung, and Taichung, with flooding identified as the primary risk factor.	In the short term, water scarcity risks were mainly concentrated in Taoyuan and Kaohsiung, with high-risk suppliers accounting for approximately 13% of the total. In the long term, the risk levels of Taoyuan and Kaohsiung sites decreased to medium-high risk and were categorized together with Miaoli and Tainan sites as medium-high risk; the remaining sites were mostly assessed as low risk, with medium-high-risk supplier sites accounting for approximately 20% overall.	In the short term, all supplier sites were assessed as low risk; in the medium-to-long term, approximately 15% of sites increased to medium risk, all of which were concentrated in the Greater Taipei area.
	SSP5-8.5	Across short- to long-term time horizons, high-risk supplier sites account for less than 2%. The high-risk sites mainly concentrated in Hsinchu and Kaohsiung, and Taichung, with flooding identified as the primary risk factor.	In the short term, water scarcity risks were mainly concentrated in Taoyuan and Kaohsiung, with high-risk suppliers accounting for approximately 13% of the total; in the long term, the risk level of the Miaoli site increased from medium-high risk to high risk, with high-risk supplier sites accounting for approximately 16% overall.	In the short term, all supplier sites were assessed as low risk; in the long term, approximately 99% of sites increased to high risk.

Climate adaptation measures and strategies

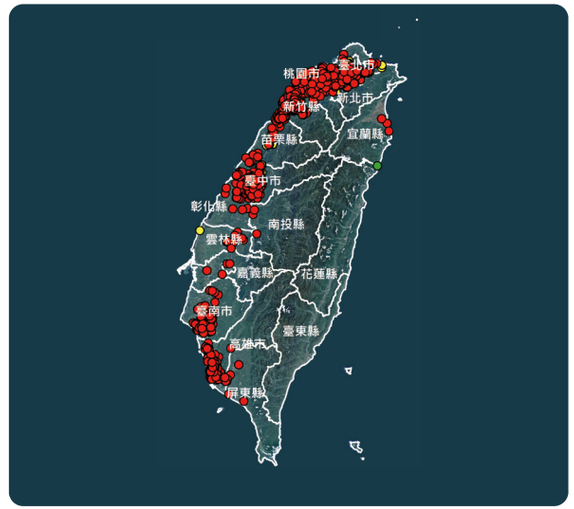
- Flood-related response measures were communicated to suppliers, including strengthening fab foundation structures and drainage facilities, as well as conducting routine emergency drills
- An around-the-clock emergency response task force was established, with continuous monitoring of flood conditions in supplier locations

SSP5-8.5 long-term scenario –
overall risk assessment results for extreme rainfall

●High risk ●Medium risk ●Low risk ●No risk

SSP5-8.5 long-term scenario –
water scarcity risk assessment results

●High risk ●Medium-high risk ●Medium risk ●Low risk



SSP5-8.5 long-term scenario –
extreme heat risk assessment results

●High risk ●Medium risk ●Low risk

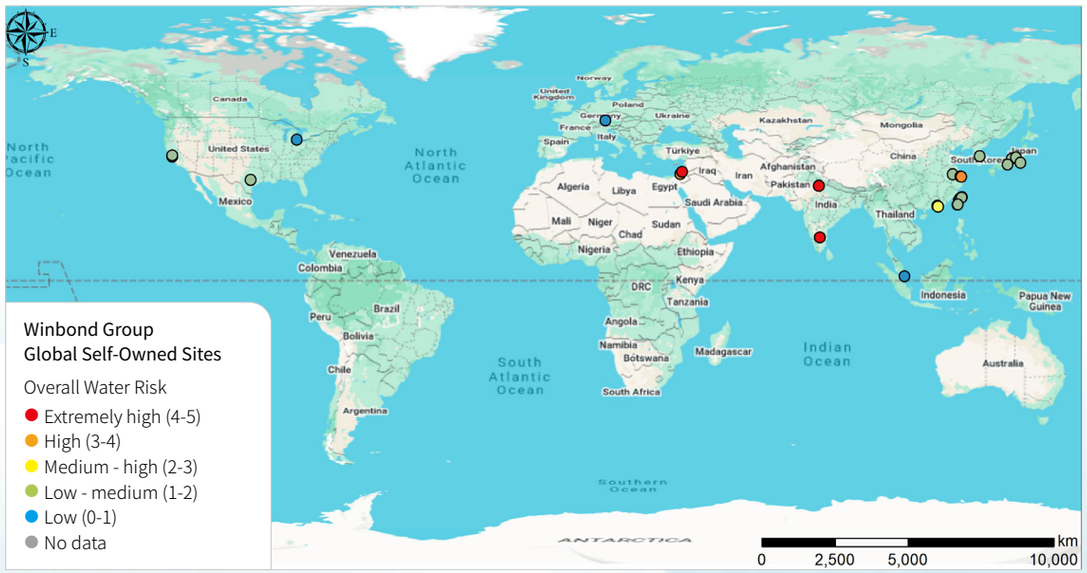
Physical risk scenario analysis results for global self-owned sites and suppliers

- Baseline: overall water risk analysis

Based on WRI Aqueduct baseline results, Winbond identified global water-risk hotspots across its operations. Sites located in China, India, Israel, and the United States were assessed as having high to extremely high overall water risk, reflecting intense competition for water resources, seasonal supply variability, or elevated flood risk. These results inform future global operational planning and supply-chain resilience management.

Assessment scope: Winbond Group – global self-owned sites

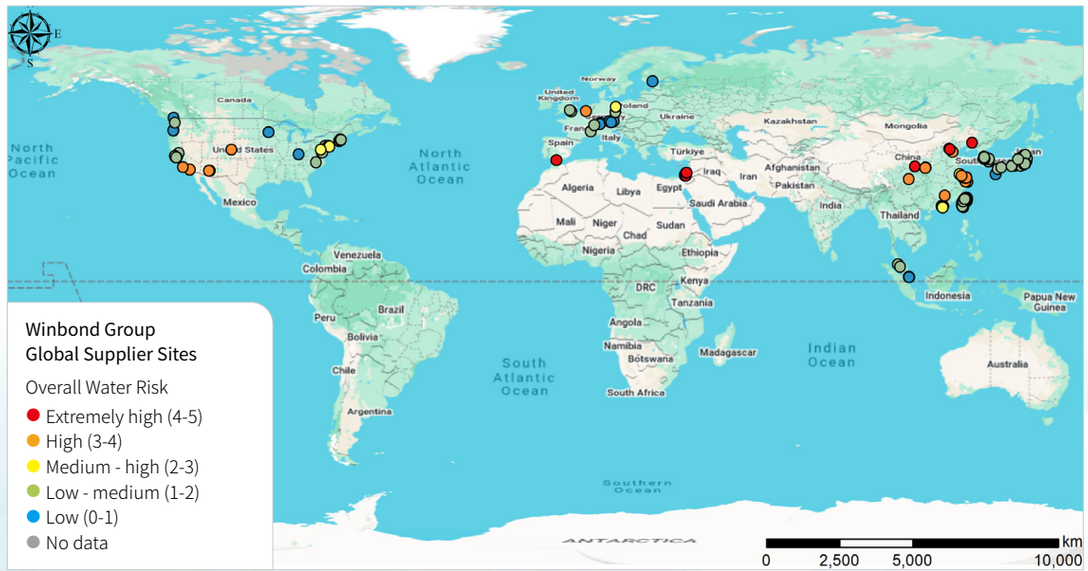
Climate risk	Baseline overall water risk
Assessment results	Water-risk hotspots were concentrated in China, India, and Israel. Among 30 self-owned sites, three in India and Israel were classified as extremely high risk, while four sites in China and Israel were classified as high risk.



Baseline overall water risk assessment results for self-owned sites

Assessment scope: Winbond Group – global supplier sites

Climate risk	Baseline overall water risk
Assessment results	Water-risk hotspots were concentrated in China, the United States, and Israel. A total of 44 supplier sites (approximately 1%) were assessed as high to extremely high risk. Approximately 98% of supplier sites were assessed as low to medium risk or lower.



Baseline overall water risk assessment results for supplier sites

- Future scenarios: water stress analysis

Scenario analysis indicates that as emissions pathways intensify and time horizons extend, the number of global operating sites and supplier locations classified as medium-high, high, and extremely high water stress increases, while the number of low and low-medium water stress sites declines. Elevated water stress indicates tighter local supply-demand conditions and may expose operations to unstable water access, withdrawal restrictions, or rising water costs under both normal and extreme climate conditions. Overall, the results suggest that climate change may further exacerbate global water stress and pose long-term challenges to operational and supply-chain water security.

Assessment scope: Winbond Group – global self-owned sites

Climate risk		Water stress risk under climate change
Assessment results[1]	SSP1-2.6	Under both SSP1-2.6 and SSP5-8.5 scenarios, water-stress risks were concentrated in China, India, Israel, and the United States. Across short-, medium-, and long-term horizons, eight sites were assessed as high to extremely high risk, while most sites in Taiwan and Japan were assessed as low-to-medium risk.
	SSP5-8.5	

SSP1-2.6 long-term scenario – Water stress assessment results for self-owned sites:

SSP5-8.5 long-term scenario – Water stress assessment results for self-owned sites:

Note: The assessment presented only the representative low-emissions scenario (SSP1-2.6) and the very high-emissions scenario (SSP5-8.5) to illustrate the range of risk impacts under different climate pathways. The analysis results of the remaining scenarios were incorporated as reference inputs to the overall risk assessment.

Assessment scope: Winbond Group – global supplier sites

Climate risk		Water stress risk under climate change
Assessment results	SSP1-2.6	Under both SSP1-2.6 and SSP5-8.5 scenarios, water-stress risks were concentrated in China, Israel, and the United States. Across short-, medium-, and long-term horizons, approximately 50 supplier sites (about 2%) were assessed as high to extremely high risk. Nearly 96% of supplier sites were assessed as low-to-medium risk or lower, primarily located in Asia.
	SSP5-8.5	

SSP1-2.6 long-term scenario – Water stress assessment results for supplier sites

SSP5-8.5 long-term scenario – Water stress assessment results for supplier sites

1.3 Productivity and Business Performance

1.3.1 Business Performance

In 2025, Winbond reported consolidated operating revenue of NT$89.41 billion, representing a 9.55% year-on-year increase. Consolidated net income after tax reached NT$3.18 billion, and earnings per share attributable to owners of the parent amounted to NT$0.88. For further explanations and analysis of financial performance, please refer to the FY2025 Consolidated Financial Report.

Consolidated financial performance

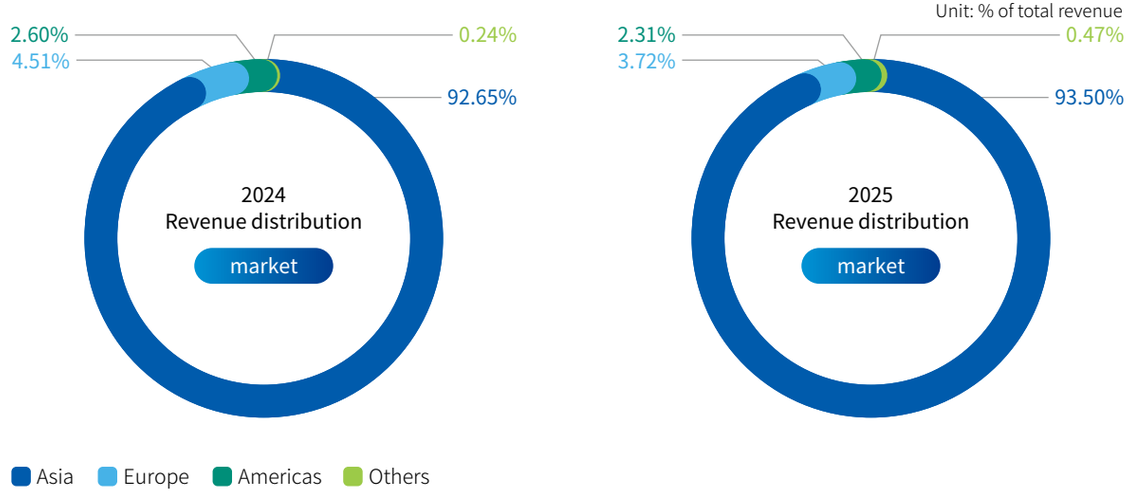
Unit: NT$ million

Item	2022	2023	2024	2025
Operating revenue	94,530	75,006	81,610	89,406
Non-operating income (expenses)	1,512	933	604	(924)
Direct economic value generated (A)	96,042	75,939	82,214	88,482
Operating costs	51,479	52,610	57,609	58,210
Employee wages and benefits	19,706	16,775	16,668	18,453
Payments to capital providers	5,506	6,492	1,915	1,421
Payments to governments	4,345	1,768	800	646
Community investments	7	7	6	6
Direct economic value distributed (B)	81,043	77,652	76,998	78,736
Retained economic value (A–B)	14,999	(1,713)	5,216	9,746
Consolidated income (loss) before tax	18,046	(698)	1,112	4,610
Consolidated net income after tax	14,987	34	710	3,177
Earnings per share attributable to owners of the parent (NT$)	3.25	(0.29)	0.14	0.88

Note: The change in non-operating income (expenses) , which turned into a net expense in 2025, primarily reflects higher interest expenses.

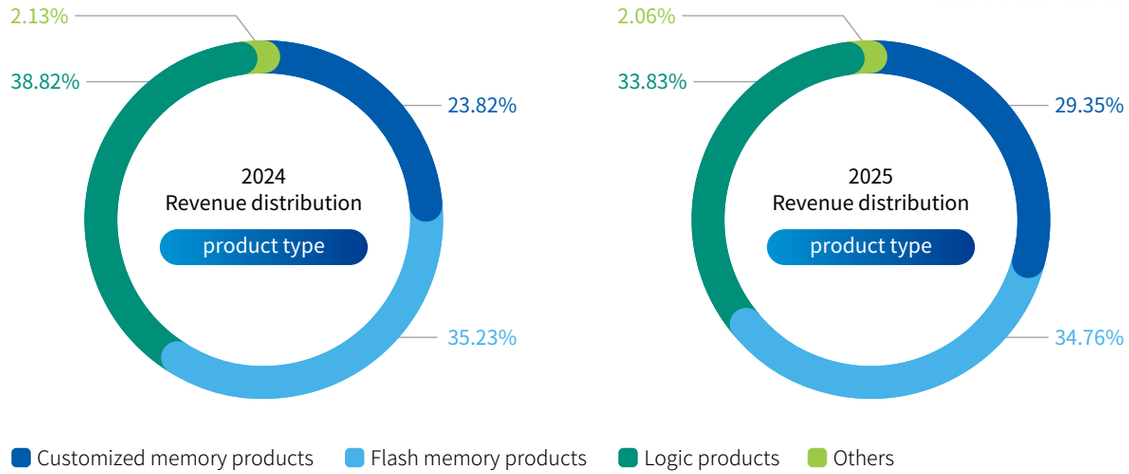
Revenue distribution by market

Unit: % of total revenue



Revenue distribution by product type

Unit: % of total revenue



1.3.2 AI Empowerment and Digital Transformation

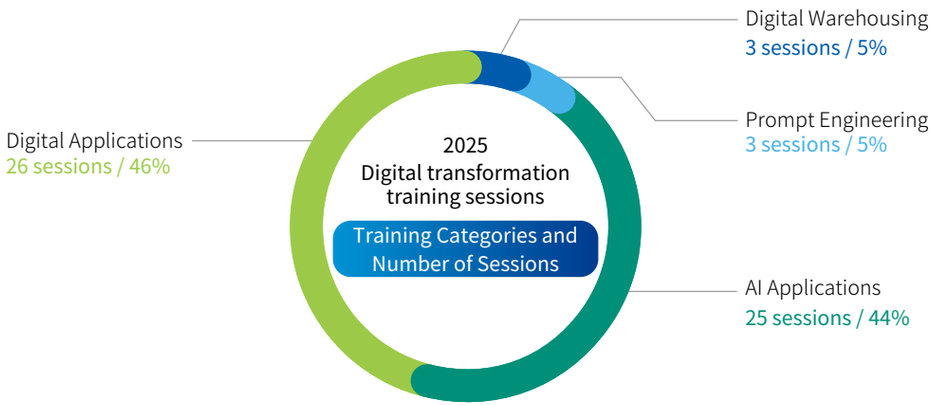
Productivity and business performance form the cornerstone of Winbond' s sustainable growth and are critical drivers of enhanced market competitiveness. The Group firmly believes that continuous improvements in productivity not only reduce operating costs and minimize resource waste, but also enable revenue expansion, thereby creating greater corporate value and stronger operating results.

In 2025, Winbond' s digital transformation reached a new milestone. A total of 57 digital training programs were delivered during the year. AI-related programs, including AI applications and prompt engineering, accounted for 49% of all sessions, while digital application programs, covering digital tools and data warehousing, increased to 51%. This "dual-track" approach demonstrated tangible results at the 2025 Hackathon, where all participating teams successfully integrated digital and AI tools to deliver hybrid innovations and translate ideas into practical applications.

Looking ahead to 2026, Winbond will adopt a comprehensive and integrated strategy to advance the coordinated development of systems, processes, and people. By establishing a transparent, data-driven decision-making framework and applying value- and resource-allocation models, the Group will ensure that investments in digital transformation are precisely aligned with corporate strategic objectives, maximizing the effectiveness of resource utilization.

Toward 2030, Winbond is committed to achieving 100% employee participation in digital transformation. This ambition underscores the expectation that every employee will serve as a key driver of the transformation journey, fully leveraging individual capabilities while collectively supporting sustained corporate growth. Through continued technological innovation, process optimization, and empowerment-driven management, Winbond will consistently enhance enterprise productivity, maintain competitive leadership, and deliver sustainable profitability alongside long-term value creation.

Completed **57** digital transformation training sessions in 2025



2025 Digital Transformation Achievements

Beginning in 2025, Winbond strengthened its tracking of digital and AI initiatives, shifting the focus from usage metrics to measurable business value, with AI becoming a core pillar of digital capability development. From 2023 to 2025, the Group delivered over 171 digital transformation activities and established structured AI certification pathways; in Taiwan, more than 2,308 employees achieved professional certification, forming a cross-functional expert network.

Innovation competitions driving cross-functional co-creation

- The 2025 Digital and AI Carnival Hackathon attracted 76 teams and 245 employees from 21 organizational units.
- During the event, approximately 1,848 employees participated in online voting and engagement activities, demonstrating that digital transformation has increasingly been internalized as a shared language and culture across the Group.

AI and digital tools directly generating operating benefits

- Internal AI agent tools recorded cumulative usage exceeding 480,000 interactions, with AI becoming an integral day-to-day work partner for employees.
- Across functions such as finance, customer service, project collaboration, environmental, safety and compliance management, and process and equipment operations, AI and automation shortened search and response times, enhanced collaboration efficiency, reduced paper-based processes and rework, and delivered quantifiable time savings while improving the timeliness of decision-making.

Application	Progress	Sustainability and business implications
Finance and management accounting	Intelligent assistants integrated financial data and workflows, reducing data retrieval time to ~1 minute.	Improved decision timeliness, strengthened internal control, and enhanced financial transparency.
Customer service	AI assistants shortened response times and increased first-contact resolution rates.	Enhanced customer experience and satisfaction, and strengthened loyalty among key customers.
Cross-functional project collaboration	Unified collaboration platforms improved efficiency and reduced communication costs.	Accelerated R&D and shortened time-to-market.
EHS and compliance	Digitalized EHS reporting and tracking eliminated paper-based records.	Strengthened occupational safety and environmental management.
Process and equipment optimization	AI-driven parameter optimization reduced equipment tuning time.	Reduced waste and enhanced production stability.

From Tools to Enablement to Culture: Building "Participate, Learn, and Lead"

Winbond firmly believes that the success of digital transformation does not hinge on a single technology, but on cultivating a workforce that is willing to participate, committed to continuous learning, and prepared to take the lead. In 2025, the Group adopted "Participate, Learn, and Lead" as the core principle to embed digital transformation into its corporate DNA.

Through a structured pathway from tools → enablement → culture, Winbond progressively fostered a digital culture characterized by proactive learning, experimentation, and knowledge sharing. This culture strengthened the organization's adaptive capacity in navigating uncertainty.

Organization-wide engagement

- By integrating digital transformation themes into the annual operating guidelines, department heads were required to articulate their respective digital transformation priorities and implementation directions when presenting annual plans. This approach institutionalized digital transformation as a standing agenda item in executive meetings and management dialogues.
- Proposal channels and regular presentation forums were established to encourage employees to proactively submit initiatives that address operational pain points through data analytics, process automation, or system integration. Frontline experience was thus translated into scalable and replicable digital projects.
- Through cross-functional digital transformation communities and internal knowledge-sharing platforms—bringing together teams from information technology, manufacturing, R&D, and quality assurance—regular case-sharing sessions and workshops were conducted. These mechanisms enabled rapid exchange of practices across fabs and functions and accelerated the replication of successful experiences.

PARTICIPATE

Continuous capability building

- By combining internal training programs with external expert sessions, the Group continued to strengthen core competencies in data analytics, process design, and AI applications, fostering a "digital-first" mindset across the organization.
- An AI learning certification system and structured learning roadmap were established, covering data science, AI implementation, and domain-specific applications. As of 2025, more than 2,308 employees had completed relevant professional certifications, forming a cross-functional internal network of data and AI specialists.

LEARN

Driving innovation

- "Digital and AI pioneers" were identified and nurtured within each business unit to serve as catalysts and coaches for change at the departmental level. Winbond cultivated over 80 AI Champions across business units and functions, who acted as digital coaches and transformation advocates within their respective organizations.

LEAD

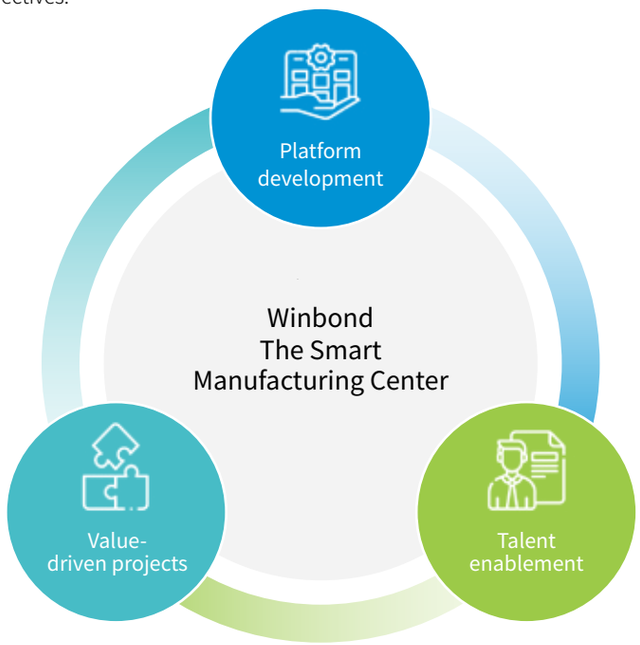
Factory Digital Transformation Promotion Strategy

Achievements in Factory Digital Transformation and Smart Manufacturing

I. Strategic vision and governance framework

To enhance long-term competitiveness and operational resilience, the Smart Manufacturing Center at Winbond advanced factory digital transformation through three strategic pillars: platform development × talent enablement × value-driven projects. Supported by robust data governance frameworks, systematic talent development, and outcome-oriented project management mechanisms, the Group established a scalable, measurable, and replicable smart manufacturing ecosystem.

Digital transformation initiatives were led by senior management and executed through cross-functional collaboration mechanisms. These initiatives were embedded into annual operating objectives and performance evaluation systems, ensuring alignment between technology investments, risk management, resource efficiency, and corporate governance requirements. This integrated governance structure balanced operational performance with sustainable development objectives.



II. Digital transformation and smart manufacturing achievements

1. Platform development: data governance and digital infrastructure

The Smart Manufacturing Center focused on building a stable, secure, and high-efficiency digital foundation for smart manufacturing. By 2025, multiple core platforms had been completed, encompassing six major domains: systems, data, business intelligence, intelligent application services, system monitoring, and large language models (LLMs). Together, these platforms formed a closed-loop architecture spanning data collection, governance, analytics, and AI application.

Key achievements and sustainability impact in 2025

Application area	Key achievements	Sustainability value
Data governance and analytics	Approximately 470,000 data queries per day; 3.7 TB of data processed daily; 4,300 active reports	Enhanced decision timeliness and transparency; reduced manual errors and operational risks
System stability and monitoring	783 management dashboards and 1,200 automated alert rules deployed	Strengthened risk early-warning capabilities and reduced operational disruption risks
Cross-functional report sharing	Full deployment of a shared reporting platform; approximately 2,300 self-built analytical reports	Eliminated data silos and improved collaboration efficiency and organizational productivity
Intelligent knowledge search	642 knowledge entries and 205 intelligent assistant tools developed	Accelerated knowledge transfer and experience replication; mitigated risks from workforce mobility
Standardized development processes	Unified development and deployment mechanisms established	Reduced redundant development and resource waste
Information security and compliance	Comprehensive access control and audit trail mechanisms implemented	Enhanced information security maturity and governance transparency

Through robust digital infrastructure, the Group significantly improved operational stability and information transparency while strengthening risk management capabilities.

Implementation case: integrated process monitoring and digital knowledge transfer

Building on these platforms, the process integration function transformed fragmented monitoring mechanisms into a systematic protective network. Visualization analytics tools were introduced to establish real-time monitoring across 71 key product indicators, shifting from reactive reviews to proactive prevention and enabling data to serve as a shared language across departments. To address knowledge transfer challenges, the team independently developed and trained 14 dedicated AI Assistants, digitizing accumulated experience and historical cases to ensure continuity of engineering capabilities despite personnel changes.

2. Talent enablement: building digital culture and capabilities

Talent remains the cornerstone of digital transformation. The Smart Manufacturing Center established a comprehensive internal training academy. For domain experts, hands-on courses were provided in data querying, analytics, report development, and intelligent model applications. For management, training emphasized data-driven leadership, including defining problems and measuring outcomes through data. The overarching objective was to establish a collaborative working model between people and intelligent tools, making digital capability a fundamental competency for every employee.

Key achievements and sustainability impact in 2025

Application area	Key achievements	Sustainability value
Data analytics capability	2,416 employees completed data analytics certification	Strengthened organization-wide data interpretation and problem-solving capabilities
Foundational intelligent application skills	955 employees completed foundational intelligent tool training	Improved process improvement and data application efficiency
Advanced intelligent project training	Two AI Workshop cohorts completed, totaling 380 trainees	Cultivated cross-functional project talent with hands-on capabilities
Data engineering capability	1,275 employees completed data modeling and querying training	Reduced technical bottlenecks and enhanced data self-sufficiency
Programming application capability	328 employees completed Python development training	Improved work efficiency and process automation
AI bootcamp	27 proof-of-concept projects completed	Established department-level AI implementation capabilities

Through sustained investment in talent development, the Group reduced reliance on a limited number of specialists and enhanced overall digital literacy and innovation capacity.

Implementation case: enabling bottom-up digital innovation

Historically, engineers spent substantial time extracting data and reconciling information across systems, constraining decision-making efficiency. Through systematic programming and AI training, employees developed self-driven problem-solving capabilities. For example, frontline staff independently applied Python to build automated architectures that integrated previously isolated analytical tools, significantly improving engineering efficiency. This shift freed engineers from repetitive data handling and enabled greater focus on advanced process optimization and yield improvement.

3. Value-driven projects: outcome-oriented transformation execution

Adhering to a value-driven approach, the Smart Manufacturing Center established a committee of domain experts to guide a three-stage upgrade path from digitalization and process optimization to comprehensive transformation. AI technologies were continuously integrated into core production processes and supply chain management to reduce waste, enhance quality, and enable intelligent, judgment-based manufacturing models.

Key achievements and sustainability impact in 2025

Application area	Key achievements	Sustainability value
Project governance mechanisms	Over 150 major projects completed cumulatively	Established transparent and traceable governance mechanisms
Process stability improvement	Cpk indices improved by 10–20%	Reduced process variability and scrap rates
Quality improvement initiatives	Abnormality occurrence rates reduced by 50%	Lowered quality-related losses and risks
Supply chain and asset management	Comprehensive inventory and optimization of Contract / Repair Parts; annual savings of approximately NT$2 million	Enhanced asset transparency and internal control effectiveness
Intelligent application deployment	Multiple high-impact use cases successfully implemented	Improved efficiency, quality, and risk early-warning capabilities

Through outcome-oriented project management, digital transformation was translated into tangible financial benefits and operational improvements while enhancing resource utilization efficiency.

Implementation case: from risk gatekeeper to intelligent AI agent

As part of value-driven initiatives, cross-functional collaboration led to the development of abnormal lot retention alert systems. These systems not only enabled timely tracking of abnormal batches but also supported product quality risk forecasting, strengthening proactive risk management capabilities.

Future intelligent manufacturing outlook

Building on existing digital foundations, factory operations will continue to advance toward intelligent manufacturing through deeper deployment of AI Agents across production processes:

Proactive analysis and recommendations
Existing monitoring dashboards will be upgraded to analyze abnormal trends proactively (e.g., parameter drift) and provide preliminary corrective recommendations.

Pilot run intelligence hub
A centralized pilot run information center will be established, leveraging AI algorithms to integrate historical experimental data and product conditions. This system will automatically calculate optimal settings, shortening development cycles and accelerating time-to-market.

Yield analysis system enhancement
Cross-functional teams will develop AI systems with big data correlation analysis capabilities to automatically identify abnormal process steps and recommend improvement actions, comprehensively enhancing engineering precision.

III. Conclusion

Through robust digital platforms, comprehensive digital talent development, and value-driven project execution, the Smart Manufacturing Center at Winbond has established a highly resilient smart manufacturing model. This approach has significantly improved operational efficiency and quality while strengthening risk management and resource utilization. Digital transformation has thus become a critical foundation for the Group' s ESG commitments and its pathway toward sustainable growth.

1.4 Tax Management

Winbond Electronics Tax Governance Policy

Winbond has established the Winbond Electronics Tax Governance Policy to enhance tax transparency, mitigate tax-related risks, and foster constructive and trust-based engagement with tax authorities. Through this policy framework, the Group integrates tax governance into its broader corporate social responsibility commitments and supports the sustainable development of the economy, the environment, and society.

In response to the OECD-led global initiatives against tax avoidance, the Group has strengthened tax transparency and fairness across its operations. From a transparency perspective, Winbond completed transfer pricing documentation filings for both parent and subsidiary entities in a timely manner and regularly disclosed tax-related information in its financial statements and annual reports. From a tax fairness perspective, all subsidiaries fulfilled their local tax filing obligations within statutory deadlines. The Group also engaged external professional advisors to support compliance and ensure the proper fulfillment of tax responsibilities across jurisdictions.

| Tax policy: seven guiding principles |

1. The Company strictly complied with applicable tax laws and regulations in all operating jurisdictions and adhered to the spirit of tax legislation. Accurate, timely, and honest tax filings and payments were made to fulfill the social responsibility of a taxpayer.
2. The Company did not use artificial tax structures or tax havens for tax avoidance purposes, nor did it shift profits to low-tax jurisdictions.
3. Related-party transactions were conducted in accordance with the arm' s length principle and complied with the OECD Transfer Pricing Guidelines. Profits were not manipulated through related-party arrangements.
4. In the event of material changes to tax regulations, independent third-party tax advisors were consulted as necessary to assess potential impacts and develop appropriate response strategies.
5. Tax-related information was disclosed in financial statements, annual reports, and other stakeholder-oriented disclosures where such disclosure enhanced tax transparency.
6. The Company maintained open, honest, and trust-based communication with tax authorities.
7. The Group continuously cultivated tax professionals to promote knowledge transfer and long-term capability development.

Tax reduction and credits

Winbond (Taiwan) and Nuvoton (Taiwan) filed their 2024 Taiwan corporate income tax returns in 2025 and applied tax credits under Article 10 of the Statute for Industrial Innovation, including research and development expenditures and investments in 5G smart machinery. The total eligible tax credit amounted to NT$862,213 thousand, of which NT$56,006 thousand was utilized to offset current tax liabilities.

Note: The 2025 tax filing cases have not yet been assessed by the tax authority (National Taxation Bureau).

Government grants and subsidies

1. Winbond obtained preferential-interest government loans of NT$6,901,600 thousand under the "Action Plan for Welcoming Overseas Taiwanese Businesses to Return to Invest in Taiwan." After applying interest subsidies, interest rates ranged from 1.38% to 2.91%. The funds were used for equipment purchases and working capital.
2. Winbond' s application to the Ministry of Economic Affairs, Department of Industrial Technology, for the "IC Design Advancement Subsidy Program" was approved in September 2024, with a total approved subsidy of NT$555,500 thousand.
3. Winbond received approval under the Ministry of Economic Affairs, Industrial Development Administration' s "Post-pandemic low carbon and smart transformation project," collaborating with 13 suppliers and outsourced partners to implement carbon reduction initiatives. The total approved subsidy was NT$18,800 thousand.
4. Winbond was approved by the Ministry of Economic Affairs, Energy Administration' s "2025 Energy Performance Contract Program," with total approved subsidies of NT$5,000 thousand.

For detail information, please refer to the 2025 Consolidated Financial Report.

Major operating activities and employee headcount

Item	Company name	Major operation	Total employee
Taiwan	Winbond Electronics Corporation	• Design, development, manufacture and marketing of very large scale integration (VLSI) integrated circuits (ICs) used in a variety of microelectronic applications.	5,052
	Miraxia Technology Taiwan Corporation	• Development of software and services for automotive and industrial control.	
	Nuvoton Technology Corporation	• Research, design, development, manufacture and marketing of Logic IC, 6-inch wafer product, test, and OEM.	
	Song Yong Investment Corporation	• Investment holding.	
Asia Pacific (exclude Taiwan)	Winbond Electronics Corporation Japan	• Research, development, sales and after-sales service of semiconductor.	2,747
	Winbond Electronics India Private Limited	• Sales and services of semiconductor.	
	Winbond Electronics (Hong Kong) Limited	• Sales of semiconductor and investment holding.	
	Winbond Integrated Circuit (Suzhou) Limited	• Design, development, testing, sales and services of integrated circuits and related equipment.	
	Winbond Technology Ltd	• Design and marketing services of semiconductor.	
	Callisto Holding Limited	• Electronic commerce and investment holding.	
	Miraxia Edge Technology Corporation	• Software and hardware integration design of semiconductor.	
	Atfields Manufacturing Technology Corporation	• Manufacture of semiconductor and smart factory solutions.	
	Nuvoton Electronics Technology (Shanghai) Limited	• Provide projects for sale in China and repairing, testing, consulting of application software and semiconductor equipment leasing business.	
	Nuvoton Electronics Technology (H.K.) Limited	• Sales services of semiconductor.	
	Nuvoton Electronics Technology (Shenzhen) Limited	• Computer software service (except I.C. design), wholesale business for computer, peripheral equipment and software.	
	Nuvoton Electronics Technology (Nanjing) Limited	• Provide development of semiconductor technology, consulting services and sales.	
	Nuvoton Technology Israel Ltd.	• Design and services of semiconductor.	
	Nuvoton Technology India Private Limited	• Design, sales and services of semiconductor.	
	Nuvoton Technology Singapore Pte. Ltd.	• Design, sales and service of semiconductor.	
	Nuvoton Technology Korea Ltd.	• Design, sales and service of semiconductor.	
	Nuvoton Technology Holdings Japan	• Investment holding.	
	Nuvoton Technology Corporation Japan	• Design, sales and service of semiconductor.	
Other	Winbond International Corporation	• Investment holding.	332
	Winbond Electronics Corporation America	• Design, sales and service of semiconductor.	
	Winbond Electronics Germany GmbH	• Marketing services of semiconductor.	
	Nuvoton Technology Corporation America	• Design, sales and service of semiconductor.	
	Nuvoton Investment Holding Ltd.	• Investment holding.	
	Nuvoton Technology Germany GmbH	• Customer service and technical support for semiconductor.	

Distribution of operating revenue, income before tax, current income tax expense, and cash income tax paid

Unit: NT$ million

Item	Tax jurisdiction	2024	2025
Operating revenue	• Taiwan	66,534	75,489
	• China (including Hong Kong)	26,259	30,312
	• Japan	26,368	21,343
	• Other regions	10,057	8,975
Income (loss) before tax	• Taiwan	1,040	3,448
	• China (including Hong Kong)	408	440
	• Japan	(1,339)	(4,159)
	• Other regions	399	595
Current income tax expense (benefit)	• Taiwan	(297)	9
	• China (including Hong Kong)	65	83
	• Japan	14	79
	• Other regions	96	81
Cash income tax paid	• Taiwan	314	91
	• China (including Hong Kong)	60	82
	• Japan	36	104
	• Other regions	113	86

Notes:
1. All figures are presented prior to consolidation eliminations.
2. "Other regions" include Germany, Israel, India, Korea, Singapore, and the United States (listed alphabetically by country).
3. In 2025, the Group' s cash income tax paid amounted to NT$363 million, representing approximately 0.41% of consolidated operating revenue. In 2024, cash income tax paid totaled NT$523 million, accounting for approximately 0.64% of consolidated operating revenue.

1.5 From Capital Management to Sustainable Competitiveness

Winbond positioned “sustainable operations” and “value creation” as core principles, with finance serving as a key driver of sustainable competitiveness. Green finance integrated environmental responsibility, operational efficiency, and cost of capital to create a virtuous cycle of growth and social value.

1. Implementation of sustainability-linked loans (SLL) to enhance financial resilience

Linked financing terms to sustainability performance, securing more competitive funding while strengthening financial structure.

2. Quantification of sustainability metrics to enhance governance transparency

Embedded measurable, trackable indicators into financial and operational systems. Systematic management demonstrates a high level of execution, effectively strengthening corporate credibility and investor confidence.

3. Driving company-wide decarbonization through financial mechanisms

Through a cost-of-capital linkage mechanism, energy conservation and carbon reduction are transformed into shared organizational goals. This helps employees understand that environmentally friendly behaviors directly impact financial performance, driving behavioral change through financial incentives and deepening the internal culture of sustainability.

4. Reduction of financing costs and enhancement of brand reputation

Applied green finance to strengthen brand credibility, improve funding conditions, and support technology development and sustainability investments, generating tangible financial advantages.

Sustainabilitylinked loan performance indicators

No.	Indicator	2024 Progress	2025 Progress
1	Reduction in GHG emission intensity per unit (kg CO_2e / wafer mask layer) ≥ 5% yearonyear	Reduced 18.1% vs. 2023	Reduced 8.7% vs. 2024
2	Reduction in electricity consumption intensity per unit (MJ / wafer mask layer) ≥ 1% yearonyear	Reduced 14.8% vs. 2023	Reduced 2.2% vs. 2024
3	Companywide water recycling rate ≥ 80%	81.9%	82.7%
4	Overall waste recycling rate ≥ 90%	91.9%	93.7%
5	Receipt of at least one Taiwan Corporate Sustainability Award	Eight awards received	Sustainability Report Platinum Award
6	Ranking within top 20% of TWSE Corporate Governance Evaluation	Listed companies ranked 6–20%	Listed companies ranked 6–20%
7	Inclusion in the TWSE Taiwan High Compensation 100 Index	Winbond and Nuvoton included	Winbond and Nuvoton included
8	Selection into the S&P Sustainability Yearbook	Selected	Selected
9	Average annual learning hours per Taiwan employee ≥ 50 hours	70 hours	71 hours
10	CDP Climate Change score ≥ A	A rating	A rating; included in CDP A List and awarded Supplier Engagement Leader

5. Investment in renewable energy

From 2022 to 2025, the Board cumulatively approved NT$1.2 billion in renewable energy investments to diversify power supply sources and enhance investment returns.

In 2022, Winbond acquired a 15% equity stake in ChiaHo Green Energy Corporation for NT$555 million, supporting access to solar power and progressive carbon reduction. In May 2024, Winbond participated in the establishment of KaiHong Energy Co., Ltd., increasing its committed investment from NT$400 million to NT$645 million in 2025. KaiHong Energy focuses on investing in solar and wind power generation infrastructure projects in Taiwan.

Through these investments, Winbond actively supported Taiwan's and global 2050 net zero targets, strengthened access to renewable energy, and advanced tangible progress toward sustainability commitments. As of April 2026, cumulative Boardapproved renewable energy investments reached NT$1.2 billion, with continued evaluation of suitable renewable energy investment opportunities.

6. Acquisition of international voluntary carbon credits

In response to global carbon neutrality trends and the 2050 net zero goal, Winbond joined Climate Impact X (CIX) in Singapore in 2022 and the Taiwan Carbon Exchange (TCX) in 2023, becoming the first enterprise to conduct international carbon credit transactions on the TCX platform.

By the end of 2025, Winbond had acquired 13,500 tCO_2e of voluntary carbon credits from projects across nine countries in Asia and Africa. All credits were issued by internationally recognized independent verification bodies, including Verra and Gold Standard, covering nature conservation, clean cookstoves, clean water, solar energy, and wind power projects.

Beyond offsetting corporate emissions, these projects contributed to terrestrial and marine ecosystem protection, waterrelated ecosystem restoration, clean energy infrastructure development, and respect for local community rights. Collectively, the carbon credit projects supported 16 of the 17 United Nations Sustainable Development Goals (SDGs).

While continuing to strengthen its core semiconductor business, Winbond remained committed to global decarbonization efforts and climate action. The Company has also hosted the "Zero-carbon Family Day" for four consecutive years, promoting organizationwide carbon reduction awareness and extending sustainability influence to the next generation, with cumulative carbon offsets of 732 tCO_2e.

02

Sustainable Supply Chain

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SDG 8.4: Improve resource efficiency in consumption and production
SDG 9.1: Strengthen resilient supply chain infrastructure
SDG 13.1: Reduce the impacts of climate-related disasters on supply chains
SDG 13.2: Integrate climate risks into supply chain management
SDG 13.3: Enhance suppliers' climate adaptation capabilities
SDG 17: Partnerships for the Goals

2025 Performance Highlights

- CDP SEA A Leadership Achieved the highest A Leadership level in the CDP Supplier Engagement Assessment through deepened supplier engagement
- 11,459 tCO_2e Annual carbon emissions reduced across the supply chain ecosystem
- 240% Overachievement of the "Large Leads Small" low carbon and smart transformation project, delivering 19,995 tCO_2e emissions reduction
- NT$430+ Million Green procurement spending, with more than 2,700 employee participations supporting the Ministry of Environment's green procurement initiative
- 700+ Units "Connecting Silicon Hands for Sustainable Basketball" initiative delivered over 700 sustainable basketballs, benefiting 20 local elementary schools with 100% community reinvestment
- 56,842 Hours Cumulative supply chain ecosystem co-learning and capacity-building hours
- 100% Completion rate of supplier sustainability due diligence management
- 100% Tier-1 suppliers covered by sustainability due diligence assessments
- 100% On-site audits and improvement programs completed for Tier-1 critical suppliers, including third-party audits
- 13,000+ Records Scope 3 product carbon data collected annually through the Winbond carbon accounting system

Targets and Progress of Material Topics

	2025 Target	2025 Progress	2026 Target	2030 Target
Supply Chain Management	• 100% of Tier-1 significant suppliers signed the Conflict-Free Minerals declaration	✓ 100%	100%	100%
	• Increased the localization ratio of critical raw materials procurement ≥ 39.5%	− 37.3% (Note 2)	40%	42%
	• 100% of Tier-1 significant suppliers signed the Winbond Electronics Supplier Code of Conduct	✓ 100%	100%	100%
	• 100% of Tier-1 significant suppliers completed supplier sustainability due diligence	✓ 100%	100%	100%
	• 100% of high-risk suppliers completed sustainability due diligence audits and consultations (Note 3)	✓ 100%	100%	100%
	• Disclosure ratio for major suppliers' energy and resource use and savings ≥ 95% (Note 4)	✓ 95%	95%	100%
	• ≥ 7% of high-risk suppliers subject to third-party onsite audits and consultations new	✓ 7%	30%	80%

Note 1: ✓ = Target achieved; − = Target not achieved.
Note 2: Local procurement volume increased significantly; however, due to the price advantages of local materials, the overall procurement spend ratio declined slightly.
Note 3: High-risk suppliers are identified through supplier sustainability due diligence, sustainability desk audits, and other assessments and require on-site audits and consultations to mitigate sustainability risks.
Note 4: Major suppliers are suppliers directly related to Winbond's Scope 3 emissions.
Note 5: The scope of the targets covers Winbond (Taiwan).

Winbond anchored its sustainable supply chain program in "Practicing Responsible Procurement," and a "People-oriented", integrating ecosystem thinking into governance and day-to-day supply chain operations. Through the dual transformation pillars of digitalization and decarbonization, Winbond strengthened controls, data collection, and collaboration mechanisms to support measurable progress.

In a volatile operating environment, maintaining business continuity requires innovation and agile response. Winbond worked with suppliers through audits, training, and digital data systems to strengthen operational resilience and manage ESG risks across the supply base.

Winbond strengthened supplier engagement and expanded value-chain collaboration. In 2025, Winbond received an A rating in the CDP SEA, achieving Leadership level recognition.

Through value-chain climate collaboration, Winbond supported partners' low-carbon transition and co-developed a climate-resilient sustainable supply chain ecosystem.

Winbond has co-built a sustainable and resilient supply chain ecosystem by practicing responsible procurement, continuously strengthening supply chain resilience, and promoting a low-carbon supply chain together with supplier partners.

Convener
Assistant Vice President
Supply Chain Management Center

Shu-Cheng Chang

2.1 Supply Chain Overview

2.1.1 Supplier Composition and Structure

Winbond is a key global memory manufacturer. Within the industry value chain, Winbond supports upstream IC/IP design needs, performs wafer manufacturing, and then—based on customer requirements across product lines—executes outsourced processing, packaging, and testing. Winbond delivers products to customers on time while considering economic and security requirements. In 2025, the Winbond Group operated primarily in Taiwan, with additional presence in Mainland China, Japan, South Korea, Israel, Germany, the United States, and India. Nuvoton's major operating sites were primarily in Taiwan and Japan, while its business sites were located across Mainland China, Japan, South Korea, Israel, the United States, Germany, India, and Singapore to support customer service needs. To ensure on-time delivery, Winbond collaborates with diversified global suppliers across Taiwan, Japan, the United States, Mainland China, South Korea, Belgium, and Germany. Based on 2025 transaction activities, Winbond (Taiwan) worked with 1,10 suppliers, and Winbond (subsidiaries) worked with 698 suppliers. Please refer to the Nuvoton 2025 Sustainability Report.

Suppliers were categorized by procurement category and application, including raw materials, outsourcing, outsourced semiconductor assembly and testing (OSAT), machinery and equipment, components and spare parts, maintenance and repair, facility engineering, and others (transportation and logistics, waste treatment vendors, waste hauling vendors, IT equipment and software, and general services).

2025	Winbond (Taiwan)	Winbond (Subsidiaries)
Total number of Tier-1 suppliers	1,100	698
Total number of significant suppliers in Tier-1	40	92
% of total spend on significant suppliers in Tier-1	80%	80%
Total number of significant suppliers in non Tier-1	5	5
Total number of significant suppliers (Tier-1 and non Tier-1)	45	97

To manage global suppliers' delivery capabilities effectively, Winbond established a rigorous screening and assessment mechanism. This mechanism comprehensively evaluates production-base and technical-service stability across three dimensions—country, sector, and commodity. After suppliers enter formal cooperation, Winbond conducts integrated assessments and management across business principles, significant supplier identification, and sustainability (ESG) criteria to build a resilient global supply chain.

Winbond Supplier Screening Criteria

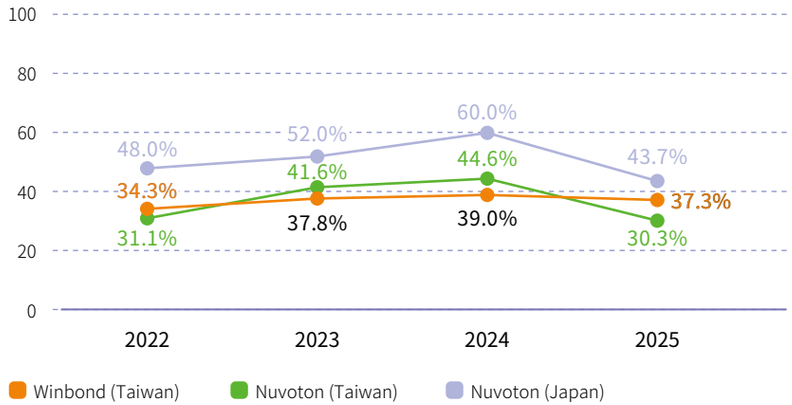
Country-specific	political and country-specific stability, legal and regulatory rigor, frequency of social events (e.g., strikes and demonstrations), and robustness of national infrastructure.
Sector-specific	energy and resource intensity, uniqueness of natural resources (specific minerals), and specialization of technology and services.
Commodity-specific	supply–demand balance, price volatility, labor availability, and the fixed equipment and capital requirements.
Business relevance	market share, industry competitiveness, supply performance and reputation within the industry, product/technology/service quality, and operating
Significant supplier identification criteria	annual procurement spend, diversification of supply sources, and critical spare parts.
Sustainability (Environmental, Social, Governance) aspect	environmental protection and climate response, protection of human and labor rights, and governance capabilities and transparency.

2.1.2 Local Procurement

Winbond worked with suppliers as "+1" sustainability partners and leveraged procurement to drive sustainability impact, transforming economic benefits into long-term momentum for shared prosperity with existing and potential suppliers. In 2025, Winbond fully implemented three sustainable procurement strategies: local procurement to reduce greenhouse gas emissions from international transportation; circular procurement to promote material circularity and reuse; and green procurement to encourage suppliers to develop environmentally friendly products and services.

To strengthen operational resilience, Winbond prioritized local procurement of critical raw materials required for wafer manufacturing (chemicals, gases, targets, and wafers). In 2025, external challenges—including new international climate agreements, carbon fees, layered tariffs, inflation controls, and supply chain regionalization and shortening—continued to affect supply chain resilience and operational stability. Winbond therefore focused on two key initiatives: enhancing green and low-carbon processes at manufacturing sites and optimizing the local procurement mix for critical raw materials to strengthen resilience and mitigate operating risks. In 2025, the local procurement spend ratio was 37.3% for Winbond (Taiwan), 30.3% for Nuvoton (Taiwan), and 43.7% for Nuvoton (Japan), all remaining above 30%. Looking ahead, Winbond will continue multi-track traceability to strengthen resilience for critical raw materials, strategically expand local procurement to production equipment, critical spares, and components, and assess localization feasibility across supply resources to build a more flexible and reliable supply chain.

| Local raw materials procurement ratio |

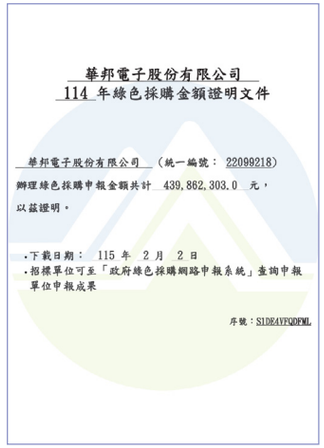


Note: Local procurement refers to the sourcing of raw materials from suppliers whose production sites are located in the same country as the Winbond Group's primary mass-production facilities

2.1.3 Green Procurement

Winbond (Taiwan) embedded the "sustainable living" concept and used procurement to drive transformation across the supply chain and employee lifestyles. On the manufacturing side, Winbond prioritized high-efficiency, low-pollution, and recyclable equipment and building materials. Reported green procurement under the Ministry of Environment "Green Procurement Declaration Platform" exceeded NT$430 million. On the employee side, Winbond promoted sustainable living each quarter, engaging 2,735 participants by the end of 2025. Going forward, Winbond will expand the scope of green procurement and develop diversified green products and services, extending initiatives across administrative and manufacturing systems at the group level.

▲ Winbond green procurement promotion

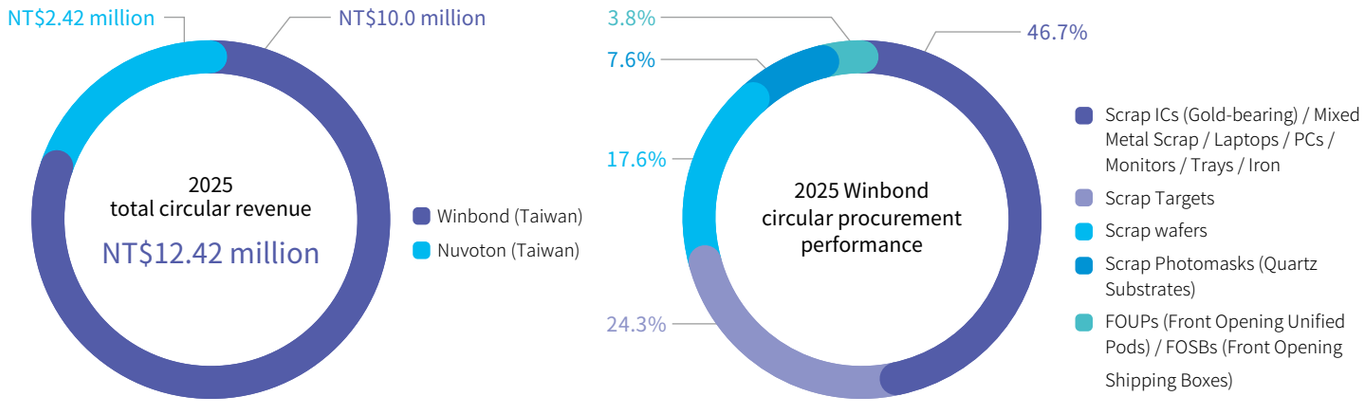


▲ Winbond 2025 green procurement certificate (illustrations omitted).

2.1.4 Circular Procurement

Winbond advanced circular procurement by focusing on operational processes at its Central Taiwan Science Park (CTSP) Fab and Kaohsiung Fab. Winbond identified products and services with circular benefits and worked closely with suppliers through procurement strategies to maximize resource efficiency. In 2025, circular value was generated through recycling and remanufacturing of scrap targets, scrap wafers, and various hardware, creating more than NT$12.42 million in circular revenue (NT$10.0 million for Winbond (Taiwan) and NT$2.42 million for Nuvoton (Taiwan). Looking ahead, Winbond will prioritize procurement of products with repairability, reusability, and high recycling potential to accelerate progress toward sustainability goals.

| 2025 Winbond circular procurement performance |



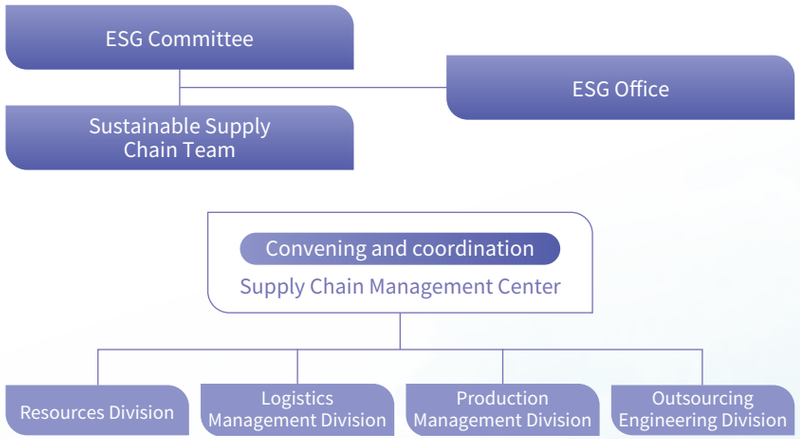
2.2 Sustainable Supply Chain Management

2.2.1 Strategy and Policy

The Sustainable Supply Chain Team operated under the ESG Committee and was led by the Assistant Vice President of the Supply Chain Management Center to implement sustainable supply chain projects. To strengthen governance quality, the team adopted a regular reporting mechanism: semiannual reports to the committee on strategy and phased outcomes, and quarterly progress updates to the ESG office. These mechanisms ensured steady achievement of Winbond' s sustainable supply chain targets.

Building on responsible procurement, Winbond integrated requirements from the Responsible Business Alliance (RBA) Code of Conduct, Hazardous Substance Free (HSF) policy, traditional supplier management (quality, price, lead time, process technology capability), and Authorized Economic Operator (AEO) practices. Winbond further incorporated "environmental co-benefits" and "shared prosperity with partners" to drive sustainability across the supply chain. In 2025, Winbond adopted a net-positive mindset and positioned suppliers as partners that create positive impact. Through in-depth audits and coaching by third-party verification bodies, Winbond achieved 100% completion of supplier sustainability on-site audits in 2025 and strengthened execution capabilities across the supply base. Winbond also advanced dual digital and low-carbon transformation measures, with notable progress in ESG data collection for suppliers and OSAT suppliers, green production management, and internal green logistics systems.

| Supply chain management framework-Organization structure |



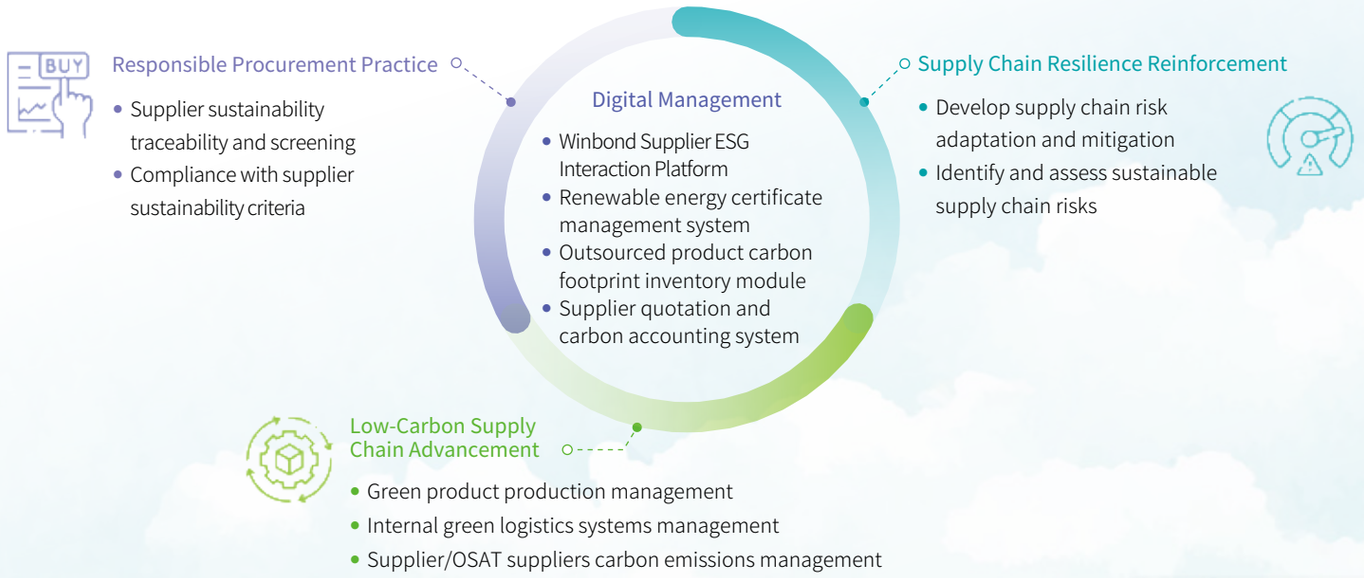
| Supply chain management framework-Management strategy |

The strategy covered Winbond' s supply chain management approach and included:

These strategies were anchored in the 3E core concept: supply Excellence, Economics, and Eco-balance.

| Supply chain management framework-Work framework |

The work framework centered on digital management and expanded across three pillars:



Sustainable supply chain initiatives

Responsible Procurement		Low-Carbon Supply Chain		Supply Chain Resilience	
• Implement Sustainable Sourcing and Selection for New Suppliers • Signing of Integrity Commitment and Regular Awareness Advocacy • Compliance with Winbond Supplier Code of Conduct	• No use of prohibited substances • No use of conflict minerals • Regular Supplier Sustainability Assessments	• Internal Compliance Program (ICP) • Authorized Economic Operator (AEO) • Supplier Sustainability Due Diligence • Supplier on-site audits, coaching, improvement, and enhancement	• Supplier ESG ecosystem engagement and advocacy • Develop supply chain risk management plans (including climate change, environmental impacts, human rights, and governance) • Sustainable education and training by Supply Chain Management Center	• Sustainable procurement (local, circular, and green procurement) • Conduct energy and resource usage surveys for major suppliers • Supply chain carbon reduction: 10%, OSAT product carbon reduction: 60%	• Facilitate and guide sustainable resources in the supply chain • Internal green logistics systems management • Green product production management

2.2.2 Supplier Management Processes and Mechanisms

2025 Key Sustainable Supplier Management Highlights

Signing rate of Winbond Supplier Code of Conduct

100 %

Signing rate of declarations on prohibited substances and conflict minerals

100 %

Compliance rate of new suppliers traceability with ESG (incl. human rights) criteria

100 %

Supplier management process

1. Assessment and selection of new suppliers
2. Signing of Winbond Supplier Code of Conduct
3. Regular evaluation of qualified suppliers
4. Audits and improvements for qualified supplier

A robust supplier partnership served as the foundation of Winbond' s supply chain operating system. Winbond implemented a systematic Plan-Do-Check-Act (PDCA) management cycle—from early-stage traceability screening, to mid-stage regular supplier assessment, to late-stage deficiency follow-up and corrective actions—to secure stable supply relationships. Winbond not only maintained strict internal control over material technology but also emphasized external collaboration to advance SDG 17. Through close supplier interaction, audits, and continuous improvement, Winbond acted as both a supervisor and an enabler by providing resources and support to drive shared transformation.

Sourcing and Assessment of New Suppliers

Winbond' s new supplier selection mechanism included quality system assessments (covering quality, lead time, service, technology, and supplier' s quality system), the Responsible Business Alliance Code of Conduct, and corporate sustainability requirements. As a member of the Internal Compliance Program (ICP) of the International Trade Administration, Ministry of Economic Affairs, Winbond also screened UN Security Council and Taiwan Ministry of Justice sanctions lists at the traceability stage to safeguard supply chain security.

Suppliers that met compliance requirements were required to provide third-party quality system certificates, Process/Product Change Notice (PCN) management principles, and completed hazardous substances management questionnaires. For outsourced manufacturing suppliers for security products, additional third-party certificates and the "Security Product Outsourced Processing Safety Control Measures Checklist Questionnaire" were required. In 2025, the Winbond Group added 13 new suppliers (5 for Winbond (Taiwan), 7 for Nuvoton (Taiwan), and 1 for Nuvoton (Japan), and 100% passed selection against economic, environmental, and social (including human rights) standards.

Percentage/Number of New Suppliers Selected Based on Economic, Environmental, and Social (including human rights)

Year	Number of new suppliers	Pass rate
2022	5	100%
2023	9	100%
2024	9	100%
2025	13	100%
Total	36	100%

Regular Evaluation of Qualified Suppliers

Winbond conducted an annual evaluation for qualified suppliers. Reflecting Winbond' s production specialization, suppliers were grouped into (1) suppliers and (2) OSAT suppliers. The assessment scope covered core indicators such as quality, cost, delivery, and service. Results were managed through a tiered system: suppliers were categorized as A (excellent), B (good), or C (under review), while OSAT suppliers were graded as Excellent, A, B, or C. To advance sustainable supply chain transformation, Winbond incorporated sustainability performance into regular assessments starting in 2024 and increased the weighting from 5% to 15% in 2025, covering participation in sustainability activities, target-setting, and energy-saving and carbon reduction outcomes. An ESG penalty mechanism was introduced to ensure fairness. Suppliers that failed to meet standards were required to submit improvement plans within one month; persistent underperformance triggered a supplier offboarding process to maintain compliance and resilience.

In 2025, no suppliers in Winbond (Taiwan) were terminated due to major sustainability deficiencies. One supplier received a C grade and implemented improvement measures within one month; all other suppliers and OSAT suppliers achieved B grade or higher and A grade or higher, respectively. Winbond will continue proactive communication, monitoring of government enforcement disclosures, and tracking of supplier operating dynamics to ensure stable supply on a compliance basis, while providing positive incentives for suppliers with strong sustainability performance.

Incentive mechanisms for suppliers with sustainability performance

1. Awards and public recognition at supplier forums / OSAT supplier conferences
2. Support from the Sustainable Supply Chain Team for supplier/OSAT sustainability assessments and sustainability audits and coaching; results were used to guide positive procurement measures (e.g., preferred selection and increased allocations).

Supplier / OSAT Supplier Sustainability Rating Management Mechanism

Assessment Content (QCDS-S)

Supplier / OSAT Supplier

Evaluation dimensions for existing suppliers

- Product/Technology/Engineering Quality
- Cost
- Delivery
- Service

Supplier sustainability scoring content

Sustainability

- Participation in Winbond sustainability activities and external sustainability advocacy (40%)
- Setting sustainability management targets (30%)
- Achievement of energy-saving and carbon reduction targets (30%)

Negative factors

Safety incidents, environmental penalties, labor disputes, and business/regulatory penalties occurring during the year were deducted based on materiality and severity

Rating tiers and management mechanisms

Grade A (score ≥ 85)	Grade B (85 > score ≥ 70)	Grade C (score < 70)
Continued cooperation	• Improvement actions required within a specified timeframe • Downgraded to Grade C if rated Grade B twice consecutively	• Improvement actions required within a specified timeframe • Reduced volume or termination of cooperation

Excellent (score ≥ 90)	Level A (90 > score ≥ 80)
Recommended for increased volume	Continued observation
Level B (80 > score ≥ 75)	**Level C (score < 75)**
Recommended for reduced volume	Termination of cooperation

Qualified supplier sustainability audits and improvements - Winbond (Taiwan)

To manage qualified suppliers' operations effectively, Winbond's supplier audit team conducted annual key-sample audits for all qualified suppliers. Desk audits verified valid certificates such as quality management and green review certifications. On-site audits, centered on the RBA 8.0 audit manual, conducted systematic sustainability assessments. In 2025, Winbond conducted 72 audit sessions (24 raw material suppliers, 16 OSAT suppliers, and 32 waste disposal suppliers), identifying 287 improvement recommendations. Compared with 2024, improvement items increased due to expanded sustainability coaching and supplier management needs. Suppliers submitted corrective action plans within agreed timelines, and none were removed from the qualified supplier list due to non-compliance in environment, safety, and health; labor and ethics; product and technical quality; or sustainability management systems. Winbond will expand high-frequency sustainability coaching and training to embed sustainability awareness into supply chain culture and strengthen practical capabilities.

Results of regular desk audits on qualified suppliers across economic, environmental, and social (including human rights) aspects

Economic

- ISO 9001 Quality Management System：**100** %
- IATF 16949：**100** %

Environmental

- ISO 14001 Environmental Management System：**100** %
- REACH：**100** %
- RoHS：**100** %
- HSPM Hazardous Substances Process Management：**100** %

Social (including human rights)

- RBA Social Responsibility：**100** %

Supplier ESG improvement actions

Aspect	Improvement Items	Response and Recommendations
Environmental, Health, and Safety	Inadequate maintenance of safety facilities: multiple emergency safety facilities (e.g., eye-wash station covers, insufficient water column height, expired medicines) were not maintained as required or were mislabeled, creating immediate risks.	Required suppliers to implement regular inspections and immediately rectify deficiencies related to occupational safety and health; ensured consistent labeling management across all equipment.
	Potential hazards in the workplace: piping in filling areas occupied walkways, creating route risks; personnel in receiving/testing areas did not wear PPE as required.	Required on-site management and safe route planning; mandated strict PPE compliance and incorporated PPE adherence into performance evaluation.
	Insufficient planning for energy and water resources: in 2025, suppliers lacked clear plans to adopt renewable/clean energy or to manage water resources.	Required suppliers to set sustainability targets for energy and water and integrate them into long-term operating strategies and annual objectives.
	Lack of recycled content information for products: suppliers lacked clear planning or tracking of recycled content composition in supplied products.	Required suppliers to disclose product composition clearly and establish material sustainability plans or disclosure policies to improve transparency.
Fire Protection System	Emergency exits in receiving areas were obstructed by stored items.	Required regular inspections and review of inspection records.
	Fire extinguishers in the packing room lacked control tags and periodic inspection data.	Required fire extinguishers to be tracked and regularly inspected, with inspection records maintained.

Aspect	Improvement Items	Response and Recommendations
Labor and Ethics	Lack of diverse and anonymous employee communication channels: no anonymous suggestion/complaint box and insufficient confidentiality and protection measures.	Required suppliers to establish diverse communication channels and confidentiality and protection mechanisms; recommended engaging an independent third party to manage anonymous cases to ensure impartiality and professionalism.
	Insufficient awareness and planning for human rights due diligence: limited understanding and no advanced planning or policies.	Required suppliers to develop a human rights policy, conduct human rights risk assessments, periodically map and assess potential negative impacts on human rights (including supply chains), identify high-risk groups and issues, and implement management plans with follow-up.
	Insufficient protection mechanisms for vulnerable groups: failure to establish a pregnancy notification mechanism, compromising the protection of employee rights.	Required suppliers to develop a maternal health protection plan aligned with Ministry of Labor OSH Guidelines and establish a pregnancy-friendly reporting mechanism and process.
Product and Technical Quality	Inadequate equipment and instrument management: mismatched equipment status labels, missing pressure gauge control stickers, and test equipment not included in maintenance plans.	Required standardized status labeling for process equipment (e.g., running, down, abnormal), immediate repair and maintenance for abnormal readings, and ensured accurate monitoring.
	Disorganized material and product storage: conforming and non-conforming items mixed; different materials stored in the same location without clear labeling.	Required improved storage management with zoning and 5S practices; recommended training for site managers, warehouse staff, and production staff to reduce quality risks.
	Incomplete process data and records: HF process testing was used to guide acid addition but values after acid replacement were not recorded, affecting traceability and analysis.	Required standardized data recording; operators must immediately and completely record latest test values after each acid addition or replacement, and periodically analyze results.

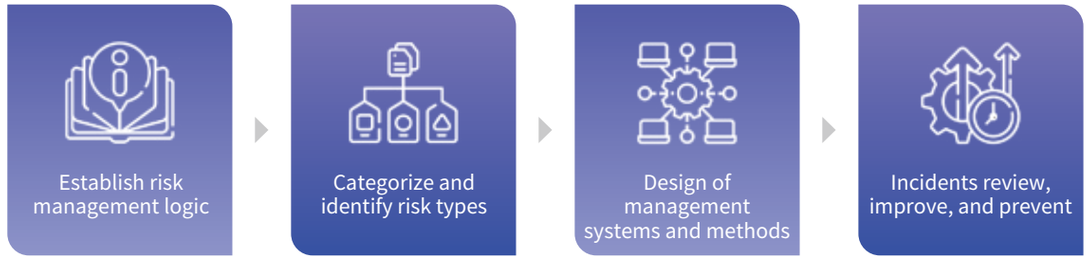
Aspect	Improvement Items	Response and Recommendations
Management System	Incomplete personnel and contractor management: differences in re-certification cycle definitions and execution; unclear contractor risk standards.	Required standardized re-certification cycle definitions and execution standards and inclusion in annual training and audit items; required clear definitions for quality and supply risk evaluation standards and periodic audits and tracking.
	Mismatch between physical storage and management labeling: inventory records inconsistent with physical stock, risking misuse and traceability difficulties.	Required standardized labeling and 5S implementation with fixed-point visual management to ensure neat placement and clear labels.
	Incomplete environmental regulatory compliance data: waste reporting and pollution control equipment maintenance records required supplementary information after audits.	Required suppliers to develop and strictly implement periodic maintenance and calibration plans for air and wastewater pollution control equipment; recommended digital management to input and archive environmental records in real time.
Corporate Sustainability	Insufficient environmental sustainability and emergency response management: lack of a regular verification mechanism for conflict mineral sourcing, and the emergency response plan is not periodically reviewed to ensure its effectiveness.	Required periodic verification of source stability and compliance, as well as establishment and periodic review and drills (e.g., annually or semiannually) for emergency plans with continuous improvement.
	Unclear science-based carbon-reduction targets and strategies: limited understanding of Science Based Target initiative (SBTi) and no further planning or action.	Encouraged targeted training on SBTi for key department personnel to strengthen understanding of climate change and carbon reduction targets.
	Gaps in supply chain information security training: no information security training with regular value-chain partners, creating cybersecurity risks.	Planned to make information security training a required condition for regular collaboration with value-chain partners and to conduct periodic online/offline training to build baseline security awareness.

2.2.3 Sustainable Supply Chain Risk Management

2025 Key Sustainable Supplier Management Highlight

- **100%** Signing rate of the Integrity and Ethics Policy among all suppliers
- **100%** of Tier-1 suppliers covered by sustainability due diligence
- **100%** completion rate of sustainability guidance for high-risk Tier-1 suppliers

Suppliers Risk Management Process



Through its procurement activities, Winbond (Taiwan) builds collaborative relationships with various types of suppliers. Distributed across production sites in different regions, these suppliers provide products and services and together constitute Winbond's supply chain. First, Winbond used ISO 31000-based systematic thinking for monitoring and impact assessment. Second, Winbond categorized risk sources into Material risks, intra-partnership risks, and external risks. Third, Winbond established corresponding management methods based on differences in risk sources and types. Fourth, Winbond reviewed each management incident, corrected deficiencies, and implemented improvements to reduce future impacts on supply chain management.

Supply chain risk management mechanism

Risk type	Definition	Management systems / measures
Material risk	Risk that directly related to the production and manufacturing	• Managed based on the Responsible Business Alliance (RBA) requirements for conflict-free minerals; conducted annual due diligence for significant suppliers using the RMI Conflict Minerals Reporting Template (CMRT) and issued a conflict minerals due diligence report. • Ensured product quality by establishing Process/Product Change Notice (PCN) principles; triggered controls when raw materials, processes, or packaging materials changed.
Intra-partnership risk	Supply chain partnership risks arising from integrity risks driven by comparative advantage among members.	• Regularly updated the Winbond Supplier Code of Conduct and required signing for all new qualified suppliers. • Conduct biannual communication on ethics and integrity policies for all suppliers. • Require suppliers to comply with Winbond's Information Security Management Policy and define response measures and liability for compensation in the event of information security risks or incidents.
External risk	Risks from climate change and natural disasters, and non-natural risks (political, economic, and social).	• Natural disasters: used the Emergency Response System to reflect global earthquakes in real time and supported procurement in assessing supplier impacts. • Climate change: analyzed disaster exposure for global supplier sites under warming scenarios. • Political, economic, and social risks: for events such as war, major safety incidents, and strikes that could disrupt supply, Winbond established an emergency response taskforce to collect, consolidate, report, analyze, and assess impacts. • Strictly complied with Authorized Economic Operator (AEO) regulations and required OSAT suppliers to comply with trade security management.

Winbond Supplier Code of Conduct

Supplier sustainability due diligence process

1 Comply with the Supplier Code of Conduct

- Updated the Winbond Supplier Code of Conduct in line with international trends
- Conducted regular promotion

2 Establish assessment content and select suppliers to be assessed

- Developed assessment content based on the Responsible Business Alliance Code of Conduct, ISO 20400 Sustainable Procurement Guidelines, and PAS 7000 Supply Chain Risk Management
- Screened suppliers across Tier-1 and non–Tier-1 categories and classified Tier-1 significant suppliers

3 Implement supplier sustainability due diligence

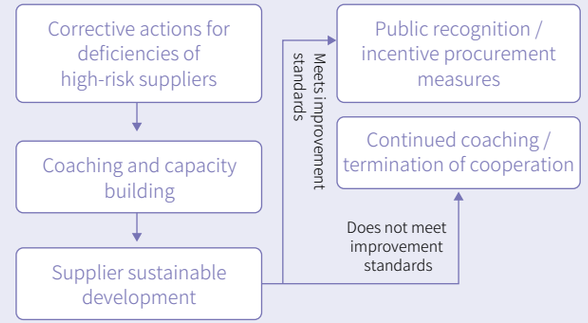
- Issued self-assessment questionnaires
- Guidance on questionnaire completion, tracking, and collection

4 Sustainability assessments and audits

- Conducted desk assessments and audits
- Identified suppliers requiring focus / high-risk suppliers
- Conducted on-site audits

5 Improvement, enhancement, coaching, and capacity building

6 Follow-up and confirmation



In 2025, Winbond (Taiwan) established Supplier Sustainability Due Diligence content based on RBA 8.0, ISO 20400:2017 Sustainable Procurement, and the OECD Due Diligence Guidance for Responsible Business Conduct. For the first time, Winbond implemented due diligence across all Tier-1 suppliers. To strengthen implementation among Tier-1 significant suppliers—including raw materials, OSAT services, and critical spares (e.g., quartz, photomasks, PAD) with significant procurement spend and direct manufacturing relevance—the Sustainable Supply Chain Team conducted rigorous desk reviews for 133 suppliers. On average, OSAT suppliers, machinery and equipment suppliers, and raw material suppliers performed better. Results also showed strong performance in occupational safety and health and in human rights and labor protection. However, to strengthen overall supply chain resilience, suppliers required further improvements in corporate sustainability and environmental and climate response management. Following the 2025 assessment results, 11 high-risk suppliers were identified; 100% were required to submit improvement plans and were included in coaching and follow-up management.

Content of Supplier Sustainability Due-Diligence Self-Assessment Questionnaire

Management dimension	Environment	Social	Governance
Purpose	From a life-cycle and traceability perspective, encouraged and supported suppliers to operate on an environmentally friendly and economically sound basis.	Required suppliers to sign a code of ethical conduct and provide safe and healthy workplaces while protecting rights and interests.	Required suppliers to treat business integrity as the highest ethical standard for stakeholders and implement it across all operations.
Assessment items	• Environmental management system • Air pollution control • Water resource management • Waste management • Greenhouse gas management • Sustainable materials • Biodiversity management • Hazardous and prohibited substances management	• Human rights protection • Working and labor rights protection • Human rights risk identification and adaptation • Occupational health and safety • Health management system • Chemical safety • Fire safety • Equipment safety	• Corporate sustainability formalization • Sustainability response and disclosure • Climate change and adaptation • Business continuity and management • Supply chain management • Service quality management • Business ethics and public welfare • Corporate governance • Information security
High-risk supplier identification criteria	• Penalty records within the last three years or still under penalty mitigation • GHG emissions > 25,000 tCO_2e and no management measures • Carbon management maturity < 3 points	• Penalty records within the last three years or still under penalty mitigation • No clear management rules prohibiting child labor or protecting pregnant workers' rights • Inadequate management of living environments for migrant workers	• Penalty records within the last three years or still under penalty mitigation • Cybersecurity concerns and IP litigation within the last three years • No business continuity and supply chain management plan

Note: Tier-1 significant suppliers referred to suppliers directly related to manufacturing, single-source supply, and critical spares that affected production (photomasks, PAD, quartz, and export packaging), representing 80% of total procurement spend.

Supplier sustainability due diligence results and action items

Measure type	Key action items
Sustainability audits	Based on desk audit results from annual Supplier Sustainability Due Diligence, prioritized suppliers with identified significant negative sustainability impact risks for follow-up management. In addition to existing second-party on-site audits aligned with industry standards, we expanded the number of third-party audits conducted annually. This initiative strengthens objectivity and improvement effectiveness for high-risk suppliers while supporting continuous follow-up tracking and management.
Introduce industry–government–academia coaching resources	Connected industry–government–academia resources, matched suppliers with government coaching and capacity building programs, and supported suppliers with limited resources to improve sustainability management capabilities.
Supplier sustainability empowerment	Provided digital sustainability training and coaching resources through the Supplier ESG Interaction Platform and thematic forums. Topics included human rights due diligence, biodiversity, and climate and environmental management, supporting suppliers in understanding international sustainability requirements and domestic policy trends and improving independent improvement and long-term governance capabilities.

Supply chain human rights risks and management

Internal capability building:

In 2025, Winbond invited a benchmark supplier—Hewlett Packard Enterprise (HPE)—to share practical experience in supply chain human rights management, helping employees deepen understanding of human rights risks, management mechanisms, and international trends as a foundation for advancing supplier human rights management.

Survey distribution and assessment:

In Supplier Sustainability Due Diligence, Winbond assessed the human rights and labor protection module and conducted preliminary human rights risk identification based on suppliers' industry characteristics, operating models, and responses, serving as the basis for follow-up management and coaching.

Communication of supplier management principles:

Through regular promotion, Winbond communicated that suppliers should respect labor human rights and ensure dignified work conditions, including prohibiting forced labor, child labor, and discrimination; safeguarding reasonable working hours and wages and benefits; and respecting freedom of association and an inclusive workplace culture as fundamental principles for supplier management and cooperation.

Survey results and subsequent response plans:

For suppliers identified with higher human rights risks, Winbond required the submission of corrective action plans (CAP) and verifies tracking progress through our subsequent follow-up and consultation mechanisms. When necessary, Winbond arranged for third-party professional organizations to conduct on-site audits or employee interviews, thereby reinforcing our understanding and management of the implementation of these corrective measures.

Status of suppliers covered by sustainability due diligence management - Winbond (Taiwan)

Indicator	2022	2023	2024	2025
Number of supplier audits	0	69	120	133
Percentage of unique significant suppliers assessed via desk assessments/on-site assessments	0	100%	100%	100%
Number of significant non–Tier-1 suppliers	0	6	5	5
Number of suppliers with identified substantial negative impacts	0	0	13	11
Number of suppliers terminated due to substantial negative impacts	0	0	0	0
Number of suppliers supported in corrective action plan implementation	0	0	13	11
Percentage of audited suppliers implementing corrective action plans	0	0	100%	100%

KPI for supplier assessment and development	2025
Total number of unique suppliers	1,105
Number of unique significant suppliers	45
Number of unique significant suppliers supported with development measures	45
Percentage of suppliers supported in development measures	100%
Number of unique significant suppliers assessed via desk assessments/on-site assessments	45
Percentage of unique significant suppliers assessed via desk assessments/on-site assessments	100%
Number of unique significant suppliers assessed with substantial actual/potential negative impacts	2
Number of unique significant suppliers with substantial actual/potential negative impacts with agreed corrective action/improvement plan	2
Percentage of unique significant suppliers with substantial actual/potential negative impacts with agreed corrective action/improvement plan	100%
Number of unique significant suppliers with substantial actual/potential negative impacts that were terminated	0

Sustainability due diligence audit forms - Winbond (Taiwan)

Completion of desk audit (supplier sustainability due diligence)

133 suppliers

Completion of second-party on-site audit (including RBA VAP)

11 suppliers

Completion of third-party on-site audit

1 supplier

Note: In 2025, on-site audits for significant and high-risk suppliers were planned based on the prior year' s assessment results; therefore, the number of audits executed followed the previous year' s planning baseline.

2.3 Supply Chain Engagement and Impact

2.3.1 Green and Low-carbon Supply Chain

To advance toward the 2050 net zero target, Winbond in 2025 continued supplier ESG engagement activities related to energy conservation and carbon reduction and expanded the scope of supply chain decarbonization. Winbond led by example by starting with Scope 3 reductions, including upstream transportation, backend packaging and testing services, and waste treatment. Annual carbon reductions reached 11,459 tCO_2e, and Winbond continued to encourage suppliers to set Science Based Targets initiative (SBTi) targets.

In supply chain collaboration, Winbond (Taiwan) and 13 suppliers applied in 2023 to the Industrial Development Administration, Ministry of Economic Affairs, for the "Low-Carbon and Smart Manufacturing Upgrade and Transformation Subsidy Project (Large Leads Small)." Over two years, the project completed over 30 carbon reduction initiatives, reducing 19,995 tCO_2e and exceeding the target by 240%. Winbond demonstrated low-carbon supply chain governance performance through two pillars: "Lead by Example—Internal Scope 3 Emission Reduction" and "Expansion and Impact—Low-carbon Supply Chain Governance."

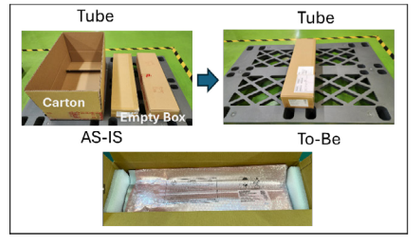
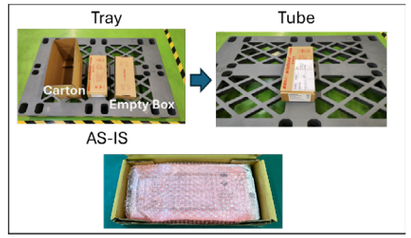
2025 Highlights

- **>95%** disclosure rate of energy and resource usage surveys among Tier-1 significant suppliers in the sustainable supply chain
- **19,995** tCO_2e total emissions reduced through Winbond's "Large Leads Small low carbon and smart transformation project
- Annual increase of **11,459** tCO_2e in Scope 3 emission reductions.

| Supplier low-carbon management process |

1. Identify gaps and align expectations to build a mutually beneficial mindset
2. Declare carbon reduction goals and establish sustainability targets
3. Collect and improve data transparency
4. Conduct training and facilitate open discussions
5. Introduce industry–government–academia resources for collaborative decarbonization

Lead by example — Internal scope 3 emission reduction in 2025

Category	Key Initiatives and Carbon Reduction Performance
Raw materials decarbonization	In 2025, coached significant suppliers to complete product carbon inventories; annual reductions in upstream value chain (Scope 3, Category 1) reached 4,625.8 tCO_2e.
Upstream transportation	1. Completed multi-source traceability for 9 significant materials; six were shifted to Local Procurement, reducing emissions by 725.0 tCO_2e. 2. Introduced a shared logistics mechanism and engaged two suppliers in shared-transport models, reducing 0.3 tCO_2e annually. 3. Implemented Packaging Optimization 2.0 and paperless low-carbon import/export operations; for sample shipments, adopted safe minimal packaging to avoid over-packaging, reducing packaging and transportation emissions by 251.6 tCO_2e annually. • Packaging optimization 2.0  
Backend packaging and testing services	1. Conducted regular product carbon footprint inventories; the third inventory will be conducted in 2026 to track changes across seven major OSAT suppliers and set hotspot reduction targets. 2. Continued packaging material decarbonization projects (anti-static boxes replacing paper cartons, Reel material reduction, Carrier Tape recycling and reuse, Tube material recycling and reuse, removal of duplicate labels), reducing 285.9 tCO_2e. 3. Introduced energy-efficient test production equipment, reducing 3,702.0 tCO_2e.
Waste disposal	1. Reduced the incineration treatment ratio for IPA waste liquid (CTSP Fab: 30% → 15%; Kaohsiung Fab: 20% → 10%), reducing 391.2 tCO_2e in 2025. 2. Shifted spent waste expanded polystyrene (EPS), corrugated plastic board, and ultrapure water (UPW) filter cores from incineration to recycling treatment, reducing 3.9 tCO_2e in 2025.

Expansion and impact — Low-carbon supply chain governance

Decarbonization and reduction commitment

- Supply chain carbon reduction target by 2030: **10 %**
- Annual electricity consumption reduction target: **1 %**
- Annual water conservation target: **5 %**
- Annual waste reduction target: **1 %**

Energy and resource disclosure

In 2025, Winbond (Taiwan) surveyed 250 suppliers directly related to Winbond Scope 3 emissions to review annual electricity savings, water usage, waste generation, and GHG reduction performance. For details, please refer to the ESG website.

Training and open discussion

Winbond (Taiwan) conducted a total of 5 supplier ESG co-learning workshops, one Sustainable Supply Chain Management Forum, and one Environmental Forum. Through thematic co-learning sessions and engagement with suppliers, the scope of learning covered the promotion of sustainability across second-tier semiconductor supply chains, corporate low-carbon transition, product carbon footprint and supply chain traceability, practical sharing of international sustainability ratings, and the transition from responsibility to implementation.

Integrate resources from industry, government, and academia to collaboratively drive carbon reduction

Winbond held 1 briefing session on the low carbon and smart transformation project, with a special invitation extended to suppliers with smaller procurement volumes and limited transformation resources. A total of 220 participants attended.

Winbond' s low-carbon transformation collaboration project within the sustainable supply chain was successfully concluded, completing over 30 carbon reduction initiatives and achieving total reductions of 19,995 tCO_2e—exceeding the target by 240%. The project was selected as an annual low-carbon achievement demonstration case by the Industrial Development Administration, Ministry of Economic Affairs.

- Final review meeting for the Large Leads Small project, with all 13 partner suppliers in attendance.

- Selected as a 2025 Low-Carbon Achievement Demonstration Enterprise by the Industrial Development Administration, Ministry of Economic Affairs.

In 2025, Winbond facilitated collaboration with the Chung-Hua Institution for Economic Research and partnered with ChipMOS Technologies Inc. and Walton Advanced Engineering, Inc. to conduct expert interviews on carbon fee policies. This initiative enhanced Taiwanese enterprises' engagement with carbon pricing policies and supported government think tanks in formulating industry-aligned policies, achieving public–private collaboration and sustainable win–win outcomes.

- Carbon fee and voluntary reduction consensus interview – OSAT supplier (ChipMOS Technologies Inc.)

- Carbon fee and voluntary reduction consensus interview – OSAT supplier (Walton Advanced Engineering, Inc.)

2.3.2 Sustainable Raw Materials Management

Sustainable raw materials policy

Winbond is a professional memory integrated circuit company, providing comprehensive memory solutions to global customers. Its operations span product design, technology research and development, wafer fabrication, and global marketing under its own brand. In terms of corporate sustainability, Winbond continued to pay attention to global trends, social issues, and the resilience of self-governance, practiced responsible material procurement, expanded positive environmental and social impacts through sustainable approaches, and aimed to be a hidden champion in providing sustainable semiconductors to enrich human life.

Biodiversity protection in the supply chain

Supplier standards communication:

Winbond added ecological resource protection clauses to the environmental chapter of the Winbond Electronics Supplier Code of Conduct and clearly required suppliers to:

1. Monitor and mitigate impacts on surrounding ecosystems
2. Comply with biodiversity conservation regulations; avoid operational impacts on key habitats and participate in conservation actions
3. Commit to no operations in or near key biodiversity areas
4. Propose mitigation measures including avoidance, mitigation, restoration, and compensation
5. Commit to compensation measures for forest restoration and cease any future development activities

Biodiversity impact analysis and supplier support

In 2025, Winbond evaluated biodiversity impacts across global supplier sites and will continue to provide necessary support to suppliers located in hotspots.

Sustainable raw materials programs

In 2025, Winbond launched comprehensive traceability management for raw materials to minimize procurement impacts on primary environments. For key materials such as wafers, process chemicals, gases, and targets, Winbond established a sustainable raw materials evaluation system integrating five dimensions: quality, technology, commercial feasibility, environmental friendliness, and humanitarian considerations. Winbond continued to prioritize “wafer regeneration and circular utilization” as the primary initiative before 2027. Looking ahead, Winbond will introduce third-party verified sustainable raw materials while ensuring process quality, increase procurement ratios year by year, and strengthen professional training to empower front-line procurement personnel to embed sustainability capabilities into daily supply chain operations.

Sustainable raw materials training

To effectively enhance front-line procurement personnel’ s understanding of sustainable raw materials and expand upstream traceability, Winbond introduced diversified sustainable raw materials training programs in 2025, totaling 470 person-hours. Course topics included:

- Environmental education lecture series – Introduction to SBTi science-based carbon reduction targets
- Zero-waste challenges: From individuals to collectives
- Green energy: The role of new and renewable energy in advancing net zero
- Daily plastic reduction practices starting from households
- Net zero takeoff: Actions and innovations toward net zero emissions
- Net zero power grids: Power systems on the path to net zero
- The history of plastics and their environmental impacts
- Energy saving and carbon reduction: Innovative pathways to improve energy efficiency
- Core concepts of achieving a zero-waste lifestyle

2025 Short-term sustainable raw materials plan

Raw materials category	Procurement item	Sustainable raw materials			
		Percentage of use		Percentage of recycling	
		Target (%)	Actual (%)	Target (%)	Actual (%)
Silicon wafers	• Regenerated silicon wafers for control/stop layers	68%	64%	100%	100%

Note: 2025 was a triennial major overhaul year for Winbond. To maintain stable restart quality, new control wafers were required; therefore, the recycled-use share declined compared with the previous year.

2027 Medium-term sustainable raw materials plan

Raw materials category	Procurement item	Sustainable raw materials	
		Target usage percentage (%)	Target recycling percentage (%)
Silicon wafers	• Regenerated silicon wafers for control/stop layers	71%	100%
Targets	• Copper targets	10%	100%

2030 Long-term sustainable raw materials plan

Raw materials category	Procurement item	Sustainable raw materials	
		Target usage percentage (%)	Target recycling percentage (%)
Silicon wafers	• Regenerated silicon wafers for control/stop layers	72%	100%
Targets	• Copper targets	10%	100%
	• Copper/Manganese targets • Titanium targets	Evaluated according to quality, technology, commercial feasibility, environmental friendliness, and humanitarian criteria; management plans will be disclosed progressively.	100%
Chemicals	• Isopropanol		

In 2025, metal raw materials usage and recycled material usage ratios were as follows. Winbond will continue exploring circularity for metal raw materials and, in 2026, will further strengthen traceability for circular regeneration of metal raw materials and require raw materials suppliers, OSAT suppliers, and outsourced manufacturers to advance circular remanufacturing and product R&D, minimizing primary extraction and maximizing environmental friendliness.

Metal raw material usage and recycled content share (Winbond (Taiwan), 2025)

Metal materials	Usage (metric tons)	Percentage of material from recycled sources
Gold	0.67	0
Aluminum	0.70	0
Cobalt	0.03	0
Copper	153.39	18.6%
Iron / Steel	2.27	0
Nickel	20.43	8.0%
Lithium	0	0
Titanium	0.68	0

2.3.3 Sustainability Engagement and Capacity Building

Supplier/ Contractors training (Winbond Group)

To safeguard workplace equality, occupational safety and health, and fire safety and to strengthen supplier awareness, Winbond provided annual training for suppliers' employees who worked on-site or provided resident services. In 2025, training hours for workplace equality, occupational safety and health, and fire safety reached 5,391 person-hours across the Group.

Regular workplace equality and ESH training - Winbond (Taiwan)

Topic	Content	Trainees	Total training hours (person-hours)
Workplace equality	Training on workplace bullying, abuse, harassment, and related matters	68	128
Occupational safety and health & fire safety	Hazard communication and special operations training; evacuation drills	5,809	4,576

Regular workplace equality and ESH training (Subsidiaries)

Topic	Content	Trainees	Total training hours (person-hours)
Occupational safety and health & fire safety	Hazard communication and special operations training; evacuation drills	379	687

Sustainable education and training by supply chain management center - Winbond (Taiwan)

To advance supply chain management on the sustainability journey, Winbond (Taiwan) combined technical and quality fundamentals with innovative thinking and management models. In addition to regular ESH training for suppliers/contractors and the OSAT supplier conference, Winbond expanded internal sustainability education through the ESG Academy within the Supply Chain Management Center to ensure front-line colleagues maintained up-to-date thinking, knowledge, and capabilities.

In 2025, training hours for colleagues in the Supply Chain Management Center reached 5,358 person-hours, averaging 34 hours per employee. Training included quality courses, supplier manufacturing management courses, and digital management courses required for routine work. Winbond also encouraged participation in iPAS Net zero Carbon Emission Planning Administrator training and industry AI talent development programs led by the Ministry of Economic Affairs. In 2025, seven colleagues achieved iPAS Net zero Carbon Emission Planning Administrator certification.

Supply chain ESG academy: courses & training hours

Supplier on-site training

136 Person-hours

Supply chain resilience enhancement — procurement work reports

270 Person-hours

Industry sustainability trends

608 Person-hours

Corporate green and low-carbon topics

4,176 Person-hours

iPAS Net zero Carbon Emission Planning Administrator training and external seed training for industry AI talent

168 Person-hours

Case study: Deep engagement and knowledge exchange with sustainability benchmark suppliers – Supplier ESG co-learning workshop

Since advancing its sustainable supply chain, Winbond has deepened industry exchange through its Co-learning Workshops, covering environmental carbon reduction, climate change adaptation, greenhouse gas and carbon management, human and labor rights protection, and corporate governance. As of 2025, a total of 38 partner companies had participated, with 2,626 cumulative participants and 5,265 co-learning hours.

Winbond has continued to deepen its sustainability co-learning mechanism, expanding from perspective exchanges and thematic discussions to ecosystem dialogues. This has enabled timely understanding of semiconductor ESG trends and, through generous sharing from benchmark suppliers, helped capture practical experience in international sustainability ratings and human rights due diligence. Internally, the platform provides colleagues with the latest industry insights to optimize supply chain planning; externally, it serves as a stage for suppliers to demonstrate sustainability performance. Looking ahead, Winbond will continue using this model to encourage suppliers to invest in low-carbon processes and green product R&D, strengthening the global competitiveness of Taiwan's semiconductor supply chain and the "Silicon Shield" capability from upstream.

Supplier feedback

- *"We sincerely thank Winbond for hosting this forum, which deepened understanding of the circular economy. In a context of limited resources, advancing circular regeneration is a shared responsibility across the supply chain."*
- *"The forum featured speakers from diverse fields and delivered rich and in-depth content, including practical applications of the circular economy at the manufacturing level. Overall, the learning outcomes were highly valuable."*

Sustainable supply chain management forum

Winbond hosted the "Sustainable Supply Chain Management" forum to strengthen suppliers' sustainability awareness and execution motivation through professional coursework and open discussion. The forum encouraged cross-functional participation among partner companies to amplify learning leverage and information diffusion, embedding sustainability DNA into daily operations. As of 2025, Winbond had held six sustainability forums and one environmental-themed forum, totaling 11,143 person-hours. In anticipation of the government's "2050 Circular Economy Roadmap" to be issued in 2026, the 2025 forum specifically focused on the circular economy, partnering with the Green Economy Research Center of the Chung-Hua Institution for Economic Research and the Chinese National Association of Corporate Sustainability Development to provide a systematic introductory guide. Winbond also invited ChipMOS Technologies Inc.—recognized for strong sustainability performance—to share how circular economy practices strengthened operational resilience. Recognizing that energy saving is central to net zero, Winbond will continue adopting diversified strategies to enhance supply chain sustainability capabilities and inject momentum into industry transformation. This year, Winbond also presented the "Low-carbon Outstanding Supplier" award to 13 partners participating in the Industrial Development Administration's "Large Leads Small" low carbon and smart transformation project. Winbond thanked suppliers for completing more than 30 decarbonization initiatives—covering process gas emissions reduction, water-saving measures for ammonia-nitrogen systems, and net zero supply chain acceleration—delivering total carbon reductions of 19,995 tCO_2e, equivalent to the annual carbon sequestration of 52 Da'an Forest Parks and far exceeding the original target by 240%. Through awards and recognition, Winbond promoted experience sharing and learning across the supply chain, encouraging more suppliers to continue investing in decarbonization and sustainability transformation and jointly advancing a low-carbon supply chain.

2025 Sustainable Outstanding Supplier – Sharing by ChipMOS Technologies
2025 Sustainable Supply Chain Management Forum

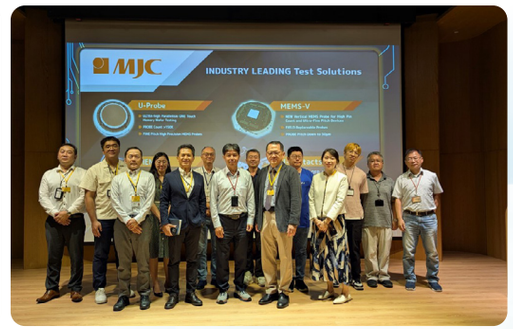
2025 Sustainable Supply Chain Management Forum

2025 Low-Carbon Outstanding Supplier Awards Ceremony

Advanced packaging technology forum

Innovation is a core driver of supply chain sustainability. Winbond believes that strengthening OSAT partners' R&D capabilities also enhances the competitiveness of Winbond's own products. To this end, Winbond held the "Advanced Packaging Technology Forum," establishing a direct dialogue mechanism between internal units and backend packaging and testing partners to co-develop solutions that deliver future life benefits. In 2025, the forum held six sessions, focusing on the critical impact of 3D IC packaging architectures (such as 3D TSV advanced packaging and interposer technologies) in the AI era, while examining challenges and innovation pathways across packaging and testing processes. Total learning hours exceeded 3,918 person-hours, with participation spanning engineering teams from Winbond and OSAT partners. Through technical co-creation, this initiative strengthened industry competitiveness.

SHINKO and Powertech Technology Inc.



MJC, one of the world's top three semiconductor probe card suppliers (Probe Card)

2025 OSAT supplier conference – Further strengthening supply chain resilience: From co-learning and innovation to ecosystem alliances

Behind Winbond's highly competitive memory products are colleagues' unwavering commitment to quality and OSAT partners' pursuit of technical excellence. At the 2025 OSAT supplier conference, the general manager's in-depth industry insights further reinforced commitments to green manufacturing and strengthened supply chain cohesion. Practical experience sharing by site and division leaders also accelerated sustainability upgrades across the supply chain. To recognize partners' contributions, Winbond selected "Sustainable Outstanding OSAT Suppliers" based on five key indicators, including quality and sustainability, honoring outstanding companies that advanced alongside Winbond.

2025 Winbond supplier awards

Award	Number of awarded suppliers
Low-carbon Outstanding Supplier	13
Best Packaging Supplier	1
Best Testing Supplier	1
Best Quality Supplier	1
Best ESG Contribution Supplier	1

2025 OSAT Supplier Conference

2025 OSAT Supplier Awards Ceremony

Number of suppliers empowered in sustainability initiatives (Winbond (Taiwan), 2025)

Since establishing the Sustainable Supply Chain Team in 2022, Winbond actively engaged suppliers as "+1" sustainability partners. In 2025, four supplier empowerment projects were implemented: Co-Sustainability (ESG exchanges, analysis, and learning); sustainable logistics and low-carbon transportation; resource circularity projects (e.g., styrofoam/hollow boards/UPW filter cores reuse and IPA incineration reduction); and sustainable supply chain management forums. Cumulatively, 502 suppliers have participated in Winbond's engagement and capacity building. Winbond will continue to match suppliers aligned with sustainability values and expand industry demonstration impacts.

Supplier empowerment projects and number of suppliers empowered

Project type	Project name	2023	2024	2025	Total accumulated number of suppliers
Winbond supplier empowerment projects	• Co-Sustainability Project — ESG exchanges, analysis, and learning				38
	• Sustainable logistics and low-carbon transportation				3
	• Recreate value from waste — circularity project				8
	• Sustainable supply chain management forum				429
Winbond supplier empowerment projects	• Large Leads Small Supply Chain Decarbonization Project				13
	• Supplier energy-saving and carbon reduction diagnostics and coaching				2
	• Carbon data electronic data interchange — PACT pilot verification				9

Note: The implementation period of the Winbond Large Leads Small Supply Chain Decarbonization Project was from September 1, 2023, to August 31, 2025.

Proportion of suppliers covered by capacity building programs

	2023	2024	2025
Number of suppliers included in capacity building programs	37	62	502
Share of significant suppliers within capacity building programs	74%	95%	100%

As of 2025, **100** % of key suppliers had implemented sustainability capacity-building programs.

Note: Calculated as the number of key suppliers implementing capacity-building programs divided by the total number of key suppliers.

1 Case study

The Silicon Circular Chain: From sustainable wafers to sustainable campuses

As semiconductor manufacturing processes continue to advance in precision, wafer fabrication has faced increasingly stringent challenges, including high energy consumption, intensive water use, and complex chemical management. Winbond firmly believes that addressing these challenges proactively enables the identification of long-term development opportunities.

Internally, in 2025, Winbond centered its efforts on "maximizing resource efficiency" and "minimizing waste," comprehensively advancing the sustainability of wafer manufacturing. This approach not only optimized operating costs but also strengthened alignment with international regulations and customer expectations. Externally, Winbond leveraged its influence across the supply chain by integrating the needs of diverse stakeholders and embedding the principles of the circular economy and shared social value. In line with Chairman's vision that "sustainability is a multidimensional concept," the Group progressively engaged suppliers in public welfare initiatives and low-carbon management. Looking ahead, Winbond will continue to build on this model as a demonstrative foundation, mobilizing the broader supply chain to deepen cross-domain collaboration and jointly advance sustainable development goals.

Internal actions

▶ Establishing clear targets to strengthen circular impact

In 2025, Winbond established a clear internal target of achieving a 30% waste resource utilization rate at its CTSP Fab and Kaohsiung Fab. To advance this target, Winbond conducted a comprehensive inventory of on-site waste streams and systematically reviewed waste collection, transportation, and treatment processes, with the aim of improving recycling efficiency while reducing environmental burdens. To accelerate implementation, Winbond actively engaged treatment partners with proven circular processing capabilities to support the resource recovery of manufacturing materials at Winbond (Taiwan), including:

Transitioning spent waste expanded polystyrene (EPS), waste foam boards, and waste UPW filter cores from incineration to recycling treatment:

After treatment, these materials were remanufactured into products such as pens, plastic goods, bicycle pedals, traffic cone linkages, cleanroom garments, and commemorative trophies. The initiative is estimated to reduce 8.3 tCO_2e annually.

Reducing the incineration ratio of IPA waste liquids:

After the adjustment, the incineration ratio of IPA waste liquids was reduced from 30% to 15% at the CTSP Fab and from 20% to 10% at the Kaohsiung Fab.

Winbond temporary storage area

Resource utilization process at the treatment facility

External engagement

▶ Cross-sector collaboration to expand social impact

In parallel with internal circular initiatives, Winbond extended circular value creation beyond its manufacturing boundaries. In 2025, Winbond partnered with ChipMOS Technologies to launch the "The Silicon Circular Chain: From Sustainable Wafers to Sustainable Campuses" public welfare initiative, translating cradle-to-cradle circular economy principles into tangible social outcomes. The project collaborated with Semisils possessing advanced material regeneration capabilities to extract recycled materials from recovered silicon sludge and remanufacture them into high-quality sustainable basketballs. Through coordination with the National Kaohsiung Normal University Teacher Education Center and the Corporate Sustainability Development Research Center, the basketballs were delivered to 20 rural and underserved elementary schools across Tainan and Kaohsiung. Beyond material reuse, the initiative enabled students to better understand the circular lifecycle of semiconductor manufacturing, while leveraging supply chain scale effects to advance SDG 4 (Quality Education), SDG 10 (Reduced Inequalities), SDG 12 (Responsible Consumption and Production), and SDG 17 (Partnerships for the Goals), thereby amplifying social impact through cross-sector collaboration.

Sustainable basketballs—filled with the care of Winbond and ChipMOS colleagues—delivered to students

Minquan Elementary School, Namaxia District, Kaohsiung City

"Thank you to Winbond, ChipMOS, and partner companies for working together to integrate sustainability principles and actively support physical education in rural communities. Through basketball, the initiative supported children's diverse learning and healthy development, allowing care and sustainability to move forward together."

2 Case study

Sustainability and digital empowerment: Building supplier carbon data competitiveness through the Winbond carbon accounting system

Since 2023, Taiwan's Climate Change Administration (Ministry of Environment) has convened experts from industry, government, academia, and research to explore fiscal measures that strengthen corporate carbon reduction actions. Starting January 1, 2025, the government also officially announced that the first group subject to carbon fees would include power and gas supply as well as manufacturing entities with emissions of 25,000 tCO_2e or more. While these policies are designed with sound intent that integrates economic and environmental considerations, many domestic businesses still face challenges in understanding "carbon accounting." Moreover, incorporating carbon topics into business decision-making to secure first-mover advantages and transformation benefits in an era of carbon pricing has become a hidden operational pain point for many enterprises.

Aligning with global decarbonization trends:

▶ Building sustainable competitive advantage through net zero transformation

Taiwan's semiconductor industry has long been regarded as the "Silicon Shield." Developing an effective strategic roadmap to accelerate sustainable supply chain transformation—one that guides suppliers through the evolving carbon management landscape and leverages organizational scale to amplify impact—represents a core responsibility of contemporary corporate citizens committed to sustainability.

In 2025, Winbond (Taiwan) formally implemented a comprehensive carbon accounting management system across all emission scopes. Beyond leading by example through the integration of Scope 1 and Scope 2 cost and emissions management, Winbond further extended the system to Scope 3 by linking it with existing procurement quotation mechanisms, encouraging suppliers to disclose product-level carbon data at the quotation stage.

To strengthen supplier engagement, the Sustainable Supply Chain Team has promoted the system's value proposition to stakeholders through a series of outreach initiatives since 2024. In 2025, Winbond further introduced a structured refresher and support mechanism designed to serve as a long-term enabler of supplier transformation. As of the end of 2025, over 13,000 product and service carbon data records had been reported through the system. These outcomes demonstrate that integrated carbon and cost management can effectively drive supply chain carbon inventories and establish a benchmark with transformational significance for advancing carbon management practices across the domestic industry.

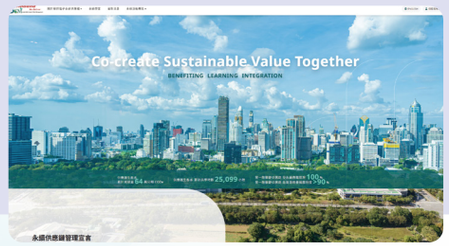
- Sustainable Supply Chain Summit Forum,Industrial Development Administration,Ministry of Economic Affairs

- Winbond Sustainable Supply Chain UpgradeForum: Opportunities for Supply ChainTransformation in the Era of Carbon Pricing

- Large Enterprises Leading SMEs in Low-Carbon Supply Chain Collaboration Program – Interview by UDN News

2024 Early-StageAwareness Campaign → **2025** Official Launch → Commencement of Refresher Training

- Carbon Accounting System and Quotation Briefing Session



- Winbond ESG Interactive Platform: Supplier Carbon Information and Quotation Portal

2.4 Conflict Minerals

Winbond continued to implement the requirements of Responsible Business Alliance requirements in the supply chain and considers them to be a mandatory element of supply chain management. In accordance with the management recommendations of the OECD due diligence, Winbond first issued a conflict-free minerals statement and then analyzed the material composition of its products to identify key suppliers requiring further assessment, thereby facilitating due diligence implementation. Suppliers are strictly required to select qualified smelters and update the information within the validity period. Finally, based on the annual survey results, Winbond published the due diligence report on conflict minerals for public disclosure. In 2025, suppliers directly related to Winbond products involving 3TG metals, cobalt, mica and other minerals included 18 suppliers for Winbond (Taiwan), 19 suppliers for Nuvoton (Taiwan), and 49 suppliers for Nuvoton (Japan). Winbond (Taiwan) also conducted on-site audits for 9 suppliers, achieving a 100% qualified rate.

2025 Conflict minerals management highlights

- **100%** coverage rate of suppliers for conflictfree minerals policy advocacy
- **100%** of new Winbond suppliers committed to conflictfree minerals
- **100%** qualification rate for suppliers surveyed and audited in 2025

Conflict minerals management process

2.4.1 Conflict-free Minerals Statement

Winbond follows the RMI to conduct due diligence on the sources and regulation of gold (Au), tantalum (Ta), tungsten (W), tin (Sn), cobalt, mica, copper, and nickel in its products, to ensure that its sourcing practices are in alignment with the OECD Guidelines for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas or an equivalent and recognized due diligence framework. Winbond also requires all suppliers to comply with and sign the sustainability-related codes of conduct and ethical standards, employee ethics standards, the International Declaration of Human Rights and the International Labor Organization's Tripartite Declaration of Principles, the adoption of green products, environmental protection and hazardous substance free (HSF) policies, or comply with the requirements set by the Responsible Business Alliance (RBA). In 2025, all qualified suppliers signed the Winbond Code of Ethics and Integrity and the Winbond Supplier Code of Conduct Commitment (including the terms of the RBA and Conflict Minerals Statement) to avoid the use of minerals originated from non-compliant smelters. Suppliers shall ensure that such minerals do not directly or indirectly finance or benefit armed groups in the Democratic Republic of the Congo (DRC), its adjoining countries, or other conflict-affected and high-risk areas, and comply with all applicable regional and international laws and regulations on responsible mineral sourcing..

2.4.2 Identification and Results of 3TG Metals Sources

Winbond first reviewed the Safety Data Sheets provided by the supplier to determine product composition and identify whether specific metals were included. Winbond then adopted the Conflict Minerals Reporting Template (CMRT) and Extended Minerals Reporting Template (EMRT) to survey suppliers whose product composition involves gold (Au), tantalum (Ta), tungsten (W), tin (Sn), cobalt (Co), mica, copper, nickel, and other responsible mineral sources as reported in the Responsible Minerals Initiative (RMI). In 2025, surveyed suppliers included 18 suppliers for Winbond (Taiwan), 19 suppliers for Nuvoton (Taiwan), and 49 suppliers for Nuvoton (Japan), with smelter sources spanning North America, South America, Europe, Asia, and Central Asia. Qualified smelters included 67 for Winbond (Taiwan), 191 for Nuvoton (Taiwan), and 226 for Nuvoton (Japan). In addition, Winbond has also formally implemented on-site conflict minerals audits to reinforce its conflict-free commitment and ensure suppliers' management commitments. In 2025, all suppliers comply with the requirements and have not been prohibited from selling related products to Winbond.

| Number of conformant smelters by mineral |

Mineral	Winbond (Taiwan)	Nuvoton (Taiwan)	Nuvoton (Japan)
Gold	17	90	90
Tin	13	47	49
Tantalum	19	25	30
Tungsten	9	14	30
Cobalt	4	15	27
Mica	0	0	0
Copper	4	0	0
Nickel	1	0	0
Total	67	191	226

2.4.3 Supplier Management and Labeling of Conflict Minerals

Due to the ever-changing nature of global political relationships, intergovernmental conflicts or even wars between countries in recent years can arise with little warning. To ensure that Winbond abides by its commitment to not using conflict minerals, Winbond has implemented three measures to manage and control risks related to the use of 3TG metals. First, Winbond continued to issue regular due diligence surveys and annual due diligence reports on conflict minerals, and simultaneously expanded to suppliers who use 3TG metals, conducting on-site audits to ensure their practices are consistent with their stated policies. Second, we continued to trace the compliant 3TG sources domestically and internationally, and the suppliers implementing conflict minerals management policies to diversify supply risks to implement diversified supply risk control and conflict prevention of mineral sources. Third, for suppliers with potential conflict minerals risks, Winbond supported traceability toward other compliant minerals; if improvements were not achieved, Winbond would cease business with the supplier. Winbond's supply chain team is responsible for supplier management related to conflict minerals and actively monitors stakeholders' requirements regarding conflict minerals management. Based on a proactive and preventive approach, the team continuously reviews and adjusts its internal supplier management measures to identify and prevent the use of conflict minerals, with the aim of upholding the rigorous standards for responsible mineral sourcing and respect for human rights.

In 2025, in accordance with the regulations of the RBA and U.S. Securities and Exchange Commission, Winbond (Taiwan) also actively responded to the U.S. Dodd-Frank Act (DFA) and strengthened the implementation of corporate social responsibility. Winbond (Taiwan) will label all product outer packaging with a "Conflict-free" mark to clearly declare that the company's products were manufactured without the use of conflict minerals.

| Suppliers conflictfree minerals prevention mechanism |

- Periodic surveys and on-site audits
- Traceability for compliant mineral sources and suppliers
- Provide assistance to suppliers with risks; if no improvement is made, business relationships will be terminated

| Winbond's products are 100% conflict-free minerals |

03

Green Products

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3.3 Customer Relationship Management 108

SDG 7.3: Improve energy efficiency in products and processes
SDG 8.2: Enhance productivity through technological innovation
SDG 8.4: Improve resource efficiency in consumption and production
SDG 9.4: Upgrade industrial technology to improve sustainability
SDG 9.5: Strengthen R&D and innovation capability
SDG 17: Partnerships for the Goals

2025 Performance Highlights

- Reduced HYPERRAM operating voltage to 1.2V, delivering 33% lower power consumption compared with 1.8V HYPERRAM.
- When integrated with an SoC, CUBE delivers bandwidth ranging from 16GB/s to 256GB/s (x16 I/O), comparable to HBM2 and equivalent to 4 to 32 LPDDR4x 4266Mbps devices.
- Accumulated over 11,200 granted patents across the Winbond Group.
- Shipped 451 million products manufactured with renewable energy, delivering cumulative carbon reduction benefits of approximately 35,044 tCO_2e.
- Winbond (Taiwan) achieved Taiwan Intellectual Property Management System (TIPS) A-Level certification in 2023 and 2024, while Nuvoton (Taiwan) obtained A-Level certification in 2025
- Led the industry with 1.2V NOR Flash; in 2025, the second-generation 8Mb–256Mb portfolio was fully launched, further reducing power consumption by 40% beyond the 50% savings already achieved versus 1.8V products.
- Recognized as a Clarivate Top 100 Global Innovator for three consecutive years.

Targets and Progress of Material Topics

Topic	2025 Targets	2025 Progress	2026 Targets	2030 Targets
R&D and Innovation	• Global patents granted >350	✓ >380	• >350	• >350
Green Products	• 25 nm 1.2V/128 Mb HyperRAM customer use-phase energy and carbon reduction > 33%	✓ 37%	• 25 nm 1.2V/128 Mb HyperRAM customer use-phase energy and carbon reduction > 33%	• Lifecycle carbon reduction for the full DRAM product portfolio: 20%
	• Annual cradle-to-gate carbon emissions reduction for the full Flash memory portfolio (including process evolution): 35,000 tCO_2e	✓ 63,000 tCO_2e	• 35,000 tCO_2e	• 110,000 tCO_2e
Customer Satisfaction	• Overall customer satisfaction >85%	✓ 87%	• >85%	• >85%
Renewable Energy Manufacturing	• Shipments of products manufactured with renewable energy >8%	✓ 9.1%	• >8%	• >50%

Note 1: ✓ indicates target achieved; "⊖" indicates target not achieved.
Note 2: Targets apply to Winbond.

Winbond integrates core competencies and innovation to improve energy efficiency and drive value-chain decarbonization. Through sustainability-focused R&D and optimization—including green product design, information system digitization, and process efficiency improvements—we strengthened quality control across key product stages. We remain committed to delivering high-quality products while reducing life-cycle carbon emissions and supporting customer decarbonization efforts across the value chain.

Net zero carbon emissions are increasingly recognized as a global priority. Winbond continues to advance energy saving and carbon reduction across manufacturing processes and product use by adopting green materials, strengthening green product design, expanding manufacturing powered by renewable electricity, and implementing emissions-reduction actions. We continuously optimize product and process pathways to enable die shrink, reduce power consumption, and adopt miniaturized and low-temperature-soldering packaging materials. These efforts reduce material use and unit carbon intensity, lower use-phase energy consumption, and support decarbonization across the value chain.

Convener
Vice President, Flash Memory IC Business Group

Jen-Lieh Lin

3.1 R&D and Innovation

3.1.1 Innovative Technologies and Services

Winbond provided comprehensive specialty memory solutions to global customers. Core products included Code Storage Flash memory, TrustME® Secure Flash memory, and Customized Memory Solutions (CMS). As Taiwan's only company with proprietary Flash and DRAM technologies, Winbond leveraged portfolio synergies and green product design principles to address diversified customer requirements. These solutions supported applications across handheld devices, consumer electronics, computer peripherals, AI, automotive, and industrial electronics. To enable environmentally responsible and sustainable growth and to provide customers with high-quality and innovative products and services, Winbond continued to invest in R&D, technology, and talent and remained focused on the following priorities:

1. Advance green product development across Flash memory, secure Flash memory, specialty memory, and mobile memory
2. Strengthen green product development and manufacturing processes, including carbon reduction and energy-saving outcomes
3. Develop key technologies for high performance, small form factor, low power consumption, high quality, and security
4. Enhance design capabilities, advance process miniaturization innovation, and strengthen intellectual property management

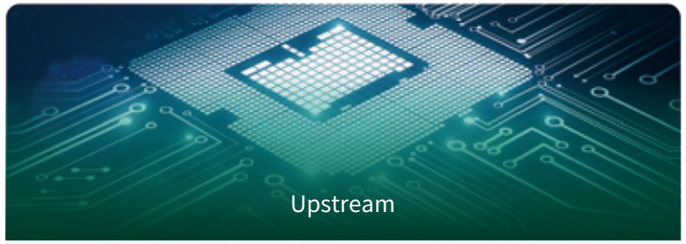
- Nuvoton technologies: please refer to the Nuvoton 2025 ESG Report.

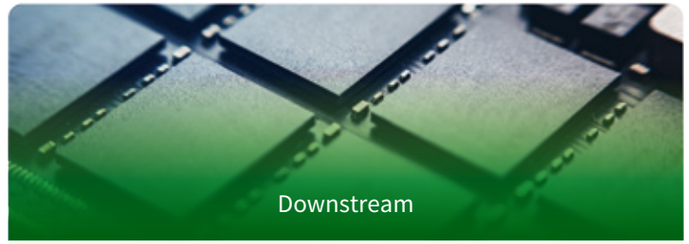
Winbond technologies

Key technology	Highlight products	Applications
Low-power NOR Flash	1.2V Flash memory • Winbond launches the market's first generation of QSPI NOR flash memory supporting 1.2V, the W25Q64NE, • In 2025, the second-generation 1.2V portfolio from 8 Mb to 256 Mb entered the market and further reduced power consumption by 40% compared with first-generation products.	• Wearables and other low-power applications; low-voltage interface products such as advanced CPU, GPU, and DPU for HPC and AI applications. • Supported advanced-node low operating voltage requirements and reduced the need for a Power management IC (PMIC), lowering cost and footprint.
High-performance NAND Flash	8-channel NAND (Octal NAND) • Based on 46 nm serial NAND Flash technology, Winbond launched a high-speed NAND Flash supporting 8-channel I/O, Octal NAND. • Supported applications requiring higher density and higher data transfer rates. • In 2025, the next-generation 24 nm QSPI NAND product reduced die area to 72% of the equivalent-capacity 46 nm product.	• Automotive electronics (e.g., instrument clusters and ADAS applications) requiring fast boot and rapid firmware updates. • Smart video doorbells requiring fast boot and rapid detection. • Smart home, AI-enabled healthcare, and high-speed networking equipment.
Secure Flash memory	Secure Flash memory integrating PQC and the Leighton–Micali Signature (LMS) algorithm • Supported asymmetric key algorithms (LMS) and enabled secure OTA requirements via LMS-OTS as specified in NIST 800-208. • Supported a 166 MHz high-performance Quad-SPI interface and expanded Replay-Protected Monotonic Counter (RPMC) support to eight counters, supporting security hardening and data protection for PCs (UEFI and BIOS).	• First memory supplier integrating the LMS algorithm, setting a new benchmark for compliance with emerging security regulations. • Optimized for Industrial IoT, networking, servers, and critical infrastructure. • Supported endpoint devices subject to EU RED (EN 18031:2024) and US CSNA 2.0 security requirements. • Supported compliance with PFR (NIST SP 800-193, Platform Firmware Resiliency) in regulated regions.
Dynamic Random Access Memory (DRAM)	16 nm DDR4 DRAM • Achieved an industry-leading 3,600 Mbps data transfer rate to meet high-speed computing requirements. • Enabled smaller die area and higher density under the same package, reducing total system cost.	Televisions, servers, networking equipment, industrial PCs, and embedded applications
High-bandwidth memory	CUBE customized ultra-bandwidth elements • Delivered 32 GB/s to 256 GB/s bandwidth and performance beyond industry norms. • Achieved high energy efficiency, with power consumption below 1 pJ/bit. • Provided flexible designs tailored to application requirements.	Edge AI computing, wearables, automotive, and industrial electronics

Semiconductor industrial chain

Winbond maintained an advanced and integrated semiconductor industrial chain and specialized division of labor spanning IP design, IC design, wafer fabrication, and packaging and testing.





Hidden Champion
Global leader in Known Good Die(KGD) Market share in niche markets

NOR Flash Products
Number one in global market share

Note: Known Good Die (KGD) refers to dies provided to customers without packaging after wafer fabrication, requiring strict product quality to ensure end-product functionality.

Known good die (KGD) – reduced packaging

Portable electronics and IoT applications continue to increase demand for smaller, more integrated packaging solutions. Winbond supports product carbon footprint reduction through long-term investment in Known Good Die (KGD) solutions and collaboration with chipmakers on System-in-Package (SiP) multi-chip packaging. Under the KGD sales model, memory dies are packaged together with logic dies, enabling energy-efficient and carbon-saving end applications. Customers leverage Winbond' s expertise to integrate memory KGD into SiP solutions—for example, stacking memory and controller dies within a single package or module. Additional KGD components can also be stacked with memory KGD to reduce packaging materials while improving performance, reducing power consumption, and lowering die area requirements.

Low-temperature soldering (LTS) process

Intel introduced the LTS process in 2017. Calculations indicate that reducing Surface Mount Technology (SMT) temperatures from 220–260° C in lead-free processes to approximately 190° C under the Low Temperature Soldering (LTS) process can deliver significant carbon reduction benefits. The International Electronics Manufacturing Initiative (iNEMI) forecast that the market share of products adopting low-temperature soldering would increase from approximately 1% to more than 20% by 2027, reflecting the electronics industry' s growing focus on sustainability. In response to this "green electronics" trend, Winbond introduced memory products compatible with the LTS process. These products comply with JEDEC standards and passed reliability validation programs, including drop, vibration, and temperature cycling tests, confirming LTS process support without quality concerns and contributing to environmental protection and sustainable development.

Note 1: LTS process support reduced annual CO_2 emissions by 57 tCO_2e per Surface Mount Technology (SMT) production line.
Note 2: Source: Intel (2017) introduction to the Low Temperature Soldering (LTS) process.

Code storage Flash memory

Winbond positioned "green semiconductors" as a core development direction and embedded energy saving, high efficiency, and low carbon as key design values. In response to rising demand for low-power memory in mobile devices, wearables, and IoT markets, Winbond launched the world's first 64 Mb QSPI NOR Flash supporting a 1.2V operating voltage (W25Q64NE). In 2025, the second-generation 1.2V portfolio from 8 Mb to 256 Mb entered the market and further reduced power consumption by 40% compared with first-generation products, establishing a technology benchmark for low-power NOR Flash.

Delivering performance comparable to 1.8V/3V NOR Flash, W25Q64NE reduced use-phase power consumption by 50%, extending battery life for wearables such as wireless earphones, smartwatches, and other battery-powered devices. Driven by its low power consumption advantages, 1.2V NOR Flash sales volume increased nearly tenfold between 2024 and 2025, reflecting rapid market adoption and recognition of energy-efficient products.

To strengthen green products deployment, Winbond expanded the next-generation 1.2V NOR Flash portfolio in 2025 to cover 8 Mb to 256 Mb. The portfolio adopted an optimized circuit architecture and innovative leakage detection technologies, reducing overall power consumption by an additional 40% compared with the previous generation and improving energy efficiency. These products responded to global customers' needs for long endurance, high performance, and low-carbon storage components and supported customer decarbonization objectives in end applications.

By continuing to expand a low-power, low-carbon memory portfolio, Winbond reinforced leadership in global green semiconductor markets and continued to deliver quantifiable decarbonization benefits for customers and the value chain.

1.2V NOR Flash	
Total power consumption	50% lower use-phase power consumption than today's mainstream 1.8V NOR Flash. Assuming 8 hours of daily operation (80% read, 10% standby, 10% sleep mode) over a three-year use period, and based on total 2025 first-generation 1.2V NOR Flash sales (W25Q63ND and W25Q64NE), cumulative energy savings reached 9,060,114 kWh (32,616,412 MJ), equivalent to approximately 4,294 tCO_2e and comparable to the annual carbon sequestration of 11.13 Da'an Forest Parks (note).
Performance	Delivered data transfer performance comparable to 1.8V/3V Flash.
Applications	Wearable devices such as wireless earphones, smartwatches, smart bands, and smart glasses with high power-saving requirements.

Note: Based on the 2024 electricity carbon emission factor of 0.474 $kgCO_2e/kWh$ (Taiwan Ministry of Economic Affairs) and data from the Forestry and Nature Conservation Agency and Taipei City Government (Da'an Forest Park area: 25.93 hectares; carbon sequestration factor: 14.9 $tCO_2e/ha/year$), annual sequestration of Da'an Forest Park was calculated at 386 tCO_2e.

As a leading Flash memory supplier, Winbond continued to reduce use-phase power consumption while also targeting a lower manufacturing carbon footprint through process evolution. For NAND Flash, die area decreased significantly as the process node advanced from 46 nm to the next-generation 24 nm product. For example, for 2 Gb QSPI NAND, the die area of the 24 nm LV series decreased to 72% of the equivalent-capacity 46 nm product, and the carbon footprint decreased by 5% compared with the 46 nm KV series under the same capacity and package. Based on 2025 sales of the KV series 2 Gb QSPI NAND Flash, adoption of the 24 nm LV series would have saved an estimated 1,752 tCO_2e.

Secure Flash memory

Security is not only a technical issue but also a social and ethical imperative. It materially influences social, economic, and environmental well-being, as well as the rights and welfare of individuals and organizations. In the context of digital transformation and escalating cyberattacks that exploit security vulnerabilities, security helps protect the confidentiality, integrity, and availability of data, information, and assets, supporting trust, privacy, and compliance across sectors including finance, healthcare, education, and government.

Security requires continuous monitoring, updates, and improvement to address evolving risks. It spans multiple layers—from hardware to software, networks to cloud, and users to devices—and therefore requires a comprehensive approach that considers systems and their operating environments. In a highly connected world, everyday electronic and connected devices rely on Flash memory to store control code and protect data, which also makes them targets for attackers.

In response, Winbond developed and launched a full portfolio of TrustME® Secure Flash memory. Secure memory stores sensitive data and code—such as encryption keys, passwords, certificates, and firmware—and helps protect against unauthorized access, modification, or leakage at both physical and logical levels. It can also provide encryption, authentication, tamper detection, and self-destruction functions to enhance protection and help prevent attacks. These solutions support customer data protection needs and are applied in consumer IoT, industrial IoT, servers, networking, and automotive sectors. To address emerging requirements in the post-quantum computing era, Winbond launched secure Flash memory enhanced with post-quantum cryptography (PQC) to support robust protection in an evolving cybersecurity landscape.

TrustME® Secure serial Flash memory W75F

To address mobile payment and other high-security identity authentication requirements, storage of confidential data in combination with system hardware encryption modules may require security certification above EAL 5. The W75F series is the world's first secure Flash memory solution certified to Common Criteria (CC) EAL 5. It supports eXecute-in-Place (XiP) and helps protect the confidentiality and integrity of data and code stored in IoT devices.

TrustME® Secure serial Flash memory W77Q / W77T series

Compatible with conventional SPI specifications, the W77Q and W77T series supported IoT endpoints, automotive, networking, and other connected devices. Key security features included a hardware Root of Trust, secure boot, platform resiliency, supply chain security attestation, and robust data protection. The series delivered protection and secure software update detection and recovery even when host processors were compromised.

Customized memory solutions (CMS)

Winbond introduced an 8 Gb DDR4 DRAM based on proprietary 16 nm advanced process technology, delivering higher speed, lower power consumption, and a more cost-effective solution for televisions, servers, networking equipment, and industrial PCs. Compared with the previous-generation technology, the 16 nm node enabled smaller die size, higher wafer output, and improved power efficiency, supporting lower carbon emissions. The product supported an industry-leading 3,600 Mbps data transfer rate, exceeding existing DDR4 standards to meet high-speed computing requirements. Process optimization improved signal integrity and reduced leakage current to ensure stable operation at 3,600 Mbps. Leveraging 16 nm advantages, the smaller die area delivered higher density within the same package, reducing total system costs. This design combined high speed, cost efficiency, and process maturity, making it well suited for long product life-cycle industrial and embedded applications. Based on this process platform, Winbond also developed CUBE, 8 Gb LPDDR4, and higher-density 16 Gb DDR4 products to expand next-generation memory offerings.

CUBE (Customized Ultra-Bandwidth Elements)

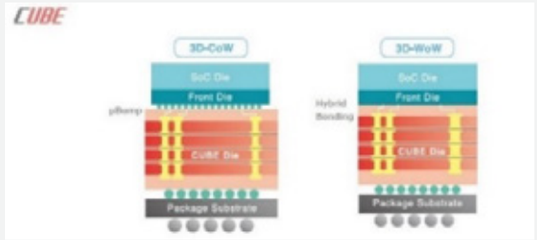
CUBE is an innovative and patented high-bandwidth memory solution designed for Edge AI applications. By adopting Through-Silicon Via (TSV) and 3D stacking technologies, CUBE delivers higher bandwidth than conventional memory in a small form factor and with low power consumption, supporting AI model computing requirements across Edge AI, industrial automation, wearables, smart monitoring, and automotive electronics. Key advantages include: (1) ultra-high bandwidth and density, delivering 32 GB/s to 256 GB/s bandwidth beyond traditional DRAM; (2) 3D stacking and compact design that support optimized packaging and integration, reducing SoC chip area and improving cost effectiveness for space-constrained devices; (3) high energy efficiency, with power consumption below 1 pJ/bit under a 20 nm process, supporting power-sensitive applications; and (4) design flexibility to enable customization for tailored customer solutions. TSV integration further improves signal and power integrity and overall system efficiency. In 2025, validation collaborations with multiple customers progressed, with small-volume shipments expected to begin in 2026.

16 nm DDR4

A 16 nm DDR4 DRAM delivered smaller die size, higher wafer output, and improved power efficiency, supporting lower carbon emissions. It supported an industry-leading 3,600 Mbps data transfer rate, exceeded existing DDR4 standards, improved signal integrity, and reduced leakage current. Smaller die area delivered higher density under the same package and reduced total system costs.

CUBE

An innovative customized high-bandwidth memory solution leveraging TSV and 3D stacking to deliver high bandwidth (32–256 GB/s), low power consumption (<1 pJ/bit), and a small form factor. System performance and energy efficiency improved, and design flexibility enabled customization for tailored customer solutions.



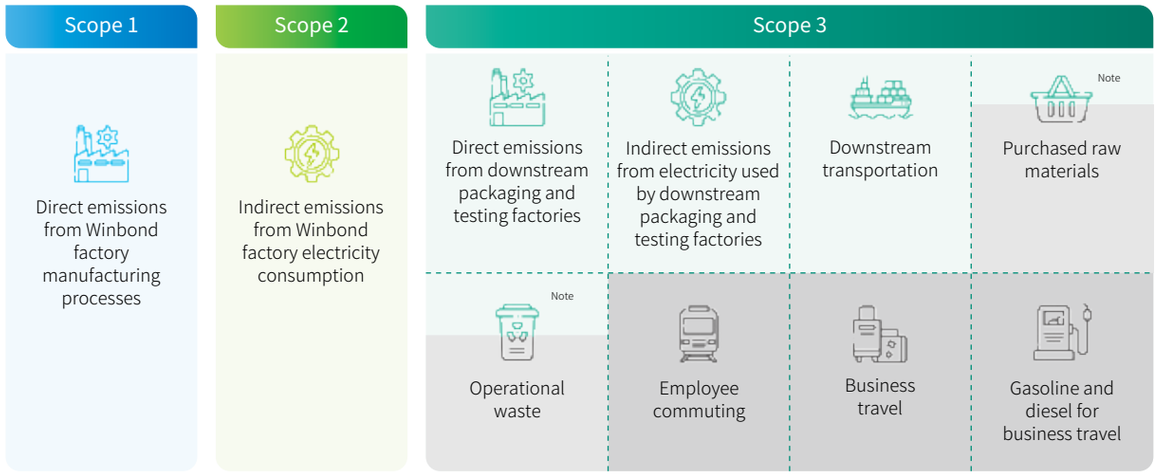
3.1.2 Green Products

Winbond anticipated market trends for next-generation products and continued to allocate resources to pursue green semiconductor design, carbon reduction and energy saving manufacturing technologies, renewable energy manufacturing, and sustainable innovation. These initiatives strengthened green product competitiveness while providing customers with high-quality products and service support.

Carbon footprint

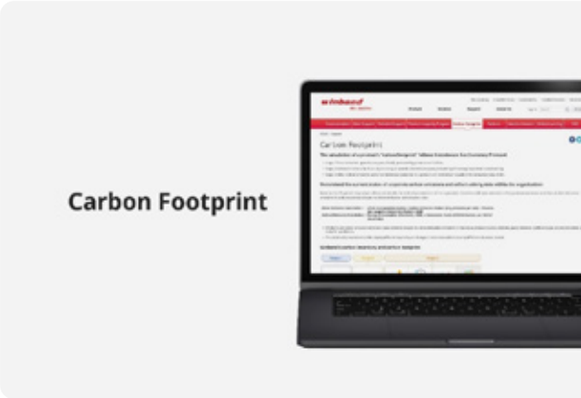
Winbond advanced product innovation by reducing hazardous substances and carbon emissions in processes, shortening production cycles, and lowering manufacturing costs, while reducing manufacturing-stage emissions. These approaches enabled smaller, more energy-efficient, low-carbon, and environmentally responsible products and reduced materials, electricity consumption, and carbon emissions across end-device manufacturing and use. To precisely quantify carbon emissions during manufacturing, identify process hotspots, and enable data-driven mitigation, Winbond developed an in-house carbon accounting system integrating three modules: (1) GHG inventory, (2) product carbon footprint, and (3) emissions management. The system enabled comprehensive monitoring of production electricity and Scope 1 to Scope 3 GHG emissions. Accurate emissions calculations supported Green Procurement and sustainable supply chain management, enabled reductions in carbon emissions (e.g., at least 60% carbon reduction for products manufactured with renewable electricity), and strengthened compliance to secure low-carbon orders from international customers.

Carbon accounting system



Note: Items shown in gray were not included in Winbond product carbon footprint calculations; operational waste and raw materials were only partially included.

To demonstrate a long-term commitment to low-carbon manufacturing and to enhance transparency in product carbon footprint disclosure, Winbond launched the Carbon Footprint webpage on its official website in April 2025. Customers were able to access product-level carbon footprint information on demand to support product selection and decarbonization planning. Winbond continued to align with international GHG inventory and product carbon footprint standards to strengthen data completeness, accuracy, and traceability and to collaborate with supply chain partners and customers to advance low-carbon product development as a foundation for long-term net zero objectives.

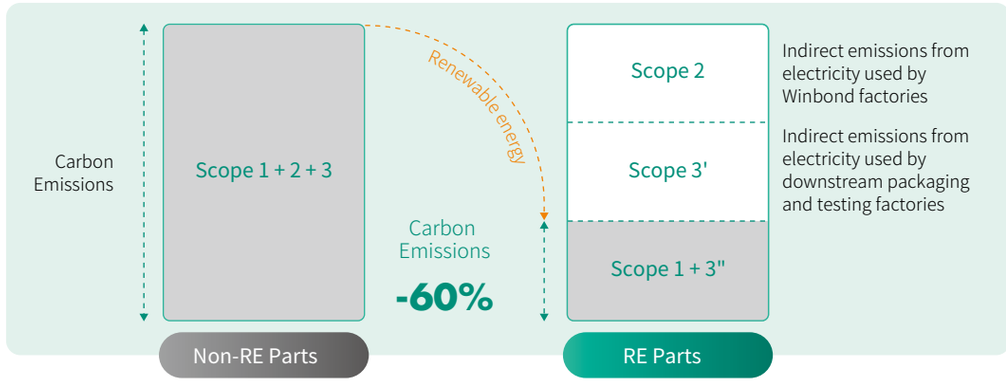


Green product manufacturing: manufacturing with renewable electricity to demonstrate a commitment to sustainable development

Winbond promoted product innovation by reducing hazardous substances and carbon emissions in processes, shortening production cycles, and lowering manufacturing costs, while reducing manufacturing-stage emissions. These approaches enabled smaller, more energy-efficient, low-carbon products and reduced materials, electricity consumption, and carbon emissions across end-device manufacturing and use. To further reduce environmental impacts from manufacturing, Winbond introduced manufacturing with renewable electricity in 2024 and expanded coverage to downstream outsourced assembly and testing (OSAT) partners. Green products manufactured with renewable electricity indicate that electricity used across wafer fabrication at Winbond fabs, packaging and testing at outsourced partners, and other process steps originated from renewable electricity. The 13th character “G” in the product part number is used as an identifier. To enable effective monitoring and management of emissions activities, an advanced carbon accounting system consolidates Scope 1 direct emissions from Winbond manufacturing processes, Scope 2 indirect emissions from purchased electricity, and Scope 3 other indirect GHG emissions data, and integrates manufacturing-stage and OSAT-related carbon emissions information.

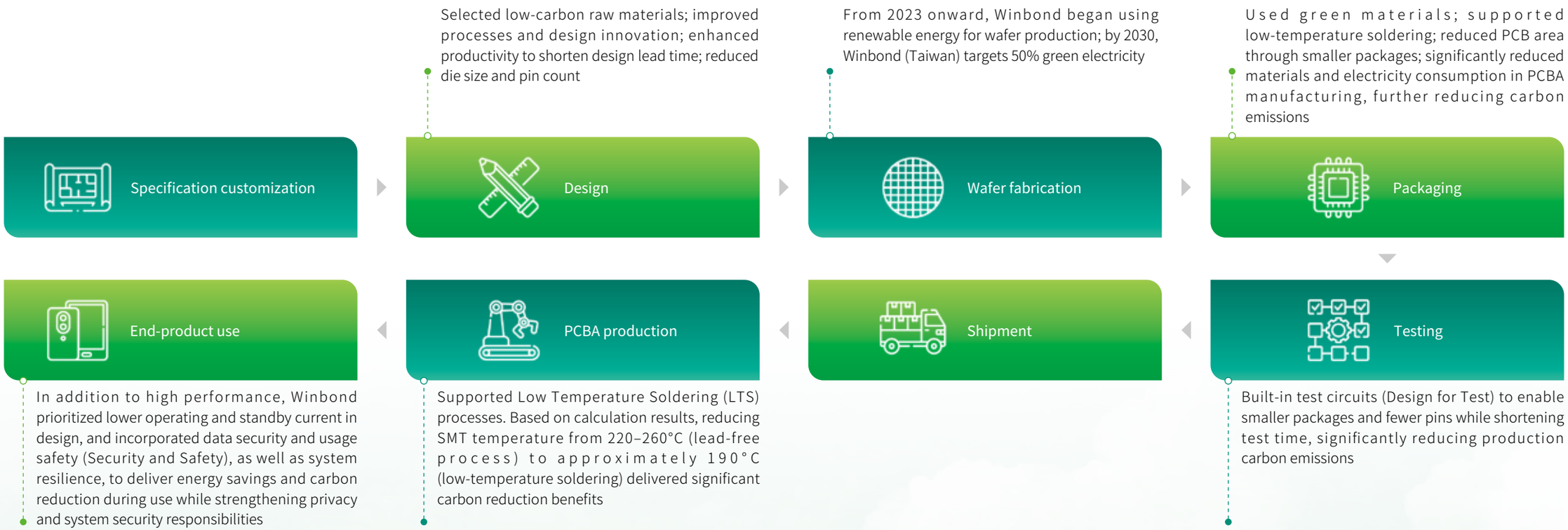
Mass shipments of products manufactured with renewable electricity began in December 2024 to key customers with a strong ESG focus, marking a milestone in responding to ESG market trends and addressing increasing demand for energy-saving green products. Compared with conventional energy sources, these products reduced carbon emissions by at least 60%. By the end of 2025, Winbond shipped 451 million products manufactured with renewable electricity and reduced emissions by approximately 35,044 tCO_2e, equivalent to the annual carbon sequestration of 91 Da’ an Forest Parks.

Winbond green product manufacturing: Integrating renewable energy into product manufacturing to demonstrate its commitment to sustainable development



Notes:
In the figures, Scope 3 = Scope 3' + Scope 3"
Scope 3': the indirect emissions from electricity in OSATs only
Scope 3": the indirect emissions in other upstream and downstream stages, including raw materials, indirect emissions from OSAT processes, downstream transportation and the waste, etc.

Green product development: integrating product life cycle, carbon reduction, and energy saving into product design



Product life cycle

Winbond's core products included Code Storage Flash memory, TrustME® Secure Flash, and Customized Memory Solutions (CMS). ISO 14067 product carbon footprint and ISO 14046 product water footprint were progressively introduced. Using 2023 production information, Winbond applied a product life cycle assessment tool (Simapro Environmental Footprint 3.1) to conduct life cycle assessment (LCA) for the full product portfolio. Potential environmental impacts were assessed and environmental footprints were calculated across dimensions including global warming and ozone depletion. Hotspot analysis identified improvement opportunities and enhanced the environmental performance of raw materials and products. Life cycle assessment (LCA) was conducted in accordance with ISO 14040 and ISO 14044 standards. System boundary was defined in line with the Taiwan Semiconductor Industry Association's Product Category Rules (PCR) for Environmental Product Declaration (EPD) for "Semiconductor Foundry" (PCR v2.1). As Winbond did not produce end products, the calculation boundary adopted a cradle-to-gate approach. The boundary included transport of chip substrates, chemicals, gases, and consumables used during the raw material stage, as well as energy and resource inputs, waste, and other elements associated with wafer fabrication at Winbond. Results were disclosed on the ESG website.

Top three standardized environmental impact hotspots

		2025 Progress	Strategies and actions
Electricity usage	44.35%	• Electricity savings increased by 24.5 million kWh compared with 2024. • Renewable energy use ratio at Winbond (Taiwan) reached 8.7%, with a 2030 target of 50%.	• Continued improvement through ISO 50001 energy management. • Continued renewable energy purchases according to plan.
Raw material acquisition	Nitrogen (N_2) 12% Nitrous oxide (N_2O) 7.5%	• Five supplier ESG co-learning workshops, one sustainable supply chain management forum, one environmental protection forum, and one briefing on supply chain transformation diagnostic subsidies were conducted. • Two suppliers were supported to complete product carbon footprint inventories and verification, and on-site sustainability audits and coaching were completed in the same year.	• Continued forums and training to provide suppliers with energy saving and carbon reduction education and to connect suppliers with government support resources. • Continued requirements for suppliers, especially those with high emissions intensity, to conduct organizational GHG and product carbon footprint inventories. • Continued requirements for suppliers to propose self-driven decarbonization plans.

Hazardous substance management

In response to increasingly stringent global environmental regulations, Winbond strengthened hazardous substance management mechanisms with international standards as the cornerstone. In 2025, compliance continued to be maintained against major requirements including QC080000, Restriction of Hazardous Substances (RoHS) Directive, Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), TSCA, and California Proposition 65. Changes to chemical control lists and restriction requirements across jurisdictions were tracked in a timely manner. Regulatory reviews and gap analyses were conducted to ensure conformity of products and processes and to reduce regulatory risks to operations.

- Nuvoton hazardous substance management: please refer to the Nuvoton 2025 ESG Report.

Hazardous Substance-Free (HSF) policy

Winbond' s Hazardous Substance-Free (HSF) policy committed to designing, procuring, manufacturing, and selling products free of hazardous substances to comply with international regulations, meet customer requirements, protect the environment, and fulfill corporate citizenship responsibilities

Hazardous Substance Process Management (HSPM) system

Winbond established a Hazardous Substance Process Management (HSPM) system and issued internal procedures for hazardous substance management. The management representative convened management reviews annually to comprehensively assess policy and targets, external regulations and customer requirements, audit results, and management performance, driving continuous improvement.

Internal controls were coordinated by a cross-functional hazardous substance management team, extending management requirements across the full product life cycle including product design, material introduction, manufacturing, testing, packaging, and shipment. Through hazardous substance exposure assessment, portfolio risk review, and change management mechanisms, risks were identified and preventive controls were implemented before new product development, material substitutions, or process adjustments. Training, exception reporting, and continuous improvement processes were integrated to ensure effective system operation. Winbond continued to strengthen hazardous substance management capabilities through sound governance, responded to stakeholder expectations, and supported sustainable operations objectives.

In supply chain management, hazardous substance requirements were integrated into supplier selection, letters of assurance, and routine management processes. Suppliers and outsourced processing partners were required to periodically disclose material composition information and support document review and audit activities. High-risk materials and critical processes were subject to stricter controls and sampling inspection based on risk levels, ensuring that each supply chain stage aligned with green products and the Hazardous Substance-Free (HSF) policy, jointly advancing environmental protection and product responsibility.

2025 Progress

- No nonconformities were identified in hazardous substance management operations during the year.
- All personnel completed hazardous substance management training, with a **100%** completion rate.
- No nonconformities were identified in hazardous substance audits conducted by customers.

Hazardous substance management system

1. HSF policy and targets
2. Regulatory compliance and conformity management
3. Hazardous substance list and control
4. Supply chain management and Green Procurement
5. New material assessment and substitution strategies
6. Regular testing and monitoring of hazardous substances
7. Employee training and awareness enhancement
8. Continuous improvement and performance evaluation

3.1.3 Intellectual Property Management

Against a backdrop of intensifying global technology competition and accelerated sustainability transformation, Winbond anticipated market trends for next-generation products and continued to allocate resources to pursue sustainable innovation in semiconductor design, manufacturing technologies, and products. Sustainable solutions with low carbon emissions and low power consumption were developed to strengthen green competitiveness and market share in international markets. Intellectual property was recognized as a strategic asset that drove innovation, supported corporate resilience, and enabled sustainable growth. Governance was strengthened under a "Sustainability × Digital" dual-axis transformation.

"Sustainability × Digital" dual-axis intellectual property governance

Sustainability perspectives were integrated into the intellectual property governance strategy. Patent targets, incentive mechanisms, and talent development programs were enhanced to encourage employees to propose green patents and register green trade secrets, strengthening innovation capabilities in sustainability technologies.

Digital transformation relevant to intellectual property governance advanced through a cross-functional knowledge platform, an efficient patent and trademark management system, an efficient cross-functional patent search system, patent landscape analysis tools, and a highly integrated trade secret registration system. This digital governance architecture improved knowledge flow, strengthened data quality, increased patent output efficiency, and reduced intellectual property risks while maintaining information security controls to protect intellectual property assets.

To strengthen corporate governance and regulatory compliance, Winbond adopted the Taiwan Intellectual Property Management System (TIPS) framework in line with the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies and established a complete intellectual property management system. An intellectual property policy and targets linked to business strategy and R&D directions were formulated. Through institutionalized processes and continuous training, innovation culture and intellectual property protection awareness were strengthened, supporting the generation of high-quality intellectual property and sustainable competitive advantages. To ensure resilient system operations, resources were continuously allocated to intellectual property training and staffing above minimum requirements, including personnel qualified as TIPS A-Level self-assessors, ensuring operational redundancy and continuity.

Winbond (Taiwan) and Nuvoton (Taiwan) obtained TIPS A-Level certification (valid through December 31, 2026), demonstrating maturity in institutionalized intellectual property governance. Implementation progress and risk responses for the intellectual property management plan were reported to the Board of Directors, strengthening oversight and transparency. Looking ahead, Winbond continued to integrate global operating strategies, technology R&D deployment, and intellectual property information to further enhance governance.

Global patent portfolio

In patent strategy, annual proposal targets were established through systematic evaluation of business objectives, R&D resources, and technology development directions. The Intellectual Property Department, Patent Committee, and taskforces executed intellectual property management, including target setting, evaluation, review and coaching, award recognition, and utilization strategy planning. Internal evaluation, review, and coaching mechanisms strengthened patent portfolios driven by product development strategies, improved alignment between intellectual property strategies and business objectives, increased patent quality and grant rates, and ensured protection of R&D outcomes. By 2025, Winbond filed more than 7,400 patents worldwide and received more than 5,600 granted patents. At the group level, granted patents exceeded 11,200, demonstrating depth and breadth in global intellectual property deployment.

Patent applications	Patents granted
• Cumulative patent applications: more than 15,330	• Cumulative granted patents: more than 11,200
• 2025 global patent applications: more than 938	• 2025 global granted patents: more than 776
• 2025 rankings for domestic corporate invention patent applications: Winbond ranked No. 18; Nuvoton ranked No. 23	• 2025 rankings for domestic corporate invention patent grants: Winbond ranked No. 11; Nuvoton ranked No. 15

Trade secret management

Since 2022, Winbond integrated trade secrets into intellectual property strategy and initiated strategic planning for a trade secret registration system. A High-Quality Trade Secret Award encouraged employees to register innovative R&D outcomes, strengthening technology competitiveness. Existing systems were integrated into the trade secret registration system, enabling the platform to serve as a library of technology and innovation knowledge and to preserve critical trade secrets. In 2025, registered cases exceeded 13,000. Customer-related business information, including documents and data exchanged with customers, was protected through internal security systems. Access approvals and permissions followed established procedures and requirements to prevent trade secret or intellectual property theft or leakage. ISO/IEC 27001 Information Security Management System certification was obtained to strengthen information security protection.

Selected as one of the Clarivate Top 100 Global Innovators for three consecutive years

"Active innovation" represented a core cultural attribute of the Winbond Group. The Group was selected as one of the Clarivate Top 100 Global Innovators for three consecutive years. Selection criteria included a minimum of 500 invention patents as well as patent influence, investment, success track record, and technological uniqueness. The Group was selected from 3,000 candidate organizations worldwide, reflecting innovation strength and the impact of global patent deployment. International recognition reinforced Winbond' s long-term commitment to R&D investment, innovation-driven growth, and sustainable operations. Winbond also advanced the adoption and development of green semiconductor technologies, embedding low-carbon materials and high-performance, low-energy, resource-efficient green products in design phases to protect the environment and reduce environmental impacts.

3.1.4 Digital Transformation

Since 2020, Winbond advanced enterprise-wide digital transformation through the Digital Transformation Committee for Business (DTCB) and Digital Transformation Committee for Manufacturing (DTCM). The President convened regular meetings to review performance. Senior executives shared digital transformation articles weekly. Human Resources invited external instructors to provide training. Internal collaboration platforms and digital technologies became core systems enabling intelligent business operations.

Wafer fab intelligence

A shift to data science methods enabled smart factories with high-efficiency production and quality control.

1

Improved product quality

2

Enhanced tool stability

3

Higher work efficiency

Utilizing industrial AI (Artificial Intelligence) technology to promote smart manufacturing application

Four digital transformation systems	Description	Outcomes
Defect and yield analysis system	Linked online tool measurement data across modules to support data analysis and integration for R&D teams during development.	• Significantly reduced data analysis time • Improved engineer productivity
Automated engineering report generation system	Automatically collected and linked all online measurement data with low time consumption.	• Supported data processing • Enabled R&D teams to analyze and balance experimental conditions and continue process optimization
Digitized and standardized online measurement and electrical test data	Enabled employees to adjust process module conditions based on data in a timely manner to meet requirements.	• Improved prediction and analysis of key memory device electrical characteristics • Enabled strong predictability for key parameters
Reliability analysis system for memory devices	Consolidated complex and large-scale measurement data and identified optimal operating conditions for application in CP/FT.	• Increased the speed of engineer data analysis

Green energy management and certificate application mechanism

1. Management approach and commitments

To advance the net zero pathway and respond to urgent global supply chain demand for green energy, Winbond established a Renewable Energy Certificate (T-REC) life cycle management mechanism. Through digital system integration and cross-functional collaboration, each certificate's acquisition, transfer, allocation, and retirement was traceable and unique, preventing double counting and supporting energy transition through concrete actions.

2. Digital management process

Renewable energy management from procurement to retirement was automated through RPA and SAP data integration to ensure data accuracy and transparency. Each month, RPA collected certificates issued by the certificate center, while suppliers uploaded their own certificates via the Supplier ESG Interaction Network. The system automatically transferred data into SAP. At shipment, certificates were deducted to support customer Scope 3 decarbonization objectives.

Deepening climate action: expanding the value chain (Scope 3) inventory boundary

1. Strategic context and commitments

To comprehensively assess the true climate impacts of operating activities and respond to stakeholder expectations for carbon transparency, the Scope 3 inventory boundary was expanded this year. In accordance with the GHG Protocol framework, key emission categories associated with upstream capital expenditure and downstream product life cycle were incorporated on top of the existing inventory foundation. This approach aimed to precisely identify decarbonization hotspots across the value chain and to establish a robust data foundation for setting Science Based Targets initiative (SBTi) objectives, demonstrating commitment to advancing low-carbon transition together with the supply chain.

2. Newly included categories in this year' s inventory

Four newly included categories covered a full product life cycle from asset acquisition to end-of-life treatment:

(1) Upstream value chain: tracking embodied emissions

- Category 2:
  Capital Goods. Environmental costs associated with business expansion were assessed. The inventory scope covered machinery and equipment, plant buildings, and transport vehicles acquired this year.
- Management concept:
  Using internal asset registers and capital expenditure data, upstream embodied emissions from extraction, manufacturing, and transport were traced, enabling monitoring of indirect carbon footprints alongside corporate growth.

(2) Downstream value chain: a full product life cycle perspective

Beyond manufacturing, responsibility was taken for impacts after products were sold, and the following three categories were added:

- Category 10:
  Processing of Sold Products. Carbon emissions from downstream customer processing of intermediate products were assessed. Collaboration with key customers was used to obtain specific factors, or industry averages were applied, to understand downstream processing energy impacts.
- Category 11:
  Use of Sold Products. For energy-consuming products, emissions from electricity consumption over expected lifetimes were calculated. These data supported the development of lower-power, more energy-efficient products.
- Category 12:
  End-of-Life Treatment. End-of-life pathways were assessed. Based on waste treatment conditions (e.g., recycling, landfill, incineration) across sales regions and product weight, end-of-life carbon impacts were estimated, supporting circular economy considerations.

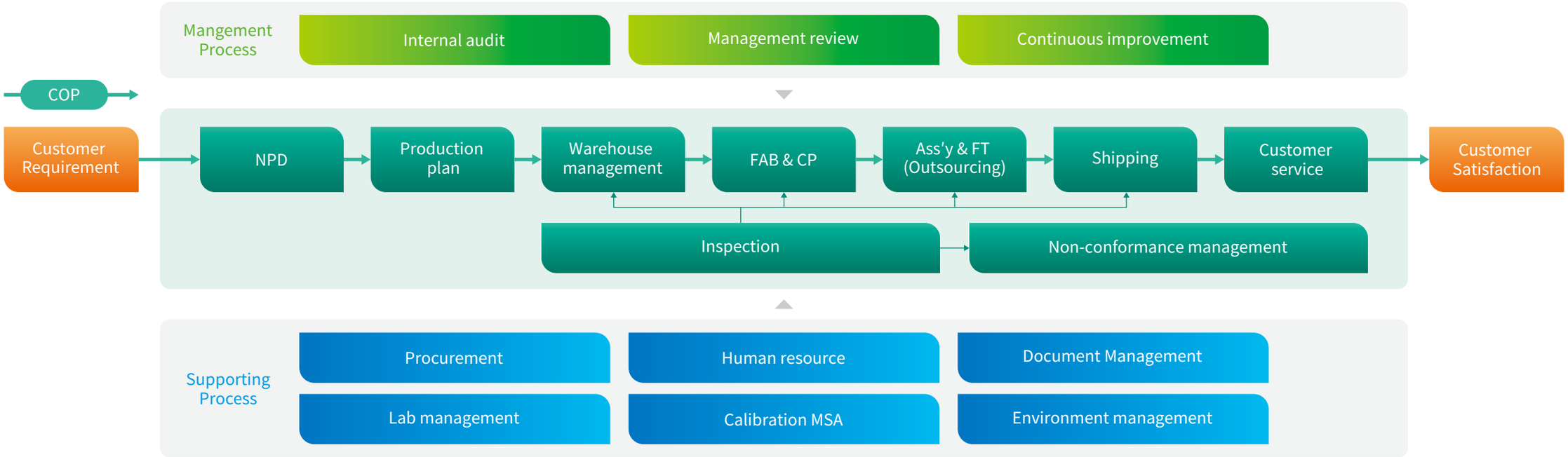
3. Outlook

The expanded boundary improved visibility of climate profiles across the full product life cycle. Data collection mechanisms would continue to be optimized, and engagement with partners would continue based on inventory results to explore deeper decarbonization opportunities across the value chain.

3.2 Product and Service Quality Management

Winbond established a quality policy: "Through continuous improvement, build a total quality management culture with zero defects and a quality-first mindset, provide customers with satisfactory products and services, and become a world-class company." Standards and guidelines were formulated accordingly. In line with this policy, product quality and labeling compliance with regulations across countries and regions were ensured. Third-party certification bodies were engaged to maintain and pass certifications including ISO 9001, IATF 16949, and ISO 26262. Quality performance indicators were established and tracked to drive continuous improvement. Tools such as Failure Mode and Effects Analysis (FMEA), Statistical Process Control (SPC), and Measurement System Analysis (MSA) were adopted to comprehensively test, evaluate, and improve product quality and to meet customer requirements and expectations.

| Quality Management System and Process |



NPD : New Product/Process Development COP : customer oriented Process

3.2.1 International Standards and Certification

Winbond maintained rigorous production process control and quality management operations covering the CTSP and Kaohsiung fab. Both fabs operated in accordance with IATF 16949, ISO 9001, and QC 080000 and underwent regular third-party surveillance audits and recertification to ensure ongoing conformity and effectiveness. To enhance product quality, yield analysis, supply chain management, and customer requirement insights were strengthened. Multi-dimensional validation ensured alignment with international standards such as the Responsible Business Alliance (RBA) and ESG requirements. High customer standards were followed, and hazardous substance management and production environmental management were implemented to fulfill corporate social responsibility.

3.2.2 Culture of Pursuing Quality

Quality award recognition

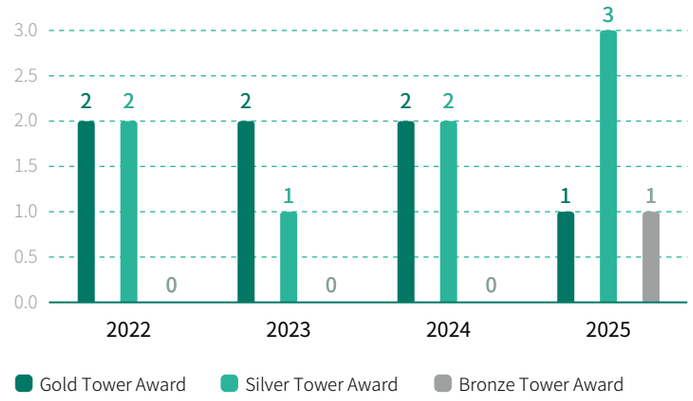
Winbond adopted Total Quality Management (TQM) as the overall management framework and advanced quality culture and continuous improvement. Cross-functional Quality Improvement Teams (QIT) addressed critical topics requiring cross-unit collaboration, while Quality Control Circles (QCC) focused on daily on-site improvements and standardization. These mechanisms reinforced two-way linkage and feedback between strategy and frontline operations, strengthening product reliability, process stability, and operational efficiency and supporting long-term sustainable development.

In external competitions, Winbond delivered strong performance at the 2025 Taiwan Continuous Improvement Awards (TCIA). The competition attracted 137 companies and institutions and 253 teams. Winbond received one gold, three silver, one bronze, and third place for the Best Presentation Award, demonstrating outstanding outcomes in quality management and process continuous improvement. Award-winning projects addressed key topics including yield improvement, defect reduction, and operational decarbonization, reflecting sustainable value creation through quality improvement, efficiency enhancement, and environmental protection.

In production-line quality improvement and international exchange, ICQCC 2025 was held in Taipei. The four-day event brought together more than 10 countries and regions with 319 circles, including 34 Taiwanese enterprises. Winbond' s "Grinding Method Circle" shared improvement outcomes in bilingual Chinese and English and received a gold award, supporting benchmarking and best practice expansion and strengthening organizational standardization maturity and resilience.

Looking ahead, cross-functional teams and production-line improvement group coverage and effectiveness would continue to deepen. Transparent key indicator management (e.g., yield, defect rate, first-pass yield, cost, energy/water intensity, and reduction of greenhouse gas (GHG) emissions) would continue to drive quality culture upgrades and support long-term net zero objectives.

Circle	Topic	Award
Perseverance Circle	• Reduced defect rate in wafer edge region for 45 nm NOR Flash	Gold Tower Award
Synergy Circle	• Reduced word-line short defect rate for 45 nm NOR Flash	Silver Tower Award
Green Diamond Circle	• Winbond Net Zero – reduced carbon emissions from the Taichung fab wastewater treatment system	Silver Tower Award
Interstellar Circle	• Reduced D25s tRP yield loss	Silver Tower Award
Jingdian Circle	• Reduced D20 word-line defect rate	Bronze Tower Award



QE 2.0 excellence quality culture promotion

Building on 2024 quality culture promotion, Winbond continued to deepen quality awareness in 2025 through "edutainment" approaches. Quality was embedded into daily work DNA, shaping a culture of full participation and continuous improvement. Systematic activity designs strengthened professional capabilities and built shared recognition of quality values.

FMEA best practice sharing sessions

Held quarterly in 2025, attracting 837 managers. Practical case exchanges strengthened risk identification capabilities and systematic problem-solving mindsets, reinforcing product and process quality defenses.

Quality Month

Under the "QE 2.0" theme, activities included quality knowledge contests, promotional videos, and quality poster competitions. On-site Q&A events were held in Jhubei, Taichung, and Kaohsiung with 3,511 total participations, strengthening engagement and quality awareness.

Quality case sharing sessions

Held semiannually to pass on best practices, foster innovative thinking and learning, and use below-standard cases to reinforce risk awareness and prevent recurrence.

Winbond continued to encourage employees to embed business philosophy and core values into daily management. Through interaction with suppliers and customers, quality culture was extended across the supply chain, advancing excellence management and continuous improvement toward total quality and sustainability objectives.

3.3 Customer Relationship Management

3.3.1 Winbond Customer Satisfaction

Winbond recognized customers as value creators and key partners in sustaining growth and sustainable development. The approach focused on not only meeting customer requirements but also exceeding expectations to build long-term, trust-based partnerships.

To comprehensively capture customer feedback, Winbond conducted an annual customer satisfaction survey and used results as a management tool for continuous improvement and culture deepening. The 2025 survey was conducted by an independent third-party research consulting firm using questionnaires, ensuring objectivity and credibility. Survey design covered core dimensions including sales and service, product and technical support, and quality performance. In response to rapid market changes, topics related to price volatility and supply–demand mechanisms were added to better understand customer experience and expectations under varying business environments.

Customer coverage in this survey reached 80.7%, and overall satisfaction reached 87%, slightly lower than the prior year. Analysis indicated that reduced supply and increased demand led to price increases and extended lead times, which affected satisfaction performance. Nevertheless, customers continued to provide stable and positive evaluations of product quality, professional technical support, and service performance. Cross-functional review and feedback mechanisms converted customer input into concrete improvement actions, continuously optimizing internal processes and communication efficiency to respond to market changes and future customer needs, reflecting the emphasis on customer relationships and sustainable operations.

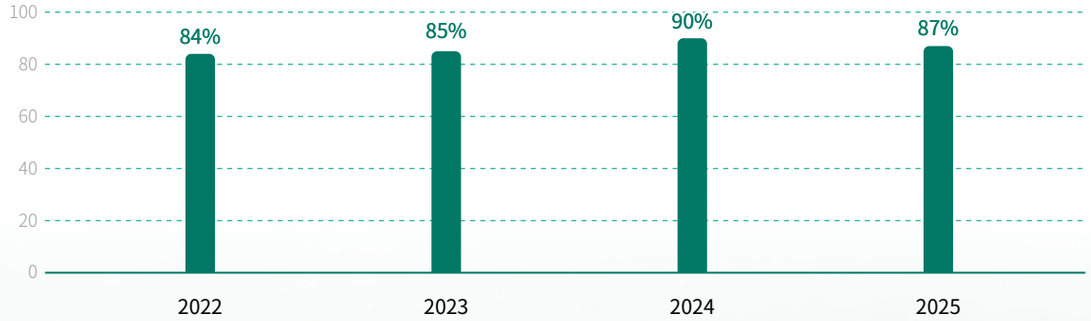
Looking ahead, Winbond would continue to strengthen a systematic customer feedback mechanism to deepen a customer-centric culture, co-create long-term value with customers, and achieve sustainable operations objectives.

- Nuvoton customer satisfaction: please refer to the Nuvoton 2025 ESG Report.

Customer satisfaction survey

- Purpose: Continuously improve customer service quality and product competitiveness
- Survey scope: “Sales and orders,” “Product and technical support,” and “Quality”
- Target: Satisfaction index > **85** %
- Customer coverage (based on 2025 revenue): **80.7** %
- Frequency: Annual

Winbond customer satisfaction trend



Customer issue tracking

Winbond established a customer complaint handling mechanism. When product failures occurred, customers submitted failure analysis requests via distributors or Winbond sales representatives through the customer complaint system. The quality assurance unit promptly evaluated and classified cases and assigned responsible departments to investigate. Quality management tools were applied to analyze root causes. Corrective and preventive actions were formulated and implemented based on investigation results, with responsible owners and timelines clearly defined. Investigation outcomes and progress updates were proactively provided to customers within specified timeframes. All handling processes were fully documented and retained, and regular consolidation and analysis supported continuous improvement, ensuring effective operation of the Quality Management System and enhanced customer satisfaction.

Winbond continued to review services to strengthen brand value. In 2025, 1,429 customer complaint cases were received, of which 773 cases (54%) were clarified after testing as not attributable to Winbond quality or service. Tailored clarification and issue resolution based on prior complaint experience and customer conditions represented a key element of customer service. Based on shipped unit volumes, complaint cases represented 0.00003% of shipments, reflecting a strong performance level. No product recalls occurred from 2022 to 2025. Analysis of confirmed failure cases enabled identification of root causes and the development of corresponding failure mode testing and improvement plans, including source process improvement initiatives. The failure rate calculated as (number of failed ICs / total shipments) reached 0.16 dppm (2023: 0.25 dppm; 2024: 0.19 dppm), supporting customer satisfaction, stable business performance, and win-win outcomes.

Quality workshop

Winbond held periodic Quality Workshops to engage customers, understand product requirements and recommendations, and invite professionals and industry experts to discuss quality and technology topics. This platform enabled timely responses to customer questions, delivery of solutions, and continuous product and service quality improvement to enhance customer satisfaction. The platform also provided industry insights and technical knowledge, supporting continuous capability building. By the end of 2025, five customer Quality Workshops were held, and a target was set to complete eight workshops in 2026, supporting win-win outcomes for Winbond and customers.

3.3.2 Customer Privacy Protection

Winbond strictly controlled customer-related information. Customer documents and data were stored within internal high-protection systems. A Privacy Policy was established, and access approvals and permissions followed established procedures to protect customer privacy and prevent trade secret and intellectual property theft or leakage. ISO/IEC 27001 Information Security Management System certification was obtained in 2022 to strengthen information security protection. In 2025, no complaints regarding customer privacy infringements or customer data loss were received. The EU General Data Protection Regulation (GDPR) became effective in May 2018. Adjustments were made in line with GDPR requirements, including website revisions and member data reviews. GDPR requirements were incorporated into online personal data protection training. In 2025, 345 participations completed training totaling 172.5 hours, and the pass rate reached 100%.

2025 online personal data protection training

Completed training	Completed training totaling	The pass rate
345 people	**172.5** hours	**100** %

04

Environmental Sustainability

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4.2 Greenhouse Gas and Energy Management 114
4.3 Water Stewardship 118
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SDG 6.3: Improve water quality, wastewater treatment, and safe reuse
SDG 6.4: Increase water-use efficiency and ensure freshwater supply
SDG 6.5: Implement integrated water resources management
SDG 7.2: Increase the share of renewable energy
SDG 7.3: Double the rate of improvement in energy efficiency
SDG 12.2: Achieve sustainable management and efficient use of natural resources
SDG 13.1: Strengthen resilience and adaptive capacity to climate-related hazards
SDG 13.2: Integrate climate change measures into policies and planning

2025 Performance Highlights

- SBTi Approved Greenhouse gas reduction targets validated under the SBTi
- CDP A List recognition for Climate Change and Water Security, plus an A (Leadership) rating in Supplier Engagement Assessment (SEA)
- UL 2799 Platinum All manufacturing sites certified to Zero Waste to Landfill at the highest Platinum level
- 100% Group-wide manufacturing sites certified to ISO 50001 Energy Management Systems
- 100% All manufacturing sites awarded the Ministry of Environment “Green Dining Table” label, with the Kaohsiung plant recognized as the city’ s first employee cafeteria to receive the designation

Targets and Progress of Material Topics

Issue	2025 Target	2025 Progress	2026 Targets	2030 Targets
Energy and Greenhouse Gas Management Technology innovation and efficiency improvements controlled energy consumption. Greenhouse gas emissions monitoring and reduction were strengthened to improve energy-use efficiency. Note: The base year for greenhouse gas emissions reductions is 2023.	• Scope 1 and Scope 2 GHG emissions reduced by 2.5%	✓ Scope 1 and Scope 2 GHG emissions reduced by 15%	• Scope 1 and Scope 2 GHG emissions reduced by 7.5%	• Scope 1 and Scope 2 GHG emissions reduced by 42% • Scope 3 GHG emissions reduced by 25%
	• GHG emissions intensity: 12.6 kg CO_2e/layer	✓ GHG emissions intensity: 11.6 kg CO_2e/layer	• GHG emissions intensity: 11.1 kg CO_2e/layer	-
	• PFCs emissions intensity: 0.471 kg CO_2e/layer	✓ PFCs emissions intensity: 0.357 kg CO_2e/layer	• PFCs emissions intensity: 0.462 kg CO_2e/layer	-
	• Electricity intensity: 24.90 kWh/layer	✓ Electricity intensity: 23.31 kWh/layer	• Electricity intensity: 23.08 kWh/layer	-
	• Annual electricity savings: 2–3%	✓ Annual electricity savings: 3.4%	• Annual electricity savings: 2–3%	• Cumulative electricity savings ≥ 15% (since 2021)
	-	✓ Winbond (Taiwan) used 8.7% renewable energy	-	• Winbond (Taiwan) used 50% renewable energy
Water Resource Management* Water-saving measures and circular water recycling and reuse protected and optimized water resources to support sustainability.	• Site-wide water recycling rate ≥ 80%	✓ Site-wide water recycling rate: 82.7%	• Site-wide water recycling rate ≥ 80%	• Site-wide water recycling rate ≥ 80% annually
	• Water consumption intensity: 161 L/layer	✓ Water consumption intensity: 143 L/layer	• Water consumption intensity: 158 L/layer	-
	• Ultrapure water intensity: 0.286 m^3/layer	✓ Ultrapure water intensity: 0.141 m^3/layer	• Ultrapure water intensity: 0.295 m^3/layer	-
	• Water pollution composite index reduction rate: 78%	✓ Water pollution composite index reduction rate: 86.3%	• Water pollution composite index reduction rate: 78%	• Water pollution composite index reduction rate ≥ 78%
Waste Management* Waste reduction, segregation, and circular reuse reduced adverse environmental impacts.	• Site-wide waste recycling rate ≥ 90%	✓ Site-wide waste recycling rate: 93.7%	• Site-wide waste recycling rate ≥ 90%	• Site-wide waste recycling rate ≥ 90% annually
	• Waste generation intensity: 0.588 kg/layer	✓ Waste generation intensity: 0.565 kg/layer	• Waste generation intensity: 0.599 kg/layer	-
Air Pollution Prevention* Emissions were controlled and process technologies were enhanced to minimize impacts on the atmospheric environment.	• Average VOC removal efficiency: 90%	✓ Average VOC removal efficiency: 99%	• Average VOC removal efficiency: 93%	• Average VOC removal efficiency ≥ 93% annually
	• VOCs emissions intensity: 0.204 g/layer	✓ VOCs emissions intensity: 0.179 g/layer	• VOCs emissions intensity: 0.2 g/layer	-

Note 1. Scope: Scope 1, Scope 2, and Scope 3 GHG emissions targets apply to the Winbond Group; all other indicators apply to Winbond (Taiwan) manufacturing operations.
Note 2. Unit: "Layer" refers to energy/resource consumption or GHG emissions per mask layer for 12-inch wafer production.
Note 3. Items marked with * were non-material topics.

Section Overview

To align with global efforts on environmental sustainability, Winbond continued to reduce the environmental impacts of its operations and recorded no material violations of environmental regulations. Guided by its commitment to "Environmental Sustainability and Value Creation," Winbond invested in innovative technologies and resources and advanced initiatives including energy and carbon reduction, improved resource-use efficiency, and strengthened waste and emissions management to deliver its sustainable development roadmap.

In 2025, Winbond received the highest recognition on the CDP A List for both Climate Change and Water Security. Winbond also achieved Leadership Level A under the CDP SEA, demonstrating strong performance in environmental sustainability, disclosure, and climate risk management.

On January 8, 2026, Winbond formally passed the review of its greenhouse gas reduction targets under the Science Based Targets initiative (SBTi). Using 2023 as the base year, the Winbond Group established value chain-wide greenhouse gas reduction targets and defined a long-term roadmap to achieve net zero emissions by 2050. The decarbonization pathway aligned closely with the Paris Agreement goal of limiting the global average temperature increase to 1.5° C, demonstrating strong integration between operating strategy and international climate action.

Risk also creates opportunities. Adequate resources support a resilient supply chain. Ongoing reviews of business models create customer value, and product and process innovation strengthens long-term, sustainable, mutually beneficial partnerships with customers.

Convener
Vice President, Manufacturing Business Group

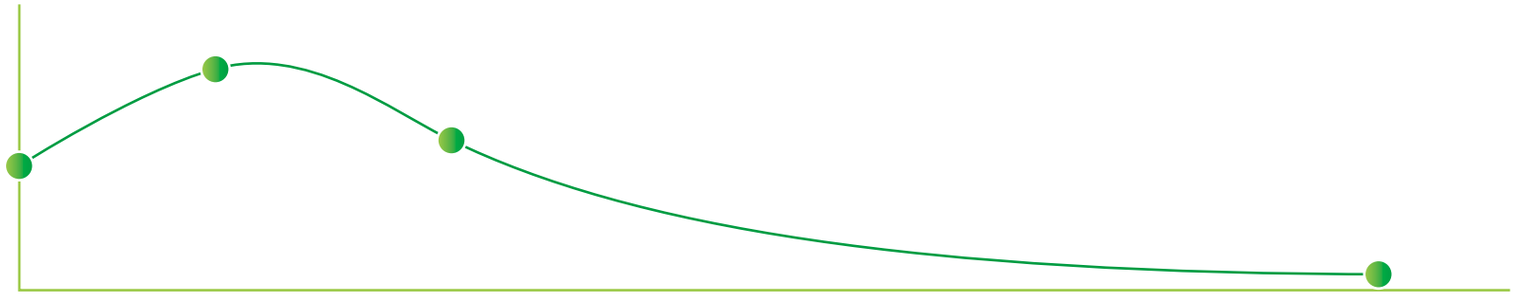
Wen-Hua Lu

4.1 2050 Net zero Commitment

In response to the severe challenges posed by global climate change, sustainability progressed from commitment to action. Science-based methodologies and a long-term perspective supported effective planning for the low-carbon transition.

On January 8, 2026, the Winbond Group formally passed the review of its greenhouse gas reduction targets under the SBTi, demonstrating a strong commitment to science-based governance and systematic climate action. Using 2023 as the base year, the Group established greenhouse gas reduction targets covering the entire value chain and defined a long-term roadmap to achieve net zero emissions by 2050. The decarbonization pathway aligned closely with the Paris Agreement goal of limiting the average global temperature increase to 1.5° C, demonstrating strong integration between operating strategy and international climate action.

Short-Term Targets (2030)	Long-Term Targets (2050)
• Reduce absolute greenhouse gas emissions from process direct emissions (Scope 1) and energy indirect emissions (Scope 2) by 42% compared with the base year • Reduce emissions from purchased products and services and from the use phase of sold products (Scope 3) by 25% compared with the base year	• Reduce absolute greenhouse gas emissions from Scope 1 and Scope 2 by 90% compared with the base year • Achieve a 90% reduction for Scope 3 emissions within the same scope as the short-term target, progressively advancing net-zero transformation across the value chain



2021
- Committ\ed to 2050 net-zero emissions

2023
- Set SBT targets with 2023 as the base year

2030
- Reduce GHG Scope 1 + 2 emissions by 42%
- Reduce GHG Scope 3 emissions by 25%
- Winbond Taiwan manufacturing sites to reach RE 50

2050
- Moving toward net zero

Winbond Group passed the SBT target review

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

THE NET ZERO STANDARD
APPROVED NET-ZERO TARGETS

2050 Net-Zero Action Plan

Systematic implementation	• carbon emissions management (GHG inventory, product carbon footprint), water resource management system, energy management system, circular economy
Reducing process gases	• process gas reduction (higher utilization), fluorinated gas substitution technologies
Improving energy efficiency	• replacement of energy-consuming equipment, usage management, AI-enabled intelligent energy monitoring
Using renewable energy	• renewable energy (wind and solar PV)
Driving a low-carbon value chain	• low-carbon transportation, low-carbon raw materials, carbon-neutral natural gas
Carbon removal	• research and practice of nature-based solutions; research of technology-based solutions

Driving transformation through substantive investment

To deliver its net zero commitment, the Winbond Group upheld green manufacturing principles and prioritized carbon reduction. Starting at the R&D stage, process optimization and the introduction of zero-carbon-emission gases reinforced the ambition to advocate green products and scale green impact through core capabilities.

Annual environmental protection expenditure supported investment in, and maintenance of, environmental software and hardware. Investment items included improvements and upgrades for air pollution prevention, water pollution prevention, and waste treatment. In 2025, the Winbond Group invested NT$896 million in environmental protection measures and optimization, representing approximately 1.0% of annual revenue. Economic benefits generated from environmental investment reached approximately NT$137 million. [Historical data is available in Appendix VII: Environmental Investment]

4.2 Greenhouse Gas and Energy Management

Winbond strengthened data governance to digitize the management of greenhouse gas emissions and energy and resource use. Data consolidation and inventory work began in 2020, enabling systematic management. In 2023, the scope expanded to subsidiaries, progressively improving data completeness and control. Reduction actions were implemented based on inventory outcomes, and performance data were tracked regularly. In 2025, Winbond revised the Climate Change and Energy Management Policy and established a climate-transition green manufacturing and supply chain management model to support social responsibility and sustainable operations.

Greenhouse Gas Management

In 2025, Winbond expanded the scope of greenhouse gas management. All global sites were included in the ISO 14064-1 greenhouse gas emissions inventory and verification. Annual inventories were conducted across sites to improve visibility into emissions and verify the effectiveness of reduction actions. [Historical data is available in Appendix VII: Environmental Sustainability Information]

| Greenhouse Gas Emissions |

Unit: Metric Tonnes CO_2e

Boundary	Winbond (Taiwan)		Subsidiaries	
	(Emissions)	(Share)	(Emissions)	(Share)
Scope 1	48,536	1.3%	27,771	0.4%
Scope 2	314,430	8.1%	81,374	1.2%
Scope 3	3,496,569	90.6%	6,622,893	98.4%

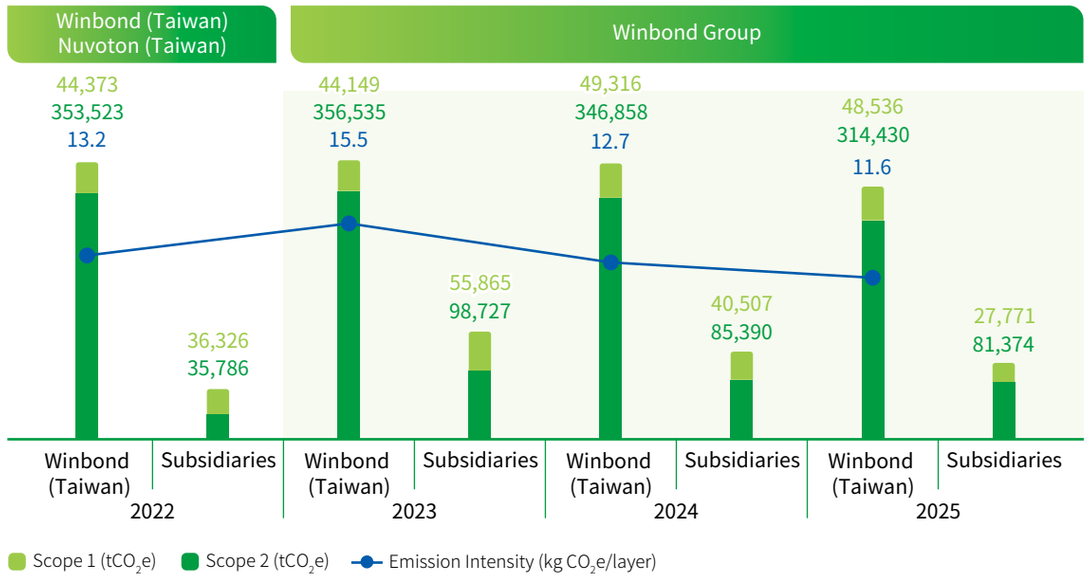
| Scope 3 Greenhouse Gas Emissions |

Unit: Metric Tonnes CO_2e

Category (Scope 3)	Winbond (Taiwan)	Subsidiaries
Purchased goods and services	321,870	247,430
Fuel- and energy-related activities	86,106	26,328
Upstream transportation and distribution	1,254	849
Waste generated in operations	2,288	108
Business travel	768	1,261
Employee commuting	2,905	613
Use of sold products	3,081,379	6,346,304

Note: Primary emission factors for each category referenced the Ministry of Environment Greenhouse Gas Emission Factor Management Table, the Ministry of Environment Carbon Footprint Information Network, supplier inventory factors, and the SimaPro database, among others.

| Greenhouse gas emissions |



Note 1: In response to greenhouse gas reduction and control requirements, the reporting boundary expanded in 2023 to include consolidated-financial-statement subsidiaries, providing more complete emissions information. Accordingly, 2023 serves as the base year for the greenhouse gas inventory.
Note 2: Global warming potential (GWP) references included IPCC AR4 (2007) for 2022. For Winbond (Taiwan), IPCC AR5 (2019) was applied in 2023–2025. For subsidiaries, IPCC AR6 (2021) was applied in 2023–2025.
Note 3: Greenhouse gas types included nitrous oxide (N_2O), methane (CH_4), carbon dioxide (CO_2), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), nitrogen trifluoride (NF_3), and others.
Note 4: Uncertainty data for emission factors referenced the latest version published by the Climate Change Administration. Uncertainty assessment for activity data referenced technical specifications for instrument metrology verification and inspection.
Note 5: 2022 covered Winbond (Taiwan) and Nuvoton (Taiwan). 2023–2025 covered the Winbond Group.

Greenhouse Gas Reduction

Greenhouse gas reduction strategy

Winbond' s greenhouse gas emissions primarily originate from fluorinated gases (Fluorocarbons, FCs) used in manufacturing processes and from purchased electricity, accounting for more than 90% of Scope 1 and Scope 2 emissions. Accordingly, direct reduction of FCs (process improvement and installation of abatement systems), indirect reduction through energy efficiency, and the adoption of renewable energy form the core strategy. Decarbonization programs continued to advance, supported by improved energy efficiency, strengthened carbon information platforms, and green product design and development. Low-power products and low-carbon processes, together with renewable-energy manufacturing, supported decarbonization and electricity-saving outcomes across production and the manufacture and use of end products.

In 2025, Scope 1 and Scope 2 greenhouse gas emissions decreased by 15% compared with the 2023 base year. Scope 3 greenhouse gas emissions (within the SBTi target boundary) decreased by 8.5% compared with the 2023 base year.

In 2025, greenhouse gas emissions intensity reached 11.6 kg CO_2e/layer. Compared with 12.7 kg CO_2e/layer in 2024, year-on-year intensity decreased by approximately 8.7%.

Greenhouse gas reduction action plan

Actions included process improvements to reduce greenhouse gas use; replacement of equipment with energy-saving components and installation of abatement equipment; energy-saving projects for production equipment and utilities; increased use of renewable energy; and reduced consumption of gases, chemicals, and raw materials. New projects added in 2025 covered Scope 1 to Scope 3 and delivered an estimated annual reduction of 21,491 tCO_2e (Scope 1: 3,029 tCO_2e; Scope 2: 11,615 tCO_2e; Scope 3: 6,847 tCO_2e). (For reduction actions, please refer to Section Energy-saving action plan.)

Reduction of fluorinated greenhouse gases began in 2000 through participation in the TSIA/WSC PFC greenhouse gas reduction program. Process adjustments, alternative gas use, and installation of fluorinated gases (Fluorocarbons, FCs) abatement equipment reduced emissions. In 2025, the reduction reached approximately 252,000 tCO_2e. These actions mitigated climate risk impacts, strengthened climate resilience, enhanced industrial competitiveness, and created value.

Energy Management

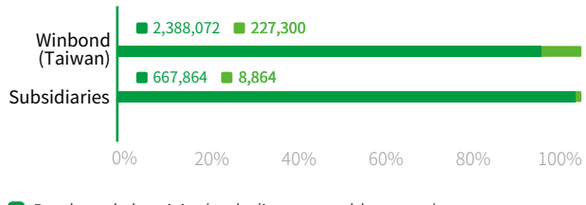
All Winbond Group manufacturing sites achieved ISO 50001 Energy Management System certification. Engineering-side management was institutionalized, supporting energy conservation and efficiency while enhancing product value. Targeted resources supported equipment energy-saving optimization to strengthen social responsibility and sustainable operations. Please refer to the ESG website-sustainability documents for more details.

Energy use overview

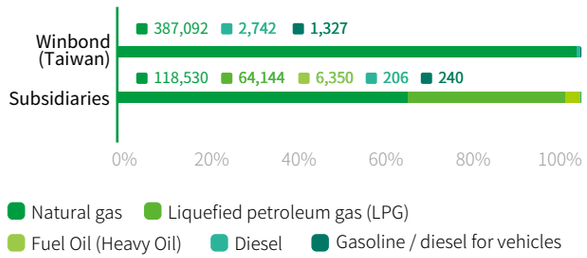
In 2025, total energy consumption reached approximately 3,006,534 gigajoules (GJ) for Winbond (Taiwan) and approximately 866,198 GJ for subsidiaries.

In 2025, the unit product energy consumption indicator—average electricity consumption per mask layer for 12-inch wafer production—reached 83.9 megajoules (MJ). Compared with 85.8 MJ in 2024, year-on-year unit electricity consumption decreased by approximately 2.2%. Electricity savings reached 3.4% in 2025. The 2026 reduction target is to keep average electricity consumption below 83 MJ per mask layer for 12-inch wafer production. Looking ahead, equipment replacement, usage reduction, process optimization, smart energy saving, and performance improvement programs will continue to advance to strengthen environmental sustainability outcomes.

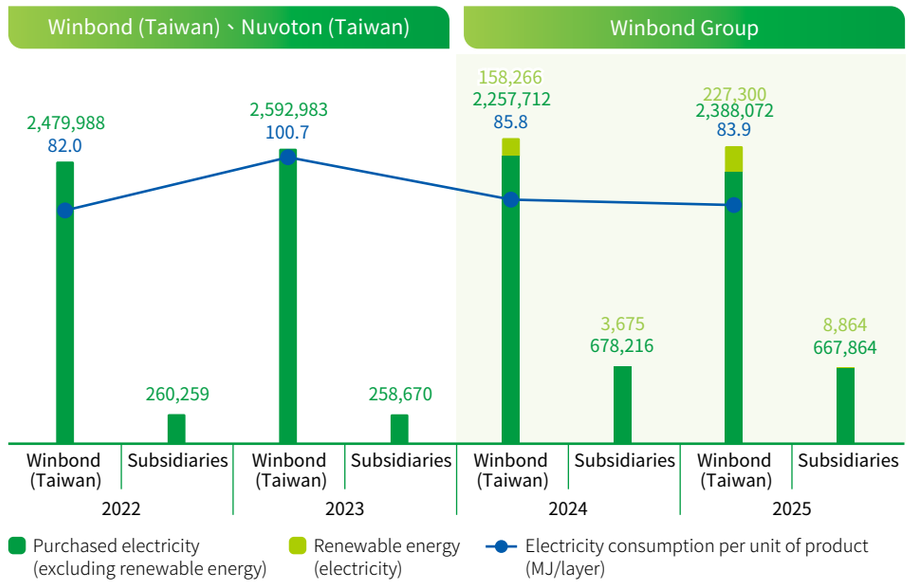
Electricity consumption (GJ)



Fuel consumption (GJ)



Winbond Group electricity consumption (GJ)



Note 1: Energy use was converted to joules. Natural gas was calculated based on the heating value provided by suppliers; other items referenced greenhouse gas emission factors published by the Climate Change Administration. Electricity: 1 kWh = 3,600 kJ; natural gas: 1 m^3 = 8,896 kcal; LPG: 1 L = 5,993 kcal; fuel oil: 1 L = 9,600 kcal; diesel: 1 L = 8,636 kcal; gasoline: 1 L = 7,586 kcal; 1 cal = 4.184 J.

Note 2: Energy consumption data were based on measured values from billing receipts, monthly natural gas settlement statements, and issue slips/material-number inventory movement verification sheets. No estimated values were used.

Note 3: 2022–2023 covered Winbond (Taiwan) and Nuvoton (Taiwan). 2024–2025 covered the Winbond Group.

Renewable Energy Advancement

Winbond continued to expand renewable energy adoption. In 2023, its first renewable energy procurement secured onshore wind power, expected to provide close to 10 million kWh annually, exceeding the annual electricity demand of Winbond (Taiwan) service sites outside manufacturing operations.

In November 2024, Winbond' s Board of Directors approved a long-term renewable energy power purchase agreement with Sustainable Energy Solution Co., Ltd. (SES), a renewable power retailer under the Sino-American Silicon Products Group. Following completion of the R3-1 offshore wind farm, SES is expected to supply offshore wind power and solar photovoltaic (PV) electricity to Winbond. The parties launched a 30-year collaboration with a total contracted supply of approximately 4.8 billion kWh. This collaboration is expected to reduce carbon emissions by approximately 80,000 tonnes annually and deliver cumulative reductions of 2.4 million tonnes over 30 years. This represented Taiwan' s first landmark transaction in which a power retailer sold offshore wind power to a domestic enterprise, demonstrating forward-looking planning and execution along the net zero transition pathway. The agreement also extended to solar PV supply. Complementary generation profiles supported around-the-clock green power demand and strengthened progress toward sustainability and net zero targets. In 2025, Winbond accelerated green power adoption and planned to bring forward supply of 24 MW solar PV under this collaboration effective January 1, 2026, with an estimated total 30-year supply of approximately 0.9 billion kWh. This approach enabled stable renewable energy supply before offshore wind grid connection and supported the low-carbon transformation of the electricity mix.

Looking ahead, the Winbond Group will continue to assess expansion of renewable energy capacity, progressively increasing renewable energy use toward the goal of building a green enterprise.

2019

Installed 0.499 MW rooftop solar power at the Central Taiwan Science Park Fab

2023

First acquisition of T-REC renewable energy certificates

Obtained the first renewable energy certificate; 2,103 certificates obtained during the year

Purchased renewable electricity

- Onshore wind power
- Nengyuan Convenience Store
- Completed the first 3.6 MW onshore wind power procurement

Rooftop solar self-generation and self-consumption

Nuvoton Taiwan installed 0.819 MW in 2023

2024

Obtained T-REC renewable energy certificates

Total renewable energy consumption reached 43.96 million kWh, and 43,961 T-REC certificates were obtained

Rooftop solar self-generation and self-consumption

The Central Taiwan Science Park Fab converted 0.499 MW of renewable energy generation capacity to self-consumption in 2024.

Diversified renewable electricity procurement

In 2024, the Board approved the procurement of 75 MW solar PV, 9.24 MW onshore wind, and 25 MW offshore wind

- Onshore wind power \ Nengyuan Convenience Store
- Procured 9.24 MW generation in September 2024

- Floating solar PV \ Chenya Energy
- Procured 27 MW generation in April 2024

Taiwan's first representative transaction in which a power retailer sold offshore wind power to a domestic enterprise

Solar PV and offshore wind\Xuxing

In November 2024, the Board approved a 30-year procurement plan of 48 MW solar PV and 25 MW offshore wind, expected to help Winbond reduce approximately 80,000 tons of CO_2 emissions annually, with cumulative reductions reaching 2.4 million tons over 30 years

2025

Increasing the share of renewable energy

Winbond (Taiwan) total renewable energy consumption reached 63.14 million kWh, up 43% year over year; 63,143 T-REC certificates obtained; renewable energy share reached 8.7%

Accelerating green electricity deployment and advancing carbon reduction benefits ahead of schedule

Planned from January 1, 2026, to begin wheeling 24 MW from the above projects, with approximately 900 million kWh of total electricity supply over 30 years, enabling early adoption of stable renewable power before offshore wind is fully grid-connected and strengthening the low-carbon transition of the electricity mix

Energy-Saving Action Plan

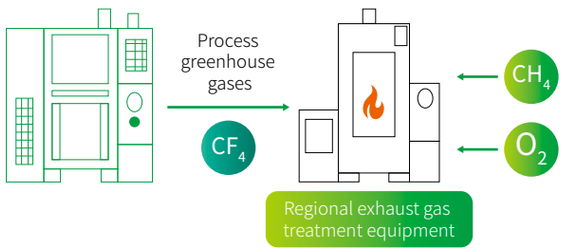
Aligned with the vision of "being a hidden champion in providing sustainable semiconductors to enrich human life," Winbond strengthened accountability for green manufacturing through benchmarking, precision control, and technical collaboration. In 2025, electricity-saving measures continued across six categories and 214 initiatives, including equipment replacement, equipment modification, performance improvement, usage reduction, process optimization, and smart energy saving. Measures included process improvements, cooling tower system optimization, compressed air system performance improvement, and replacement with energy-saving pumps.

In 2025, electricity savings at Winbond (Taiwan) increased by approximately 88,236 GJ compared with 2024, equivalent to approximately 24.5 million kWh.

Category	Action plan	Number of measures	Electricity savings (10,000 kWh)	Electricity savings (GJ)	Emission reduction (tCO_2e)
Equipment replacement	• Replace energy-saving pumps; replace energy-saving heating equipment and cooling devices	36	1,037	37,332	4,913
Performance improvement	• Improve cooling tower performance; improve compressed air system performance	19	590	21,240	2,795
Usage reduction	• Optimize settings for heating and cooling equipment; reduce equipment exhaust	96	329	11,844	1,561
Smart energy saving	• Smart equipment control system; smart chiller	8	261	9,396	1,236
Equipment modification	• Variable-frequency retrofit for equipment cooling system	12	179	6,444	847
Process optimization	• Process optimization to reduce steps	43	55	1,980	262

Case Study 1 ▶ Improving the Efficiency of Process Abatement Systems

Process gases were treated using abatement equipment with electric heating, combustion, or plasma destruction to remove harmful, flammable, and fluorinated greenhouse gases generated by processes. Exhaust containing inorganic acids and alkalis was then routed to a central scrubber for water washing and neutralization. Parameter optimization adjusted fuel use based on treatment efficiency, consolidated abatement requirements by integrating equipment to reduce unit count and energy consumption, and reallocated usable space to increase the installation ratio of fluorinated abatement equipment. Cumulatively through 2025, these actions reduced emissions by approximately 3,200 tCO_2e annually.



Case study 2 ▶ replacing cooling tower fan blades with high-efficiency, energy-saving blades

Cooling towers discharged waste heat generated by industrial production or air-conditioning systems to the atmosphere. Fan blade rotation enabled heat exchange between air and cooling water. Evaporation cooled high-temperature water to a lower temperature for recirculation. Conventional fan blades were typically made of aluminum alloy. Long-term exposure to high-humidity air caused oxidation and corrosion, increasing surface roughness and airflow resistance, which increased fan motor energy consumption. Replacing blades with fiberglass-reinforced plastic (FRP) high-efficiency, energy-saving blades prevented corrosion-driven roughness and resistance. FRP blades reduced weight and used streamlined designs that improved fluid dynamics, increasing airflow at the same rotational speed and further improving fan efficiency. These improvements saved approximately 1.1 million kWh annually.

Before : Aluminum alloy fan blades

After: FRP energy-saving fan blades

4.3 Water Stewardship

Winbond strengthened green semiconductor technology development and fulfilled its responsibilities for green manufacturing. In 2025, Winbond revised the Water Efficiency Management Policy. The policy integrated identification and assessment of dependencies on water, impacts, risks, and opportunities across operations and the supply chain, together with interactions and environmental trade-offs among environmental factors. Across all product life cycle stages, these mechanisms reduced natural water withdrawals and maximized water-use efficiency, promoted on-site water recycling and reuse, continued to reduce pollutants in water discharge, strengthened value chain resilience to water risk, and reinforced water conservation priorities.

Water withdrawal, water discharge, and water consumption

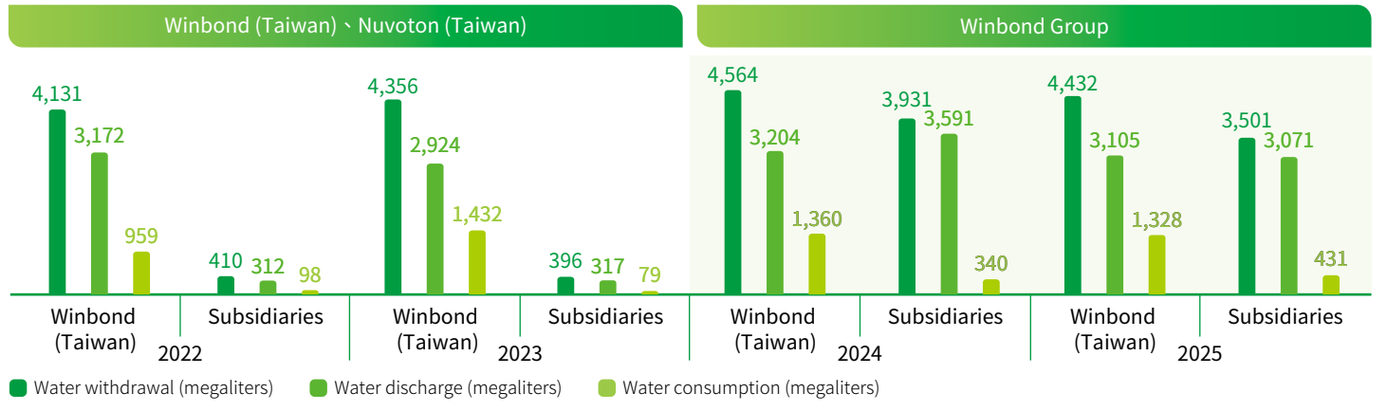
In 2025, total water withdrawal at the Group' s manufacturing sites reached 7,934 megaliters. Water sources for Winbond and Nuvoton were primarily tap water. Nuvoton (Japan) used groundwater. All sources were freshwater.

2025	Winbond	Subsidiaries	Winbond Group
Tap Water	100.0%	14.2%	62.1%
Groundwater	0.0%	85.8%	37.9%

In 2025, total water use at Winbond manufacturing sites reached approximately 4,432 megaliters. Water consumption intensity reached 143 L/layer. Compared with 147 L/layer in 2024, year-on-year unit water consumption decreased by approximately 2.7%. Recycling system performance and water-use efficiency continued to improve.

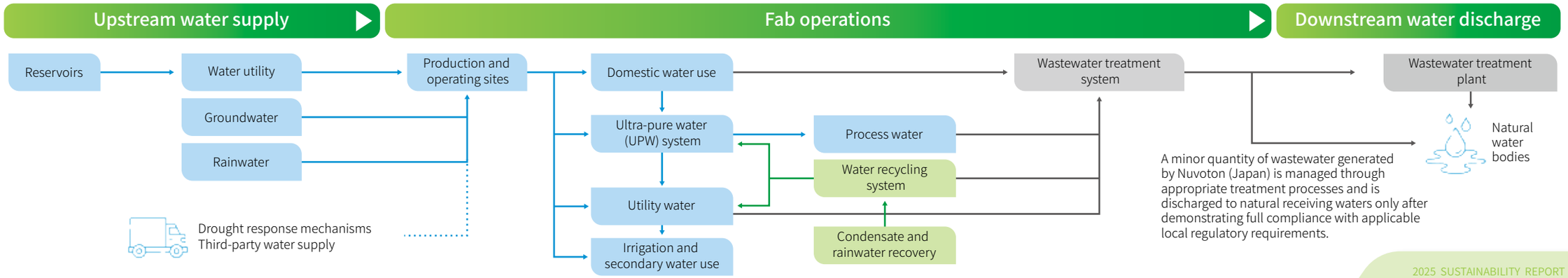
Rainwater and condensate water served as alternative water resources. Collection and reuse reduced impacts on local water resources. Rainwater and condensate water were mainly used for irrigation and secondary water uses. In 2025, total use reached 301 megaliters.

| Water resource statistics for the winbond group' s manufacturing and operating sites |



Note 1: Data scope covered manufacturing and operating sites of the Winbond Group.
Note 2: Water withdrawal = the sum of withdrawals from surface water (excluding rainwater and condensate water), groundwater, and third-party water.
Note 3: Water discharge = the volume of water discharged to groundwater and wastewater treatment plant.
Note 4: Water consumption = water withdrawal - water discharge.

| Upstream and downstream water use relationship diagram for manufacturing sites |



Water resource efficiency management

Winbond (Taiwan) all manufacturing and operating sites passed ISO 46001 Water Efficiency Management System certification. Winbond strengthened systemized mechanisms for water performance objectives and targets, action plans, performance indicators and baselines, monitoring and data analysis, regular performance review and audit, and daily management of significant water-using equipment. These mechanisms improved water-use efficiency and strengthened water resource utilization through reduction, substitution, or reuse methods.

Water risk

The World Resources Institute (WRI) served as the water risk assessment tool. Results from the Aqueduct Water Risk Atlas on the AQUEDUCT website indicated that all manufacturing and operating sites of the Winbond Group were located in low water stress areas.

In response to extreme climate conditions, Winbond established crisis handling procedures for major disasters or incidents. Manufacturing sites installed underground water storage tanks and pursued stable water sources to support factory operations. Maintenance plans for water treatment facilities strengthened equipment performance and reliability to mitigate water shortage and water rationing risks during dry seasons.

Water conservation and reuse

Winbond (Taiwan) set a mid-term target to maintain an average site-wide water recycling rate above 80% annually by 2030. In 2025, recycled water reached 14.068 million cubic meters. The site-wide water recycling rate reached 82.7%, and the process water recycling rate reached 90.3%, consistent with commitments under the science park environmental impact assessment.

Ultrapure water served as the primary water consumption point at manufacturing sites. Process improvements and technology upgrades reduced ultrapure water intensity year by year. In 2025, ultrapure water use reached 4,345 megaliters. Ultrapure water intensity reached 0.141 m^3/layer.

Winbond (Taiwan) continued to reduce manufacturing water use and increase recycled water reuse through four dimensions: reducing water withdrawal and water consumption, selecting water-saving designs, optimizing production processes, and improving facility water-use efficiency. In 2025, 11 water-saving measures continued, including recycling and reuse, process optimization, and process improvement. Total water savings reached 52.99 megaliters.

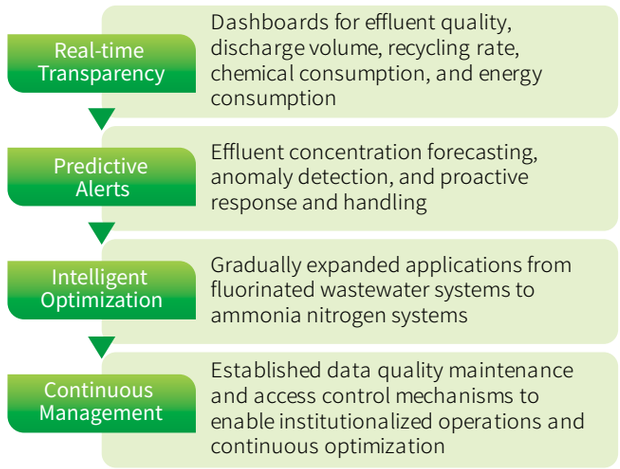
Category	Action plan	Water savings (megaliters)
Recycling and reuse	Recycle process wastewater from wet etching equipment	28.50
Process optimization	Optimize and adjust utility system procedures	19.35
Process improvement	Adjust process water use and optimize parameters	5.14

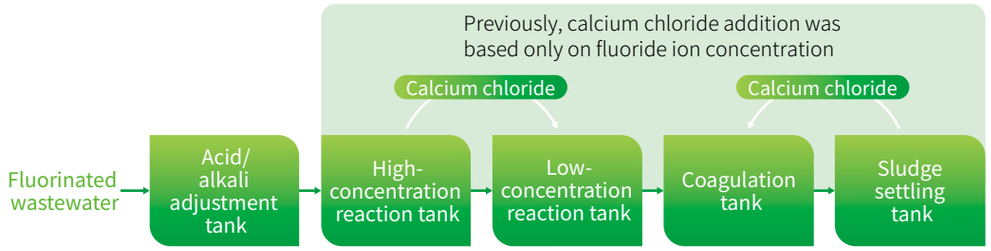
Case study

▶ Optimizing chemical dosing control through data science applications

Traditional wastewater treatment often relied on fixed chemical dosing or manual adjustments based on experience, which frequently resulted in over-dosing and increased environmental load. In the fluorinated wastewater system, Winbond built an intelligent dosing model using real-time water quality monitoring data and historical operating data. The model dynamically adjusted dosing in response to inflow water quality and load fluctuations. Chemical use decreased while stable effluent quality was maintained, delivering dual benefits of chemical savings and stable system operation.

Following on-site validation at the Central Taiwan Science Park site, the Kaohsiung site also implemented the model. Intelligent AI technology also extended to the ammonia nitrogen wastewater treatment system, demonstrating scalable environmental sustainability benefits.





Calcium chloride usage per unit of wastewater decreased by **4.5%**

Intelligent dosing control

In addition to fluoride ions, operating parameters such as flow rate and pH were added. Predictive models were used to execute optimized dosing, reducing chemical waste and environmental burden

Water pollution prevention

Winbond (Taiwan) continued to advance wastewater resource management. Based on wastewater composition and concentration, 28 diversion systems were established to support recycling and reuse. Wastewater that could not be reused was properly treated and then discharged into the science park wastewater treatment plant system. In 2025, the water pollution composite index reduction rate reached 86.3%, exceeding the annual target of 78%.

Operating discharge permits were obtained in accordance with water pollution prevention regulations and the Soil and Groundwater Pollution Remediation Act. In addition to rigorous monitoring and management of utility wastewater systems, third-party testing was conducted twice a year by accredited laboratories. In 2025, all test results exceeded the science park water quality acceptance standards. [Appendix VII: Third-party testing for wastewater discharge to the sewer system]

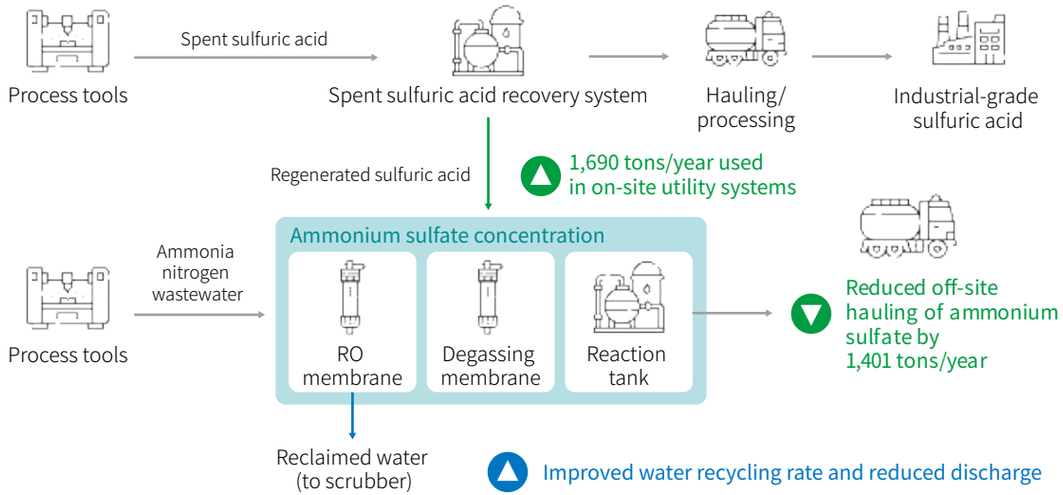
The wastewater treatment system incorporated redundancy and early-warning mechanisms to strengthen stable operation. In the event of system failure, backup equipment started immediately to ensure continuous operation. No abnormal wastewater discharge incidents were recorded in 2025.

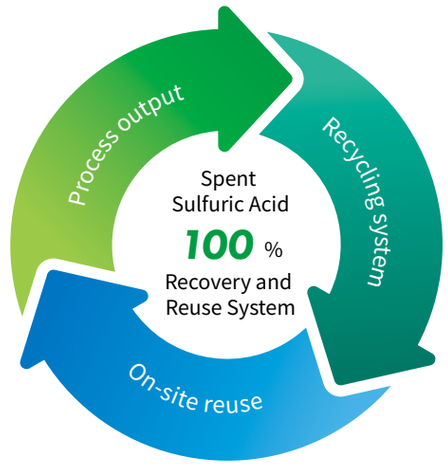
In response to domestic requirements to include total phosphorus in effluent standards beginning in 2027, Winbond (Taiwan) incorporated total phosphorus into Water pollution composite index reduction rate management in 2025. Wastewater diversion technology recovered phosphoric-acid-containing wastewater, which was then concentrated and purified into industrial-grade phosphoric acid by qualified waste treatment vendors. This approach reduced total phosphorus concentration to meet effluent standards.

Source Reduction	Source-based Characteristic Segregation	Recycling Systems	Treatment Systems	By-product Valorization
	28 Categories	**5** Types	**9** Types	**3** Initiatives
• Adopted actions to reduce water intake and consumption • Selected water-saving designs • Optimized production processes • Improved water-use efficiency of facilities	• Based on wastewater concentration and characteristics, 28 segregation systems were established • Significantly reduce end-of-pipe treatment load and increase opportunities for water recycling • Increased by-product resource recovery	• Five wastewater recycling systems were designed by wastewater characteristics Improve water recycling and wastewater treatment efficiency. Create resource recovery opportunities for various chemical wastewater streams	• Through wastewater segregation, wastewater quality was simplified • Reduce environmental load and chemical usage in wastewater treatment facilities • A total of nine wastewater treatment units were deployed	• Internal recycling of spent sulfuric acid; ammonium sulfate concentration to reduce off-site hauling • Off-site distillation of ammonium sulfate could be converted into industrial ammonia water; after dehydration and crystallization, it could be converted into solid ammonium sulfate fertilizer • TMAC (tetramethylammonium chloride) could be electrolytically refined off-site into TMAH (tetramethylammonium hydroxide), which could be used as a developer for the optoelectronics industry

Case study

▶ by-product value enhancement—on-site recycling of waste sulfuric acid and concentration of ammonium sulfate to reduce off-site transport





NEW

Degassing membrane technology

Ammonia nitrogen wastewater reacted with sulfuric acid to produce ammonium sulfate for recovery and reuse; In 2025, a total of 1,690 tons of recovered sulfuric acid were utilized

Ammonia nitrogen wastewater segregation management

Wastewater was traced and segregated to increase ammonia nitrogen concentration

Ammonium sulfate concentration

Innovative pilot testing of ammonium sulfate concentration technology; data science analysis was introduced to adjust the recirculation valve opening based on influent ammonia nitrogen concentration. System stability improvements were implemented concurrently, including installation of ammonia nitrogen analyzers, diaphragm valves, specific gravity meters, pH meters, and other instruments to enhance stability, reducing off-site hauling of ammonium sulfate by 1,401 tons in 2025

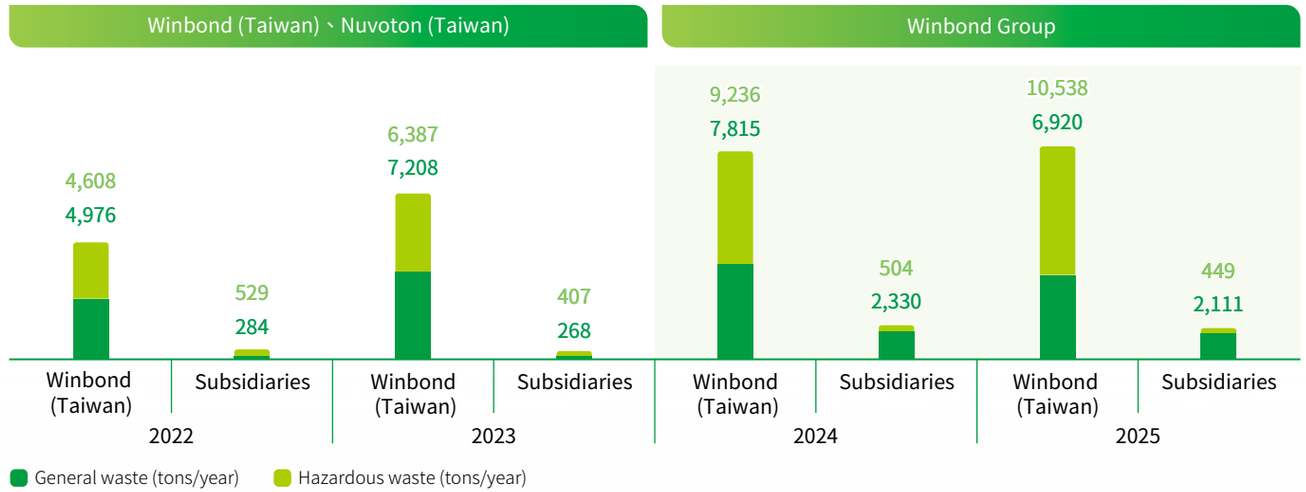
4.4 Sustainable Resource Management

Winbond delivered commitments under the《Environmental Responsibility Policy》and the《ESH Protection Policy》. The sustainable resource management strategy focused on "minimizing waste treatment and maximizing resource circulation." Source reduction strengthened recycling and reuse and reduced environmental load from production. Ecological benefit considerations were integrated across operating stages to improve energy performance and to build a green value chain characterized by low energy consumption and reduced resource use. Procurement supported high energy efficiency and green products and services to maximize energy and resource utilization efficiency. Proper waste handling supported circular economy practices and reduced environmental impacts.

In 2025, total waste generation across the Group's manufacturing and operating sites reached 20,018 metric tons. [Appendix VII: Environmental Sustainability Information]

In 2025, total waste generation at Winbond (Taiwan) manufacturing and operating sites reached 17,458 metric tons. Outsourced waste treatment intensity reached 0.565 kg/layer. All waste was properly handled by qualified waste treatment organizations. No waste disposal was conducted directly on-site. The mid- to long-term management target set the waste recycling rate above 90%. In 2025, recycled waste reached 16,351 metric tons, and the waste recycling rate reached 93.7%, achieving the target.

Waste generation statistics for the Winbond Group's manufacturing and operating sites



Waste vendor compliance audits

In 2025, Winbond (Taiwan) completed 64 audits. Of these, 36 audits were conducted before cooperation and during the treatment phase. All results met Winbond requirements. Audit ratings in 2025 included 30 vendors rated "Excellent," 4 rated "Standard," and 2 rated "Requires Attention." Vendors rated "Requires Attention" were subject to enhanced audits to ensure alignment with Winbond requirements.

Before cooperation

5 Evaluated five new vendors

Conducted vendor legitimacy checks, treatment technology evaluation, and on-site inspections; cooperation and contracting proceeded only after qualification

Removal stage

28 Observed safety practices for 28 vendor operations

Before operations at the site, verified removal equipment and hauling records

Treatment stage

31 Conducted 31 annual audits

Audit scope covered on-site operations management of treatment and recycling facilities, environmental management, penalties and non-compliance records, and cooperation with hauling and treatment

Sustainable resource management actions

At Winbond, the majority of manufacturing waste is effectively recovered through recycling, reuse, or waste-to-energy incineration, with only a small portion requiring final disposal. Guided by resource circulation principles, Winbond continued to identify new reuse pathways and advanced sustainable resource management. Winbond engaged vendors and supply chain partners through an environmental forum, plastic reduction actions, shared reusable circulation boxes, and packaging reduction. UL2799 Zero Waste to Landfill principles were promoted across the supply chain to support source reduction and resource reuse.

On-site circular reuse

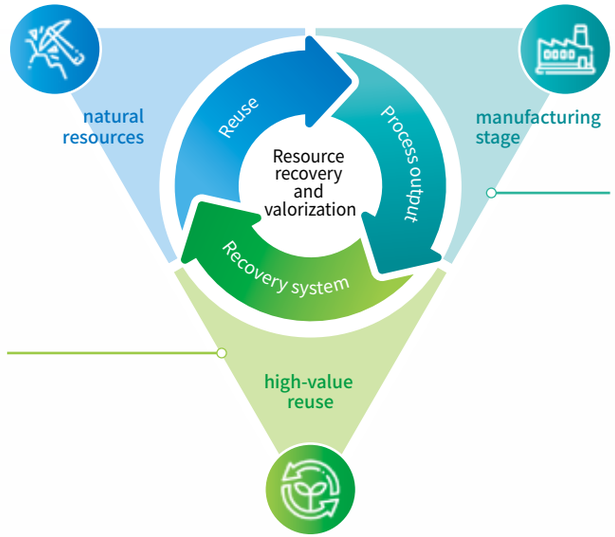
- TMAH (tetramethylammonium hydroxide) reused in manufacturing processes
- After recovery, approximately 40% of spent sulfuric acid could be reused in on-site utility systems

Off-site circular reuse

- Sludge: Used as cement raw material and low-strength concrete
- Chemicals: Converted into industrial-grade chemicals and regenerated solvents for industry reuse

Off-site waste-to-energy incineration

- Thermal energy used by the central scrubber



Source reduction

- Reduced raw material usage
- Leasing instead of purchasing: Official vehicles, copiers, and other general equipment
- Food: Winbond was an early participant in the Ministry of Environment's "Green Dining Table" initiative, refraining from proactively providing single-use items, using local ingredients, and ordering responsibly to reduce food waste. Winbond manufacturing sites obtained the "Green Dining Table" label from the Ministry of Environment.

Materials circulation

- Implemented shared logistics mechanisms and adopted reusable circulation boxes based on annual demand to deliver to Winbond operating sites.
- After return, the circulation boxes were cleaned and prepared by sheltered workshops, creating income for sheltered workshops and employment opportunities for disadvantaged groups, generating integrated sustainability benefits.

Back-end packaging and testing services

- Promoted packaging material carbon reduction projects, including replacing paper boxes with antistatic boxes, reducing reel materials, recycling and reusing carrier tapes and tube materials, and eliminating duplicate labeling tags.

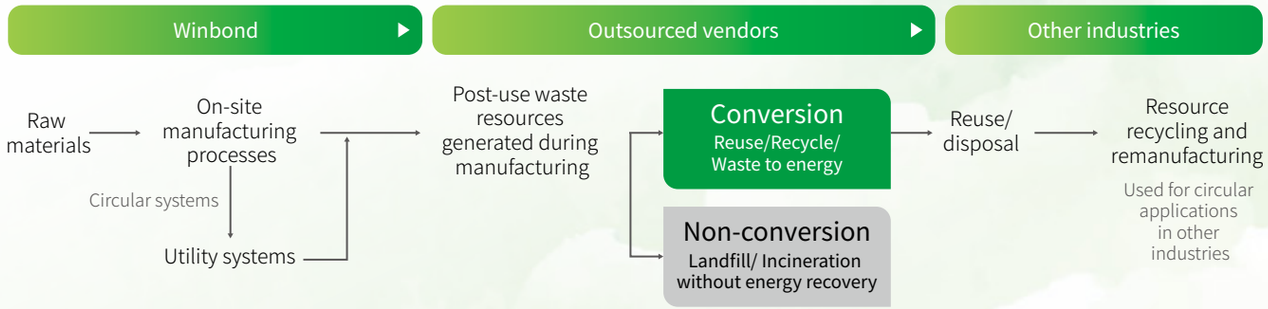
Case Study

▶ UL2799 Zero Waste to Landfill certification—All manufacturing sites achieved Platinum level

UL 2799 Zero Waste to Landfill (ZWTL) is an environmental sustainability certification standard developed by Underwriters Laboratories Inc. (UL). Through quantified scientific calculation, all waste was required to undergo reduction, recycling and reuse, and energy recovery processes to avoid landfilling and to prevent waste of thermal energy after incineration. This approach improved overall resource conversion rates and enabled continuous waste reduction strategies toward comprehensive resource utilization.

In 2025, Winbond (Taiwan) adopted UL2799 Zero Waste to Landfill certification. All manufacturing sites obtained the highest UL2799 certification level, Platinum, demonstrating strong outcomes in advancing waste resource utilization.

In 2025, the Winbond environmental forum focused on resource circulation. UL Solutions Taiwan, ASE, and Innolux shared experiences in advancing UL2799 Zero Waste to Landfill and the circular economy. Participants included employees, subsidiary Nuvoton, supply chain partners, and science park vendors. The forum was delivered through in-person and online formats, with 924 participations.



4.5 Air Pollution Prevention

Source reduction and high-Efficiency Treatment

Winbond prioritized source reduction as the air pollution prevention strategy. Process improvements rationalized and reduced air pollutant generation. High-efficiency prevention equipment treated pollutants in exhaust gas, enabling atmospheric emissions to outperform government requirements. Historical monitoring and testing results indicated that air pollutant emissions consistently outperformed regulatory emission standards.

Proper Treatment and Performance Beyond Regulatory Requirements

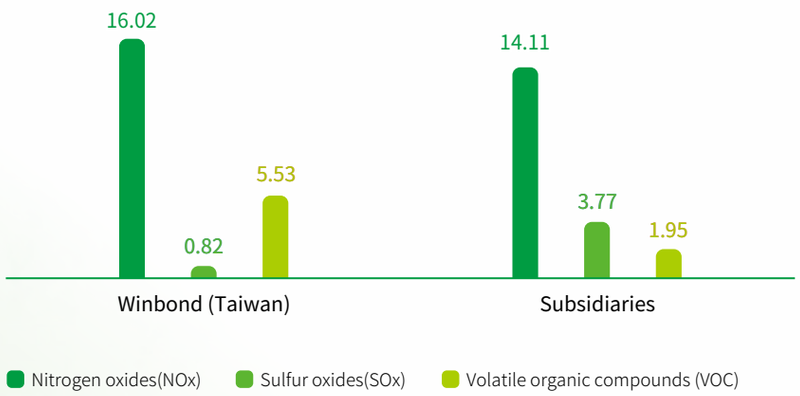
For specific harmful, flammable, and fluorinated gases (Fluorocarbons, FCs) process exhaust, on-site local scrubbers were installed to deliver adsorption and combustion oxidation treatment. Exhaust containing inorganic acids and alkalis was then routed to central scrubbers for water washing and neutralization. Exhaust containing volatile organic compounds (VOCs) was treated via zeolite rotors for adsorption and then processed through direct-fired oxidizers. In 2025, average VOC removal efficiency reached 99%, outperforming regulatory requirements.

Real-Time monitoring and stable operation

Air pollution control equipment was designed with the capability to immediately switch to backup systems during emergencies or maintenance activities and was supported by emergency power supplies and other redundancy mechanisms. Advanced real-time monitoring systems continuously tracked operating parameters 24 hours a day. When deviations exceeded internally defined control thresholds, the system immediately issued alerts, enabling prompt response by personnel. This ensured stable, uninterrupted operation 24 hours a day, 365 days a year, effectively treating air pollutants and complying with Taiwan's Air Pollutant Control and Emission Standards for the Semiconductor Manufacturing Industry and the Air Pollutant Emission Standards for Stationary Pollution Sources.

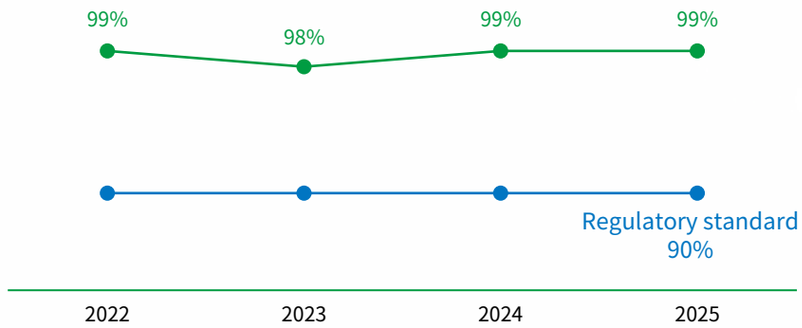
Air Pollutant Emissions

Unit: Metric Tons



Note: Emissions data reflect values reported in accordance with local regulatory requirements. POP, HAP, and PM were not included in the scope of regulatory-required detection.

Winbond (Taiwan) VOC removal efficiency



05

Human Rights and Social Inclusion

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SDG 3.4: Reduce premature mortality from non-communicable diseases and promote mental health
SDG 3.7: Ensure universal access to sexual and reproductive healthcare services
SDG 3.8: Achieve universal health coverage (UHC)
SDG 4.3: Ensure equal access to affordable and quality technical, vocational, and tertiary education
SDG 4.4: Increase the number of people with relevant skills for employment
SDG 8.5: Achieve full and productive employment and equal pay for work of equal value
SDG 8.8: Protect labor rights and promote safe and secure working environments

2025 Performance Highlights

- NT$1.91 Million Average annual compensation for non managerial full time employees in Taiwan, representing a year on year increase of 10.89%
- NT$430+ Million Cumulative childcare subsidies provided by the Group, benefiting more than 2,298 employees' children
- 71 Hours Average training hours per employee in Taiwan, with Group wide average training hours increasing by 13%
- NT$62.38 Million Total Group training investment, marking a significant 45.5% year on year increase
- 100% Completion rate for human rights and labor ethics training across the Group, achieved for three consecutive years; Winbond (Taiwan) sustained full coverage for nine consecutive years
- NT$10+ Million Investment in semiconductor academic programs to support long term talent cultivation

Targets and Progress of Material Topics

	2025 Target	2025 Progress	2026 Target	2030 Target
Talent Management	• Winbond' s HRDD coverage: 100%	✓ 100%	• 100% coverage of global high- and medium-risk issues through HRDD action plans.	• 100% coverage across the Winbond Group
	• Global Human Rights and Labor Ethics training completion rate: 100%	✓ 100%	• 100%	• 100%
	• Diverse recruitment	✓ Employees recruited from 17 countries (cumulative)	• Recruit employees from 25 countries	• Recruit employees from 40 countries
	• Average annual learning hours per employee: 50 hours	⊖ 49 hours per person	• 52 hours per person	• 65 hours per person
	• Engagement survey: employees willing to contribute their strengths over the next five years ≥ 95%	⊖ ≥ 85%	• ≥ 95%	• ≥ 95%
	• Overall compensation ranking in Taiwan: top 25%	⊖ Winbond (Taiwan): top 20%; Nuvoton (Taiwan): top 32%	• Maintain top 25% in Taiwan	• Maintain top 25% in Taiwan
	• Continue social inclusion donations	✓ NT$29.02 million	• Ongoing	• Ongoing

Note 1: ✓ indicates the target was achieved; ⊖ indicates the target was not achieved.
Note 2: the scope of the targets covers the Winbond Group (except for HRDD coverage).
Note 3: In 2025, average training hours were 66 hours per person at Winbond and 28 hours per person at Nuvoton; the Winbond Group average did not meet the annual target due to lower learning hours at Nuvoton.
Note 4: In the engagement survey, willingness to contribute over the next five years was 54% at Nuvoton (Japan), resulting in the Winbond Group average not meeting the target.
Note 5: According to the Taiwan Stock Exchange's (TWSE) 2025 publication of 2024 average salary data for full-time non-management employees, the salary ranking is based on the average salaries of full-time non-management employees. Total compensation for full-time non-management employees includes both recurring and non-recurring compensation. Non-recurring compensation, including bonuses and employee profit-sharing, is determined based on the Company's overall operating performance and profitability. In the 2025 TWSE publication, Nuvoton (Taiwan)'s 2024 average salary ranked in the top 32% among listed/OTC semiconductor companies, demonstrating that its overall compensation level remained above the industry average.

The Winbond Group adheres to internationally recognized human rights standards and applicable labor regulations as its highest guiding principles. The Winbond Group safeguards employees' rights to freedom of association and freedom of expression

and prohibits discrimination based on race, age, gender, sexual orientation, disability, pregnancy, political affiliation, religion, or other status. Guided by a people-oriented approach, Winbond aligns with international human rights conventions and labor standards through comprehensive HR systems. Following the first HRDD at Winbond (Taiwan) in 2022, governance was enhanced in 2023 to extend human rights management to suppliers and subsidiaries, the workplace experience in Taiwan was strengthened in 2024, and HRDD was expanded in 2025 to global subsidiaries to deepen governance across international sites and align practices with international standards. Winbond (Taiwan) received recognition for human rights training and friendly workplace initiatives, and continued to embed public welfare actions as a driver of sustainable development.

Our efforts to protect human rights and promote social inclusion can always be expanded, and outcomes can always be improved. This is Winbond' s unwavering commitment to employees and society, and a long-term objective of the management team.

Convener
Executive Vice President,
Headquarters Functions

Hsiang-Yun Fan

5.1 Human Rights Management

Human rights remained a core pillar of the Winbond Group's sustainability management. In 2025, Winbond conducted Human Rights Due Diligence (HRDD) in accordance with its triennial mechanism and expanded the scope to global overseas operating sites. HRDD systematically identified and assessed key human rights risks—such as forced labor, discrimination, and workplace safety—to ensure alignment with the Responsible Business Alliance (RBA) Code of Conduct and relevant international standards.

From the initial HRDD completed in 2022, to risk mitigation measures launched in 2023, workplace experience enhancements in 2024, and expanded Group-level governance in 2025, Winbond established a comprehensive human rights management framework covering policy, systems, implementation, and audits.

Human rights assessment

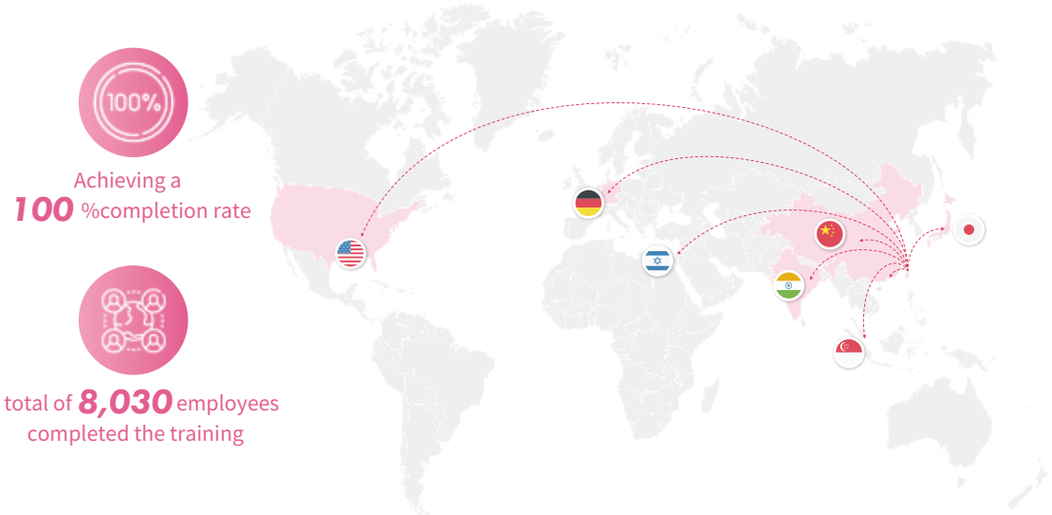
Category	A. Total percentage assessed (2023–2025)	B. Total percentage with risks identified	C. Percentage of risks with mitigation measures implemented
Own operations	100%	100%	100%
Suppliers	100%[Note]	8%	100%

Note: All Tier-1 suppliers and key non–Tier-1 suppliers were included in sustainability due diligence via questionnaires covering human rights, labor protection, and human rights risk management, supporting supplier risk identification and follow-up management.

5.1.1 Human Rights Training

In 2025, Winbond Group expanded human rights education and training to strengthen Group-level human rights governance. The Human Rights and Labor Ethics training covered employees across the United States, Japan, Germany, Israel, China, Hong Kong, and India. A total of 8,030 employees completed the training, achieving a 100% completion rate (excluding consultants and employees unable to attend for special reasons such as unpaid leave or planned resignation).

Training topics included working hours management, prevention of forced or compulsory labor, anti-discrimination, anti-bullying, and workplace harassment prevention, strengthening human rights awareness and fostering a culture that respects human rights.



To fulfill its friendly workplace commitments, Winbond (Taiwan) promoted a series of DEI courses built on three core pillars: awareness activation, cultural inclusion, and intergenerational dialogue, helping employees overcome unconscious bias. Through cross-cultural communication lectures, diversity thematic sharing, and internal e-newsletters, these initiatives foster mutual understanding across cultures and generations, thereby strengthening global collaboration capabilities.

Combined with the 2025 Global HRDD, these training programs strengthened employees' ability to identify potential human rights risks and embedded human rights principles as shared organizational values, supporting a safe, equitable, and dignified global workplace environment.

5.1.2 Implementation of Human Rights Management

In 2025, Winbond initiated its second HRDD across the Winbond Group, achieving 100% coverage for potential adverse human rights impact assessments. The HRDD followed internationally recognized standards, including the UN Global Compact, the International Bill of Human Rights, the UN Guiding Principles on Business and Human Rights, the ILO Declaration of Fundamental Principles and Rights at Work, the ILO Tripartite Declaration of Principles, and the OECD Due Diligence Guidance for Responsible Business Conduct.

Human rights due diligence (HRDD) process

Data analysis

Based on 2022 data, research and investigate in our own operations, background, value chains and management overview, clarify the scope of applicable issues, and define the targets of investigation for each stage of the investigation work.

Risk identification

Identify the human rights risk issues applicable Winbond and their contents as the basis for formal.

Risk assessment

Conduct both quantitative and qualitative research simultaneously. The human rights risk assessment questionnaire quantifies risk values based on the frequency of occurrence and impact level, and is complemented by written reviews.

Risk analysis

Based on the assessment results, we will undertake human rights risk mitigation and remediation, and establish a management cycle for subsequent improvements.

Reporting and disclosure

A human rights due diligence investigation report is regularly reviewed, which reveals the investigation process and related risk analysis results.

Human rights risk assessment

- Summary of the potential adverse human rights impact assessment:

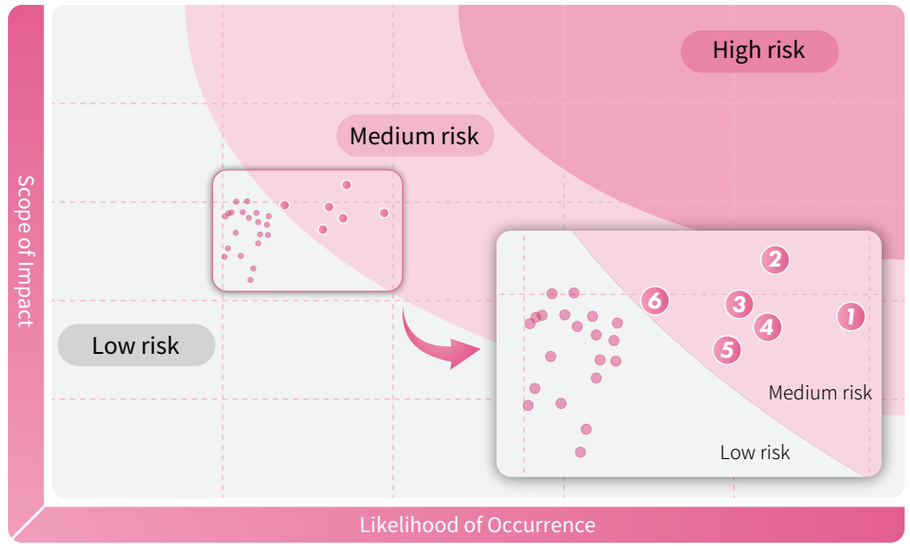
  The risk identification process identified 37 potential adverse human rights impact topics.

  Evidence-based verification confirmed 9 topics had no likelihood of non-compliance.

  An assessment questionnaire was developed for 28 human rights topics under four categories—labor rights, health and safety, environment and community, and governance and ethics—covering (but not limited to) forced labor, human trafficking, child labor, freedom of association, collective bargaining, equal pay for equal work, and discrimination.

  Risk levels were determined by multiplying frequency by severity to produce a risk score, which was then mapped into a human rights risk matrix.

  Based on the risk scores, the topics were stratified into high, medium, and low risk categories. Crucially, no high-risk items requiring immediate remediation were identified. Six topics were classified as medium risk, necessitating continuous monitoring, while the remaining 22 were assessed as low risk.



Medium-risk topics (ranked)

1. Working hours
2. Forced or Involuntary labor
3. Work-life Balance
4. Talent training and Development
5. Bullying and Harassment
6. Physical and Mental health

Improvement measures and follow-up

Issue	Preventive measures for potential adverse impacts	Remedial measures for actual adverse impacts
Working hours	• Real-time online working-hours dashboards for supervisors to strengthen monitoring and accountability. • Continued working-hours management training for managers on risk awareness and compliance responsibilities.	• Internal investigations and disciplinary actions for suspected cases; restoration of employees' rightful entitlements.
Forced or Involuntary labor	• Regular awareness campaigns and training on forced labor to reinforce management vigilance. Please refer to Chapter 5.4 Occupational Safety and Health.	• Internal investigations and disciplinary actions for suspected cases; restoration of employees' rightful entitlements.
Work-life balance	• Recreation centers established at sites to encourage regular exercise and stress relief. • Health promotion and life-support seminars to strengthen self-care capabilities. Please refer to Chapter 5.4 Occupational Safety and Health.	• Employee Assistance Program (EAP) providing professional counseling on interpersonal relations, physical and mental health, financial, legal, and management topics.
Talent training and Development	• Systematic training and development planning aligned with strategy and core culture. • Continued succession planning through job rotation and project-based development to strengthen organizational resilience. • Periodic internal rotation opportunities to encourage cross-functional experience and career flexibility. • Please refer to Chapter 5.2.4 Talent Development and Learning Outcomes	• Optimized internal transfer policies with communications and training to strengthen understanding and utilization.
Bullying and Harassment	• Strict implementation of workplace violence prevention and sexual harassment prevention policies. • Continued management training on anti-bullying and workplace harassment prevention, with regulatory updates. • Clear zero-tolerance communications via email, bulletin boards, and posters. • Confidential, diversified grievance mechanisms with defined intake, investigation, and follow-up procedures. Please refer to Chapter 5.3.1 Employment Engagement.	• Accessible grievance channels and follow-up procedures. • Protection and support for victims. • Internal investigations and disciplinary actions for suspected cases.
Physical and Mental health	• Nurse staffing exceeding legal requirements to provide 24-hour health care services. • Regular health promotion activities to strengthen health literacy and self-management. Please refer to Chapter 5.4 Occupational Safety and Health. • Periodic reviews of health examination data and identification of workload risks, with reminders and follow-up support.	• Internal investigations and disciplinary actions for suspected cases; restoration of employees' rightful entitlements.

5.2 Talent Management

Winbond Group continued to enhance its human resource management systems and optimize integrated HR platforms for recruitment, compensation and benefits, and talent development. These efforts reinforced a people-oriented culture and strengthened employee identification with Winbond, supporting both talent attraction and talent retention amid rapid global change.

5.2.1 Workforce Structure

Global talent deployment

As of the end of 2025, the Winbond Group employed 8,131 employees and engaged 7,520 non-employees. The global workforce was distributed across Taiwan, Asia, North America, Europe, and the Middle East. Through this global presence, the Winbond Group attracted diverse talent, fostered cultural exchange, and strengthened international competitiveness—enhancing organizational agility and innovation in global markets. Most employees were from Taiwan (5,013) and Japan (2,275), with an additional 843 employees from Asia, North America, the Middle East, Europe, Oceania, and Africa—representing a total of 17 countries. The Winbond Group remained committed to hiring employees of diverse nationalities, embodying diversity and inclusion, and developing outstanding global talent. The proportion of employees requiring a work visa was 2.94%.

| Global workforce statistics |

Unit: People

Category	Winbond	Winbond (Subsidiaries)	Nuvoton (Taiwan)	Nuvoton (Subsidiaries)	Nuvoton (Japan)
Employees	3,560	848	1,606	470	1,647
Non-employees	7,028	156	53	2	281
Total	10,588	1,004	1,659	472	1,928

Note 1: The number of non-employees may fluctuate significantly during and between reporting periods due to operational and engineering project needs, adjustments to capacity and operating load, as well as changes in outsourcing service models and contractual arrangements.
Note 2: Non-employee workers include dispatched workers, contractors, and workers with no guaranteed working hours.

| Global workforce by work location |

Unit: People

Company	Winbond (Taiwan)		Winbond (Subsidiaries)		Winbond Group	
	Permanent employees	Temporary employees	Permanent employees	Temporary employees		
Taiwan	3,516	41	0	0	5,052	(62.13%)
Asia (excluding Taiwan)	3	0	715	10	2,747	(33.79%)
North America	0	0	75	1	119	(1.46%)
Europe	0	0	3	0	7	(0.09%)
Middle East	0	0	44	0	205	(2.52%)
Africa	0	0	0	0	1	(0.01%)
Subtotal	3,519	41	837	11	8,131	(100%)
Total	3,560		848			

Note: Employee classification according to GRI definitions: Fixed-term contract employees are considered temporary employees; non-fixed-term contract employees are considered permanent employees. The above data exclude part-time employees and employees with no guaranteed working hours.

| Global workforce structure by nationality |

Unit: People

Countries	Numbers	Total of All	Share in total workforce	Management positions	Share in all management positions
Taiwan	5,013	8,131	61.65%	750	66.3%
Japan	2,275		27.99%	259	22.9%
Other Asian Countries	511		6.28%	64	5.7%
North America	119		1.46%	24	2.1%
Middle East	205		2.52%	34	3.0%
Europe	5		0.06%	0	0.0%
Other Countries (Including Oceania and Africa)	3		0.04%	0	0.0%

| Global workforce distribution trend |

Unit: People

Year	Non-fixed-term Contract	Fixed-term Contract
2022	7,833	263
2023	7,925	97
2024	7,995	102
2025	8,061	70

Note: Employee headcount may fluctuate significantly during and between reporting periods due to operational and engineering project needs, adjustments to capacity and operating load, and changes to contractual arrangements.

2025 Employee composition

Winbond Group regularly reviewed its workforce composition and formulated high-quality recruitment strategies to attract suitable professionals and maintain industry competitiveness. In 2025, the proportion of employees with master' s and doctoral degrees at Winbond (Taiwan) reached 55%, while those with bachelor' s degrees accounted for 33%. At Winbond (Subsidiaries), the proportion of employees with master' s and doctoral degrees reached 42%, while those with bachelor' s degrees accounted for 51%. Overall, the proportion of employees with master' s and doctoral degrees in Winbond Group reached 46%, while those with bachelor' s degrees accounted for 40%, reflecting the knowledge-intensive nature of the semiconductor industry.

In terms of age distribution, Winbond Group strictly complied with domestic and international labor laws and the Responsible Business Alliance (RBA) Code of Conduct, ensuring no employment of child labor or individuals who had not completed compulsory education. All employees were above 18 years old. At Winbond (Taiwan), approximately 75% of general staff were aged between 31 and 50. At Winbond (Subsidiaries), approximately 61% of general staff were aged between 31 and 50. Overall, approximately 61% of general staff in Winbond Group were aged between 31 and 50.

By job category, Winbond Group employed a total of 1,131 managerial staff and 7,000 non-managerial staff. The age structure of employees was primarily between 31 and 50 years old. The majority of Winbond Group' s employees were employed under non-fixed-term contracts, totaling 8,061 people, and the majority of employment types were full-time, totaling 8,128 people.

| Global workforce structure by categories |

Unit: People

Category	Sub-category	Winbond (Taiwan)		Winbond (Subsidiaries)		Winbond group	
		Male	Female	Male	Female		
Position	• Managers	489	71	98	11	1,131	(13.91%)
	• R&D/ Operation	1,318	668	217	22	4,664	(57.36%)
	• Admin/ Sales	86	215	46	40	737	(9.06%)
	• Production support	504	209	371	43	1,599	(19.67%)
Employee Contract	• Fixed-term contract	25	16	7	4	70	(0.86%)
	• Non-fixed-term contract	2,372	1,147	725	112	8,061	(99.14%)
Employment Types	• Full-time	2,397	1,163	729	116	8,128	(99.96%)
	• Part-time	0	0	3	0	3	(0.04%)

Note: A supervisor is defined as an employee at the section manager level or above, responsible for guiding department staff.

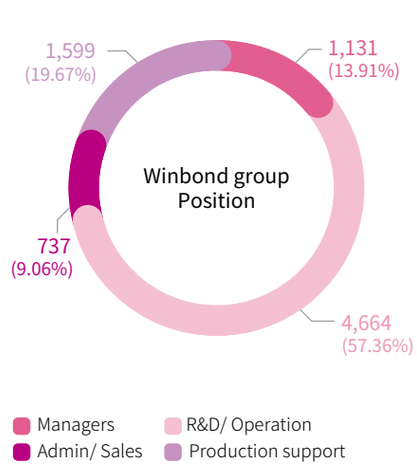
| Global workforce by education |

Company	Ph.D.	Master	Bachelor	Associate degree	High school and below
Winbond (Taiwan)	1.60%	53.15%	32.92%	5.70%	6.63%
Winbond (Subsidiaries)	1.06%	40.45%	51.41%	3.54%	3.54%
Winbond group	1.41%	44.72%	39.97%	5.66%	8.24%

| Global workforce by age |

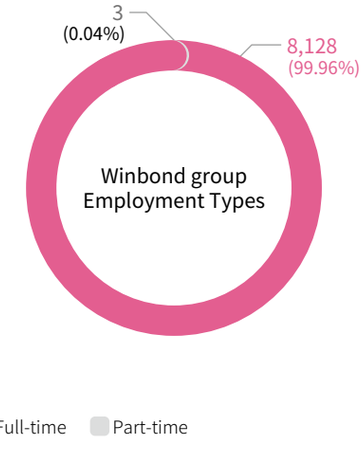
Company	18–30 years old	31–50 years old	51 years of age or older
Winbond (Taiwan)	12.44%	74.69%	12.87%
Winbond (Subsidiaries)	14.27%	61.44%	24.29%
Winbond Group	12.72%	61.42%	25.86%

| Winbond group - Position |



| Winbond group - Employee Contract |

| Winbond group - Employment Types |



Gender distribution of employees

Due to the characteristics of the semiconductor industry and the male-dominated labor market structure in Japan, the majority of employees in the Winbond Group were male in 2025. The total number of male and female employees was 5,867 and 2,264, respectively, with a male-to-female ratio of approximately 2.6:1.

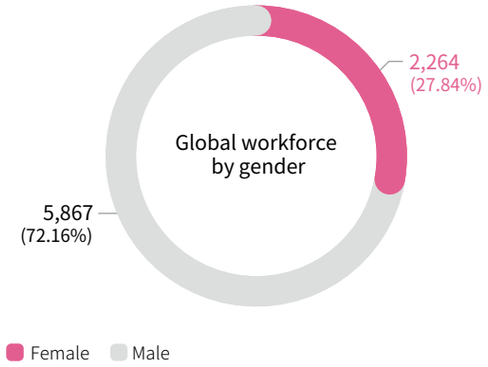
Despite external challenges, Winbond remained committed to workplace gender equality, ensuring that recruitment and selection, compensation and benefits, and career advancement were free from gender-based differences. The Company continued to maintain a stable proportion of female employees to build a diverse and inclusive workplace and safeguard equal career development opportunities for all employees. To break industry barriers, Winbond actively cultivated female managers and R&D talents, valued their unique strengths in management and technical fields, and encouraged women to engage in core R&D through policy measures—steadily advancing toward the target of 15% female managers and realizing a sustainable vision for talent diversity.

Global workforce by gender

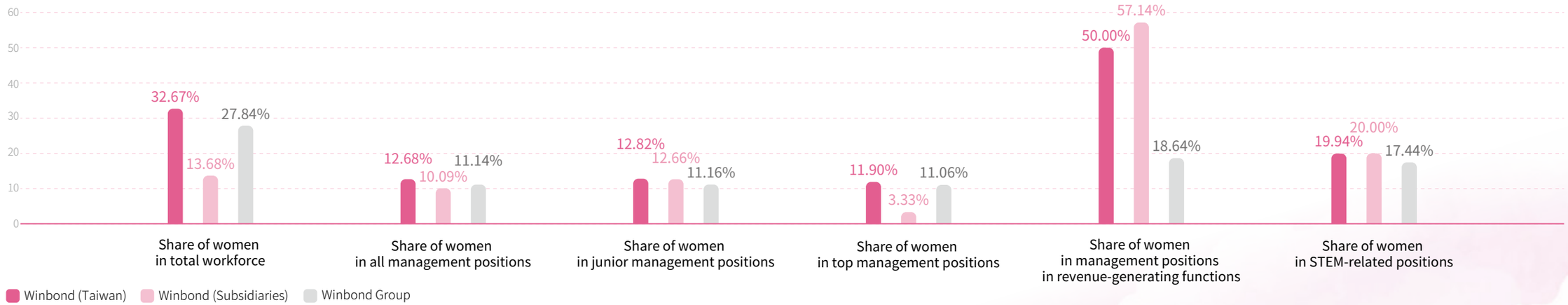
Unit: people

Company	Winbond (Taiwan)		Winbond (Subsidiaries)		Winbond Group
	Permanent employees	Temporary employees	Permanent employees	Temporary employees	
Female	1,147	16	112	4	2,264 (27.84%)
Male	2,372	25	725	7	5,867 (72.16%)
Subtotal	3,519	41	837	11	8,131 (100%)
Total	3,560		848		

Note: Employee classification according to GRI definitions: Fixed-term contract employees are considered temporary employees; non-fixed-term contract employees are considered permanent employees. The above data exclude part-time employees and employees with no guaranteed working hours.



Percentage of global female workforce



5.2.2 Talent Recruitment and Performance Evaluation

Winbond provided a compensation and benefits system exceeding legal requirements to attract and retain talent, and maintained equal treatment principles. In addition to quarterly reviews of salary and benefits and monitoring of gender-related labor regulations, Winbond regularly assessed market benchmarks to refine compensation standards. A comprehensive appraisal mechanism supported performance-based rewards, while workforce renewal aligned with corporate development goals helped introduce new perspectives.

Diverse recruitment channels

Winbond valued workplace diversity and utilized diverse recruitment channels, including job platforms, campus recruitment, social media, industry-academia collaboration, and internal referrals. An internal transfer system encouraged job rotation and role fit to enable talent to maximize strengths. Since 2022, internship programs were offered to university and graduate students to support workplace exposure. In 2025, the Kaohsiung Fab semester-long internship program recruited 11 students through university partnerships for a one-year placement across equipment, process, and integration roles, supporting early engagement with emerging talent and long-term talent development.

2025 recruitment and retention status

Winbond continued to build a diverse and inclusive workplace and believed that diverse management and employee composition strengthened market responsiveness, customer understanding, innovation outcomes, and competitiveness. In 2025, Winbond (Taiwan) recruited 353 new employees, representing an annual hiring rate of approximately 10%. New hires aged 30 and below accounted for 49%, and those aged 31–50 accounted for 48%. Across the Winbond Group, 762 new employees were recruited in 2025, representing a hiring rate of 9%, with 93% of new hires aged 50 and below. At Winbond (Taiwan), the 2025 hiring rate for female employees was 10% and for male employees was 10%. Group-wide, female and male hiring rates were 10% and 9%, respectively, reflecting continued female representation in recruitment.

| Recruitment cost |

Winbond Group (total)	2022	2023	2024	2025
Total new hires	1,200	532	821	762
Share of internal transfers or promotions	25%	26%	30%	37%
Average recruitment cost per new employee (NT$)	82,179	188,563	121,034	94,997

| New hire statistics |

Group	Winbond (Taiwan) – Headcount	Winbond (Taiwan) – Share of category	Winbond Subsidiaries – Headcount	Winbond Subsidiaries – Share of category	Winbond Group – Headcount	Winbond Group – Share of category
Gender – Female	111	31%	18	19%	216	28%
Gender – Male	242	69%	76	81%	546	72%
Age – 51 and above	9	3%	19	20%	53	7%
Age – 31–50	171	48%	46	49%	355	47%
Age – 30 and below	173	49%	29	31%	354	46%

| Annual new hires and hiring rate |

Scope	Year	Male – Headcount	Male – Hiring rate	Female – Headcount	Female – Hiring rate	Total – Headcount	Total – Hiring rate
Winbond (Taiwan)	• 2022	426	18%	294	24%	720	20%
	• 2023	95	4%	69	6%	164	5%
	• 2024	233	10%	148	13%	381	11%
	• 2025	242	10%	111	10%	353	10%
Winbond Subsidiaries	• 2022	51	10%	10	12%	61	10%
	• 2023	83	12%	13	14%	96	12%
	• 2024	63	9%	14	14%	77	10%
	• 2025	76	10%	18	16%	94	11%
Winbond Group	• 2022	763	13%	437	19%	1,200	15%
	• 2023	382	7%	150	7%	532	7%
	• 2024	548	9%	273	12%	821	10%
	• 2025	546	9%	216	10%	762	9%

Note: Hiring rate = new hires of the gender in the year ÷ headcount of the gender as of December 31 of the year.

In 2025, talent mobility in the semiconductor industry remained within a normal range and the Winbond Group' s workforce structure was stable. Winbond Group recorded 729 departures in 2025, with an overall turnover rate of 9%, reflecting Winbond's continued efforts to maintain a healthy and stable employee turnover rate. Winbond (Taiwan) recorded 367 departures and a turnover rate of 10%, indicating a controllable level of talent mobility. The Winbond Group strengthened onboarding development and care mechanisms to support integration and long-term stability.

Turnover rate

Group	Winbond (Taiwan) – Headcount	Winbond (Taiwan) – Share of departures	Winbond Subsidiaries – Headcount	Winbond Subsidiaries – Share of departures	Winbond Group – Headcount	Winbond Group – Share of departures
Gender – Female	115	31%	6	11%	193	26%
Gender – Male	252	69%	47	89%	536	74%
Age – 51 and above	40	11%	7	13%	161	22%
Age – 31–50	228	62%	41	77%	412	57%
Age – 30 and below	99	27%	5	10%	156	21%

Notes: 1. Departures include retirements.
2. Share = category departures ÷ total departures.

Annual employee turnover and turnover rate

Scope	Year	Male – Headcount	Male – Turnover rate	Female – Headcount	Female – Turnover rate	Total – Headcount	Total – Turnover rate
Winbond (Taiwan)	2022	245	11%	150	14%	395	12%
	2023	118	5%	85	7%	203	6%
	2024	204	9%	148	13%	352	10%
	2025	252	10%	115	10%	367	10%
Winbond Subsidiaries	2022	19	3%	8	9%	27	4%
	2023	21	3%	9	10%	30	4%
	2024	43	6%	8	8%	51	7%
	2025	47	6%	6	5%	53	6%
Winbond Group	2022	486	9%	248	12%	734	9%
	2023	295	5%	153	7%	448	6%
	2024	502	9%	251	11%	753	9%
	2025	536	9%	193	8%	729	9%

Note: Turnover rate = departures of the gender in the year ÷ average headcount of the gender in the year ((Beginning headcount + Ending headcount) ÷ 2).

Company core values and employee engagement survey

97 % of Winbond (Taiwan) employees committed to contributing their strengths at Winbond over the next five years.

Since 2021, Winbond (Taiwan) has conducted the survey every two years. From 2025, the scope expanded to include Winbond Subsidiaries and Nuvoton (Taiwan). Survey topics were anchored in the Company' s five core values and included questions on leadership, career development, compensation, well-being, and stress. Insights supported strategic adjustments and strengthened mutual commitments between the Company and employees. The response rate for Winbond (Taiwan) increased to 83% in 2025 from 78% in 2023. Job satisfaction reached 4.72 out of 5, and more than 97% of respondents expressed willingness to contribute fully and continue working at Winbond over the next five years. Nuvoton (Japan) conducted annual engagement surveys with response rates exceeding 90% for four consecutive years. The overall response rate for the 2025 engagement survey was 85%, and results indicated more than 85% of employees demonstrated strong identification with and confidence in the Company.

Key concepts covered in the survey

Job satisfaction	Work meaning and purpose	Work well-being	Work stress
Our company provides stable and reasonable compensation and benefits relative to employees' contributions.	Our company provides diverse opportunities for career development, which helps me achieve my career goals and continue to grow.	I feel happy and supported while working at our company.	I am able to handle the challenges and stress of my work.

Post-survey improvements and actions

After collecting responses, results were analyzed by tenure, job category, and work location to inform policy design. Employees could also submit anonymous suggestions to support improvements in workplace culture, retention, and performance across employee categories. Based on these insights, the Winbond Group set an ongoing target of "≥ 95% of employees willing to contribute their strengths at Winbond Group over the next five years," supported by continuous optimization of communication mechanisms, organizational culture, and management measures.

Employee engagement survey results

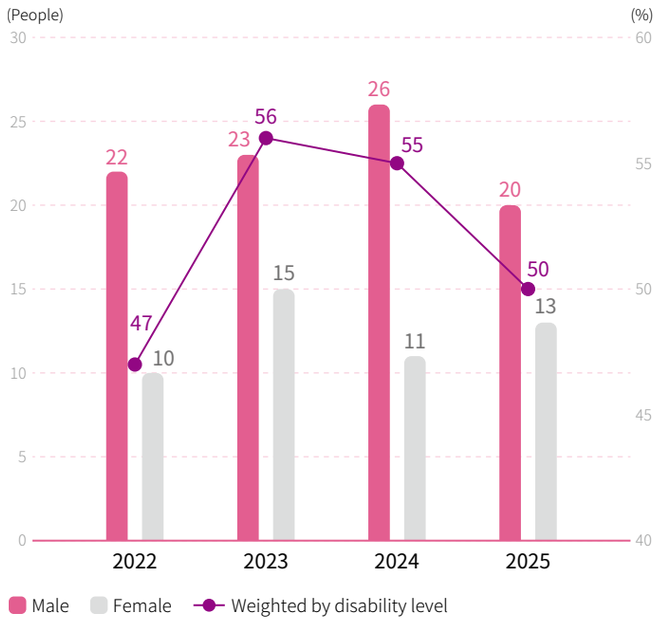
Year	2022	2023	2024	2025
Scope	Winbond (Taiwan) + Nuvoton (Japan)			Winbond + Nuvoton (Taiwan) + Nuvoton (Japan)
Winbond	97%	97%	97%	95%
Nuvoton	56%	53%	54%	72%
Overall engagement	84%	83%	83%	85%
Response rate	81%	83%	82%	85%

Note: The statistical scope for 2022–2024 covered Winbond (Taiwan) and Nuvoton (Japan); from 2025 it expanded to include Winbond Subsidiaries and Nuvoton (Taiwan).

Hiring employees with disabilities

Winbond continued to safeguard the right to work for individuals with disabilities and maintained a stable hiring ratio. As of the end of 2025, Winbond (Taiwan) employed 32 employees with disabilities; after applying Taiwan' s legally required weighting by disability level, the weighted headcount was 50, representing a hiring ratio of 1.4%, exceeding the legal requirement of 1.0%. Winbond Group' s hiring ratio for employees with disabilities reached 1.3% as of the end of 2025. Prior to onboarding, individualized support was provided to help new hires understand commuting routes and work processes, and appropriate assistance, equipment, and workplace environments were provided after onboarding to enable employees to work safely and effectively. Since 2022, Winbond also created massage therapist roles for visually impaired individuals, supporting employee wellness while expanding employment opportunities.

Employees with disabilities

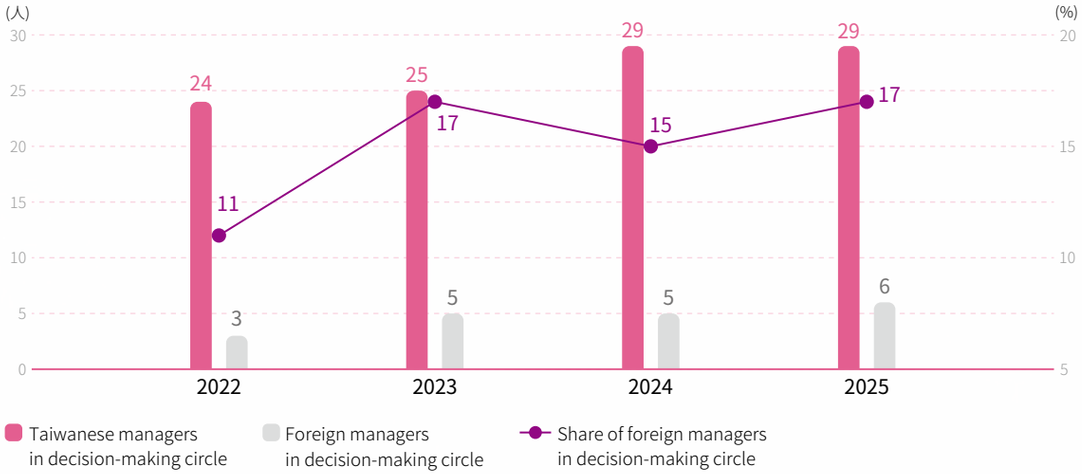


Recruitment of foreign experts

The Winbond Group actively recruited foreign talent to build a fair, competitive, and inclusive career platform. Winbond integrated international recruitment platforms such as LinkedIn with the Company website to showcase diverse workplace experiences and strengthened presence in key markets including Japan, the United States, Israel, Germany, and India. For overseas talent relocating to Taiwan, Winbond (Taiwan) provided comprehensive relocation support for employees and families, reducing barriers to performance.

In 2025, Winbond (Taiwan) extended talent pipeline efforts to international campuses by inviting teachers and students from Sasebo Jitsugyo High School (Japan) to visit the CTSP fab, strengthening brand influence. The Company continued to recruit international graduates in Taiwan who intended to build long-term careers in the local semiconductor sector, bringing diverse perspectives and innovation. As of the end of 2025, foreign employees at Winbond (Taiwan) represented 9 nationalities, with Japanese and Korean professionals forming a core cohort. Talent development outcomes were strong: 38% of foreign employees held management roles, and 31.5% of foreign managers were at deputy director level or above. Foreign managers within the decision-making circle accounted for 17.1% in 2025, marking progress in internationalizing leadership and strengthening global strategic perspectives.

| Percentage of foreign nationals in senior management |



Note: Decision-making circle managers include managers at center level (and above) with management responsibilities, and non-management employees holding job titles at deputy director level (and above).

Recruitment of indigenous people

In 2025, Winbond (Taiwan) employed 15 Indigenous employees; Nuvoton (Taiwan) employed four. To safeguard Indigenous employees' rights to practice their traditional cultures, Winbond (Taiwan) actively implements Indigenous Traditional Festival Leave, supporting the preservation and continuation of Indigenous cultural heritage and contributing to the creation of a diverse, inclusive, and equitable workplace.

| Indigenous employees and tribal festival leave - Winbond (Taiwan) |

Year	Numbers of Indigenous employees	Employees applying for Indigenous ceremonial leave	
		numbers	Share
2022	16	2	13%
2023	15	6	40%
2024	19	8	42%
2025	15	6	40%

Performance management system

Winbond Group is committed to establishing a comprehensive performance management system to ensure strong alignment among corporate strategic goals, team objectives, and employees' individual development. Through a systematic management mechanism, the Company implements both top-down goal deployment and bottom-up consensus building to enhance organizational competitiveness.

Each year, Winbond Group formulates shared annual objectives based on overall corporate strategies. Managers further break down team goals and assign them to individual employees, ensuring that employees clearly understand the connection between their work responsibilities and the organization's vision. Following the SMART principles, performance indicators and achievement milestones are jointly established to build mutual agreement on performance goals between the Company and employees.

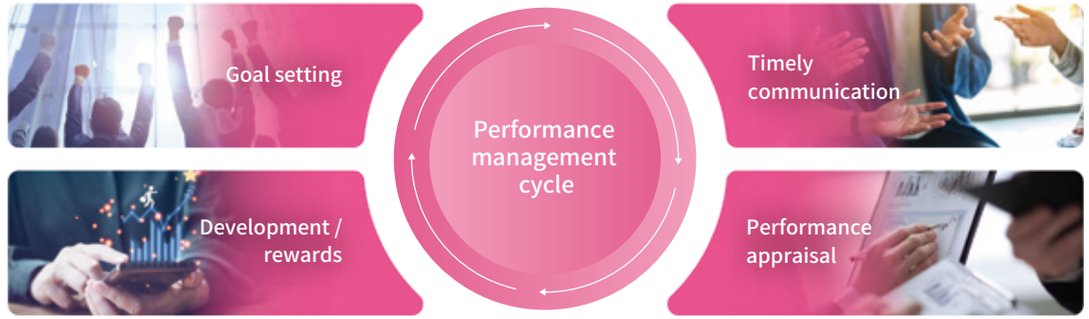
Managers were encouraged to conduct timely performance communication through day-to-day observations. Through the performance management system, managers and employees could provide ongoing comments on goal progress, record key achievements, and maintain complete communication records at any time. This mechanism not only enabled real-time tracking of improvement actions, but also strengthened coaching functions to support employees' capability development and foster a culture of two-way feedback.

To ensure employees are placed in suitable roles and able to fully realize their potential, Winbond (Taiwan) and Nuvoton (Taiwan) conducted performance appraisals twice per year:

New hire tracking	a rigorous evaluation mechanism to confirm job fit early through employee feedback and manager evaluations.
Multi-dimensional evaluation	review of milestone and key result achievement through employee self-assessment and manager assessment, including professional competencies and behavioral performance.
Competencies and ethical standards	beyond professional and managerial competencies, the evaluation also incorporated demonstrations of core competencies to promote employees' commitment to ethical conduct, accountability, and social responsibility.
Objectivity of feedback	managers may incorporate diverse feedback (360-degree perspectives) from direct reports and collaboration partners to strengthen objectivity and reference value.

Upholding the principles of fairness and impartiality, Winbond Group utilized its appraisal system to accurately identify talent gaps and employees' development potential. Appraisal results informed remuneration, promotion, Individual Development Plans (IDPs), and performance coaching, with the aim of supporting employees' long-term career development. In 2025, both direct and indirect employees completed performance appraisals at a 100% rate.

Performance management cycle



ESG practices integrated into performance appraisal

To strengthen ESG awareness and advance sustainable development goals, Winbond (Taiwan) incorporated ESG practices into performance evaluation starting in 2024. Employees were encouraged to participate in ESG public welfare activities and training as part of annual performance objectives. In January 2025, the Sustainability Performance Platform (Credits Tracker) was launched to record employee ESG performance. The platform served as a digital management tool and participation catalyst, creating a positive cycle through tracking and analytics.

Key platform-enabled initiatives in 2025 included:

Diverse training and activities:

55 themed events covering environmental education (stream cleanup, wetland restoration), low-carbon management, life education, and digital security.

Social public welfare actions:

community and environmental engagement through rice field volunteering, life education lectures, and volunteer services.

Cross-sector partnerships:

collaboration with organizations such as the Society of Wilderness, Children Are Us Foundation, Eden Social Welfare Foundation, and Kaohsiung Ciyou Home to expand impact.

Cross-company collaboration:

joint lectures and volunteer activities with Nuvoton to maximize Group resource synergies.

5.2.3 Compensation and Benefits

Senior executive compensation

Policies, systems, standards, structures, and individual compensation for directors and executives were determined and reviewed by the Compensation Committee and submitted to the Board of Directors for deliberation. Compensation levels for executives at Winbond (Taiwan) and Nuvoton (Taiwan) were designed to remain competitive within the sector to attract and retain talent. Individual executive compensation was differentiated based on responsibilities and performance, while incentive design balanced short- and long-term operating performance.

Starting in 2026, Winbond (Taiwan) increased the weighting of ESG practice indicators for executives at the Vice President level and above to 10% and incorporated all material ESG topic targets into these indicators, including business integrity and corporate governance, regulatory compliance, risk management (climate change response and preventive measures), R&D and innovation, energy and greenhouse gas management, supply chain management, Green Products, and Talent Management. Results were incorporated into employees' compensation allocations for these executives.

Fixed compensation	determined based on executive responsibilities and differentiated performance.
Variable compensation	measured by financial metrics (e.g., gross profit and gross margin, operating profit and operating margin, profit before tax, return on equity) and ESG-related metrics (e.g., cumulative carbon reductions, electricity savings), and determined based on strategy execution and sustainability outcomes.

Clawback policy for executives

To strengthen long-term integrity and protect shareholder and employee interests, a remuneration clawback mechanism was implemented: (1) executives departing before the payout date were not eligible for variable compensation. (2) Violations of work rules resulting in losses triggered disciplinary measures, including performance appraisal impacts, bonus deductions, and suspension of salary increases. (3) Failure to meet employee stock trust conditions required return of trust assets under applicable procedures.

Executive Stock Ownership Guidelines

To strengthen corporate governance and promote sustainability, the Company has established executive stock ownership guidelines. The CEO is required to hold shares equivalent to at least 10 times their base annual salary, and executives at or above the General Manager level are required to hold shares equivalent to at least 5 times their base annual salary. Eligible shareholdings may include shares held by the individual, their spouse, and their minor children. These shareholding requirements must be met within five years from the date of appointment.

Employee remuneration

Recognizing talent as critical capital, the Winbond Group provided a competitive salary system and comprehensive benefits, including base salary, allowances, employee bonuses, and employee remuneration. Employee compensation was determined by job responsibilities and professional skills, while bonuses and employee remuneration rewarded individual performance and contributions. In 2025, entry-level basic monthly salaries for inexperienced employees exceeded statutory minimum wages across the Winbond Group. Market benchmarking supported annual salary reviews and merit increases to retain talent. According to the Taiwan Stock Exchange's (TWSE) 2025 publication of Winbond (Taiwan) maintained the average salary of non-management full-time employees within the top 20% of the sector in Taiwan. Salary, benefits, appraisal, and promotion practices were based on objective human rights principles, ensuring equal pay for equal work and minimal gender differences in starting salaries across locations.

According to the Taiwan Stock Exchange's (TWSE) 2025 publication of Winbond (Taiwan) maintained the average salary of non-management full-time employees within the top **20**% of the sector in Taiwan.

Note: The Taiwan Stock Exchange publishes prior-year results each July.

Standard entry-level wage compared to local minimum wage

Location	Item	2024	2025
Winbond (Taiwan)	• Direct employees	1.3 times	1.2 times
	• Indirect employees	1.6 times	1.6 times
Nuvoton (Taiwan)	• Direct employees	1.1 times	1.1 times
	• Indirect employees	1.6 times	1.5 times
Other subsidiaries – Hong Kong	• Indirect employees	1.2 times	1.1 times
Other subsidiaries – Mainland China	• Indirect employees	4.1 times	3.8 times
Other subsidiaries – Japan	• Indirect employees	1.5 times–1.6 times	1.4 times–1.5 times

Notes: Direct employees are calculated using entry-level basic monthly salary for inexperienced employees; indirect employees are calculated using entry-level basic monthly salary for inexperienced university graduates. The boundary covers entry-level employees at major operating sites.

Ratios of standard entry level wage by gender compared to local minimum wage (2025)

Location	Male	Female	Local minimum wage
Winbond (Taiwan)	1.6	1.6	1
Nuvoton (Taiwan)	1.5	1.5	1
Other subsidiaries – Hong Kong	1.1	1.1	1
Other subsidiaries – Mainland China	3.8	3.8	1
Other subsidiaries – Japan	1.4–1.5	1.4–1.5	1

Notes: Standard entry-level wages did not differ by gender. The boundary covers major operating sites.

Salary statistics for non-management full-time employees at Winbond (Taiwan)

Item	2024	2025	YoY change
Headcount	3,422	3,414	-0.23%
Total salary (NT$ thousand)	5,907,684	6,534,965	10.62%
Average salary (NT$ thousand)	1,726	1,914	10.89%
Median salary (NT$ thousand)	1,513	1,617	6.87%

Notes: The above statistics are calculated according to the regulations of the Taiwan Stock Exchange.

Annual total compensation ratio

Entity	Ratio of highest-paid individual to median annual total compensation of general employees (2025)	Ratio of annual total compensation change: 2025 vs 2024
Winbond (Taiwan)	9.8:1	0.9:1
Winbond Subsidiaries	8.3:1	1.1:1
Nuvoton (Taiwan)	11.4:1	0.9:1
Nuvoton Subsidiaries	4.6:1	1.1:1
Nuvoton (Japan)	5.0:1	0.8:1

Notes: 1. Ratio of annual total compensation change = percentage increase in the highest-paid individual' s annual total compensation ÷ percentage increase in the median annual total compensation of all employees (excluding the highest-paid individual).
2. Formula: C = A / B, where A = 2025 highest-paid annual compensation ÷ 2024 highest-paid annual compensation, and B = 2025 median employee annual compensation ÷ 2024 median employee annual compensation.

Compensation ratio by gender

Company (Location)	Job category	Basic salary – Male	Basic salary – Female	Total remuneration – Male	Total remuneration – Female
Winbond Taiwan	• Senior executives	0.95	1	0.91	1
	• Managers	1.08	1	1.08	1
	• Professionals	1.02	1	1.02	1
	• Engineers	1.09	1	1.10	1
	• Non-engineers	0.91	1	0.91	1
	• Direct employees	0.95	1	0.95	1
Winbond Japan	• Managers	0.96	1	0.96	1
	• Non-managers	1.04	1	1.05	1
Winbond Group	• Senior executives	0.87	1	0.88	1
	• Managers	1.03	1	1.07	1
	• Non-managers	1.42	1	1.46	1

Note: Senior executives refer to managers at center level (and above) with management responsibilities; managers refer to section managers and above excluding senior executives; non-managers include professionals, engineers, non-engineers, and direct employees.

Comprehensive benefits

Quality employee benefits

The Winbond Group provides employee benefits that exceed statutory requirements in compliance with applicable local regulations worldwide. These benefits cover performance incentives, living allowances, leave arrangements, and employee clubs, supporting employee motivation, work–life balance, and personal fulfillment.

To mitigate risks associated with excessive working hours, Winbond optimizes workloads through workforce planning, work design, and a structured working hours management system. Regular and overtime working hours are monitored and analyzed to support effective workforce allocation. All overtime is properly declared, reviewed, and compensated in compliance with applicable laws, with ongoing training to strengthen labor law compliance across operating sites.

Employees are regarded as the Group' s most valuable asset. Winbond promotes a diverse, equitable, and inclusive (DEI) workplace and supports employees' family and caregiving needs across life stages. In addition to statutory maternity, paternity, and parental leave, flexible working hours and Work from home (WFH) arrangements are offered to enhance autonomy and productivity without compromising operational effectiveness.

Flexible Working Hours

With prior managerial approval, employees may adjust start and end times within defined ranges while meeting daily working hour requirements.

Work from Home (WFH)

Based on job nature and management needs, units may approve short- or long-term remote work in line with Group guidelines.

In 2025, total employee benefit expenses amounted to NT$18,453,400 thousand (including consolidated subsidiaries), comprising NT$17,588,944 thousand in short-term benefits and NT$864,456 thousand in post-employment benefits.

Notes: Employee benefit expenses include health insurance, employee club subsidies, subsidy programs, retirement benefits, and equity-based compensation. Short-term employee benefits refer to benefits payable within 12 months after the end of the period in which employees render related services, excluding termination benefits.

Comprehensive employee benefits

Bonuses	Festival bonuses, special bonuses, operating performance bonuses, employee remuneration, incentive bonuses, Winbond Star bonuses, Intellectual Property Bonus, retirement benefits, employee stock trust
Subsidies / Insurance	Maternity benefits, marriage benefits, childcare allowance, group insurance, retirement and transfer plans
Leave	LOHAS leave, Volunteer leave (paid), Parental leave
Lifestyle support	Support for foreign employees, health examinations, health care services, health promotion
Clubs and activities	Clubs (sports, arts and culture, lifestyle, public welfare), Family Day

Note：All employee benefit items are administered in accordance with applicable regulations.

Bonuses: diversified incentive programs

Winbond (Taiwan) encouraged innovation and continuous learning through diversified incentive programs. In 2025, six teams were honored with the "Winbond Star bonus" in recognition of their outstanding contributions to key areas such as product advancement, technology improvement, R&D innovation, operational optimization, and sustainable development.

Types of incentive bonus programs

Program	Description
Special bonus	Immediate rewards for outstanding performance or exceptional project achievements
Operating performance bonus	Quarterly sharing of operating performance outcomes with employees
Employee remuneration	Annual profit sharing with employees; total amount determined per articles of incorporation and allocated based on contribution and performance
Incentive bonus	Funding for activities and gatherings to strengthen team cohesion and morale
Winbond Star bonus	Quarterly recognition of individuals and teams demonstrating Winbond culture (business integrity, accountable teamwork, enthusiasm of learning, aggressive innovation, sustainable contribution) and delivering significant contributions
IP bonus	Encouraging inventions across design, manufacturing, testing, applications, and marketing to promote patent output
Employee stock trust	Participation for senior executives and full-time employees; payroll contributions plus Company matching to purchase Winbond shares regularly for long-term holding, sharing dividends and price appreciation and extending welfare to retirement life

Note: In 2025, diversified incentive bonuses totaled NT$1,361,139 thousand at Winbond (Taiwan) and NT$408,525 thousand at Winbond Subsidiaries.

Subsidies: childcare allowance

Since April 2011, Winbond implemented a childcare allowance program to support employees' families. Eligible newborn children of employees at Winbond (Taiwan) and Nuvoton (Taiwan) received monthly allowances of NT$6,000 and NT$5,000, respectively, until the child reached four years old. The program strengthened willingness to have children and demonstrated family support. By 2025, 2,298 employees' children benefited. From 2021 to 2025, newborns of Winbond (Taiwan) and Nuvoton (Taiwan) employees accounted for approximately 0.1% of all newborns in Taiwan, meaning at least one in every thousand newborns was born to an employee of the Winbond Group for five consecutive years.

Nuvoton (Japan) also provided childcare support of JPY 10,000 per child per month for employees raising children under 18, and an education support mechanism providing 150,000 points per child per year (equivalent to JPY 150,000) for employees with children in third grade of elementary school or below.

These benefits reduced financial pressure for new parents, enhanced employee well-being, and supported long-term talent attraction and retention.

Childcare subsidy program performance - Benefits realized

- Cumulative beneficiaries and subsidies: from program launch in 2011 through 2025, **2,298** employees' children at Winbond (Taiwan) and Nuvoton (Taiwan) benefited; cumulative payouts totaled NT$ **433,957,575**.
- 2025 subsidy amount: NT$ **39,414,003**.

Group insurance

To strengthen employee medical protection, Winbond (Taiwan) provided group medical insurance in addition to labor insurance and national health insurance, including term life insurance, accident insurance, hospitalization medical insurance, and cancer insurance. Coverage extended to employees' spouses and children. Optional self-funded plans also covered employees, spouses, children, and parents. Total premiums paid in 2025 amounted to NT$35,975 thousand.

Retirement system and transfer plan

Winbond complies with local retirement laws and regulations to safeguard employees' retirement rights. At Winbond (Taiwan) and Nuvoton (Taiwan), retirement reserves under the defined benefit plan (legacy system) or contributions under the defined contribution plan (new system) are provided for full-time employees. For legacy system retirement benefits under the Labor Standards Act, retirement benefits were calculated based on tenure and average wages over the last six months prior to retirement, and paid within 30 days after retirement. For each year of service up to and including 15 years, two points of entitlement were granted; for each year of service exceeding 15 years, one point of entitlement was granted, subject to a maximum of 45 base units. In addition to contributing 2% of total monthly payroll to the retirement reserve fund, the Company conducts annual reviews of contribution rates to ensure adequate reserves. If the reserve balance is insufficient to cover retirement payments for employees meeting statutory retirement conditions in the following year, the shortfall was deposited by the end of March of the following year into a dedicated account held under the name of the Labor Retirement Reserve Supervisory Committee at the Bank of Taiwan. As of the end of 2025, the fair vlue of Winbond (Taiwan)' s plan assets on a consolidated basis amounted to NT$2,890,258 thousand. The amount required to be contributed in accordance with applicable regulations in the future has been recognized as an accrued pension liability. The net defined benefit liability (consolidated) amounted to NT$1,135,838 thousand. Under the new pension system (governed by the Labor Pension Act), Winbond (Taiwan) contributed 6% of each employee's monthly wages, based on the contribution wage classification table, to individual pension accounts. Employees could also make voluntary contributions of up to 6% of their monthly wages to their individual pension accounts. In 2025, total retirement benefit expense (legacy reserve contributions plus new system contributions) totaled NT$271,926 thousand. In the event of significant operational changes or workforce adjustments, employees are informed in advance in accordance with local regulations and provided necessary assistance including opportunities for internal transfers or assistance in applying for government support programs. Please refer to Winbond' s 2025 Consolidated Financial Statements for details.

Leave programs exceeding legal requirements

Winbond supports employees in balancing work, family, and personal development by providing leave programs that exceed legal requirements and are flexibly adjusted based on regional needs.

In Taiwan, Winbond provides LOHAS leave that exceeds the requirements of the Labor Standards Act. New employees are entitled to seven days of LOHAS leave in the first year on a pro-rata basis, which can be taken on an hourly basis to enhance flexibility. Employees use LOHAS leave for health management, family care, and other personal needs. The Company also encourages employees to take extended leave to enhance family interaction and well-being. In 2025, 3,058 employees utilized LOHAS leave, with a utilization rate of 78%, reflecting strong employee recognition and demand.

To encourage participation in community engagement and support ESG commitments, Winbond (Taiwan) provides Volunteer Leave (paid) of up to one day per employee per year for Company-announced volunteer and public welfare activities. In 2025, 278 employees participated, with an average of 0.45 days per employee. By year-end, 228 employees used volunteer leave, achieving an 82% utilization rate. Total volunteer service contribution reached approximately 1,000 hours based on participation and average leave granted.

Subsidiaries also provide leave programs that exceed local legal requirements. For example, AMTC provided 14 additional calendar days of prenatal leave beyond legal minimums, and METC provided 22 days of paid leave from the date of hire, exceeding the local requirement of 10 days. Subsidiaries in Mainland China provide seniority-based leave in addition to statutory annual leave, granted from the first year and increasing with tenure, which can be taken on a daily or hourly basis, with a 100% utilization rate.

Parental leave

Winbond provided parental leave in accordance with applicable regulations and supported employees through flexible attendance management. In 2025, 32 employees at Winbond (Taiwan) took parental leave, demonstrating the importance of parenting support systems. The Company encouraged male employees to utilize parental leave to promote balanced caregiving responsibilities; 9 male employees at Winbond (Taiwan) took parental leave in 2025. The return-to-work rate after parental leave ended reached 71% in 2025, with a 75% return rate for female employees, supported by return-to-work planning and work transition mechanisms.

Employees taking parental leave

Item	Winbond (Taiwan) – Female	Winbond (Taiwan) – Male	Winbond (Taiwan) – Total	Winbond Group – Female	Winbond Group – Male	Winbond Group – Total
Eligible employees (A)	105	324	429	149	415	564
Employees taking parental leave (B)	23	9	32	34	9	43
Parental leave application rate (B/A)	22%	3%	7%	23%	2%	8%
Employees expected to return after leave ends (C)	20	11	31	27	11	38
Employees who returned to work in 2025 (or early) (D)	15	7	22	22	7	29
Return-to-work rate (D/C)	75%	64%	71%	81%	64%	76%
Employees who returned to work in 2024 (or early) (E)	20	10	30	26	11	37
Employees who were expected to return in 2024 and remained employed in 2025 (F)	19	6	25	21	7	28
Retention rate after return (F/E)	95%	60%	83%	81%	64%	76%

Notes: 1. Parental leave can be taken for up to two years before a child turns three; estimates were based on employees who took maternity or paternity leave since 2021.
2. Retention calculation covers one year of continued employment from the effective return-to-work date through 2025/12/31.
3. Statistics in this table cover Winbond (Taiwan) and Nuvoton (Taiwan) under Taiwan regulations; subsidiaries are not included.

Lifestyle support: support for foreign employees

To strengthen process development and enhance R&D talent, Winbond (Taiwan) continued to recruit overseas talent and provided dedicated support to address adjustment challenges, including language, cultural adaptation, and family relocation needs. Dedicated staff provided pre-arrival support, arranged airport pickup and accommodation, and offered ongoing assistance for residence permits, work documentation, school enrollment for children, housing searches, Company policies, and government regulations. As of the end of 2025, average tenure of foreign employees at Winbond (Taiwan) reached 6.9 years, with 63% having served more than five years (including tenure at subsidiaries), reflecting strong cultural identification and belonging.

Health promotion

Winbond (Taiwan) and Nuvoton (Taiwan) provided massage services delivered by visually impaired therapists to support employee wellness and create employment opportunities. In 2025, appointment utilization for these services exceeded 98% at Winbond (Taiwan), serving more than 9,000 sessions; utilization reached 92% at Nuvoton (Taiwan), serving approximately 3,800 sessions.

Clubs and activities: employee clubs

Winbond (Taiwan) and Nuvoton (Taiwan) established diverse clubs to encourage healthy and public welfare activities. Under the Club Subsidy Management Measures of the Employee Welfare Committee, club operations supported relationship building, well-being, and work efficiency. As of 2025, Winbond registered 41 clubs (including three newly established), and Nuvoton registered 16 clubs, totaling 57 clubs. Clubs were categorized into sports, public welfare, arts and culture, and lifestyle.

Examples of diverse club activities included:

Sports clubs (39 clubs; 68%):	ball sports, cycling, road running, etc., with active participation from senior executives; badminton and softball clubs frequently achieved strong results in the CTSP Cup annual competitions.
Public welfare clubs (3 clubs; 5.5%):	community support, social services, and environmental sustainability activities including neighborhood cleanups, dream-fulfillment programs, orphanage cleanups, repair projects, and the Happy Children Breakfast Program; blood donation and donation activities were held annually.
Arts and culture clubs (3 clubs; 5.5%):	popular music, photography, and related activities, including teaching lectures, annual photo exhibitions, and film appreciation events, with the highest family participation rates.
Lifestyle clubs (12 clubs; 21%):	including camping, board games, coffee, bridge, and other interest-based clubs to broaden horizons and foster hobbies.

Camping club

Billiards club

Basketball club

Yoga club

Zero-carbon family day

The 38th anniversary Zero-Carbon Family Day in 2025 adopted the theme “Sustainability Role Model · FUN Learning Carnival,” attracting more than 5,000 Winbond employees and family members from across Taiwan. The program was designed around the five elements of holistic education—morality, intellect, physical fitness, social skills, and aesthetics—and featured experiential activities, local bamboo craftsmanship culture, and regional ingredients such as Guoxing coffee to deepen cultural heritage and low-carbon lifestyle awareness.

Since 2022, Winbond held Zero-Carbon Family Day by offsetting carbon emissions through voluntary carbon credits. For the third consecutive year, the event’ s carbon emissions were inventoried, offset using Winbond’ s own voluntary carbon credits, and formally retired through the CIX platform with an international carbon credit certification body, demonstrating long-term commitment to climate action.

Green lifestyle actions at zero-carbon family day

E Environment

- Introduced an electronic event passport integrating check-in, challenges, market activities, and redemption mechanisms.
- Set up a power-generation bicycle zone to make juice through human-powered generation, promoting fun learning of green energy.
- Invited a National Pingtung University of Science and Technology pangolin research team to share conservation status, strengthening biodiversity awareness.

S Social

- Partnered with local farmers to set up diverse markets and bamboo weaving experiences, strengthening local cultural identity.
- Integrated holistic education concepts into activity design to deliver positive social impact.

G Economic

- Increased visitor flows to stimulate nearby consumption and regional economic development, creating shared value between the Company and communities.

5.2.4 Talent Development and Learning Outcomes

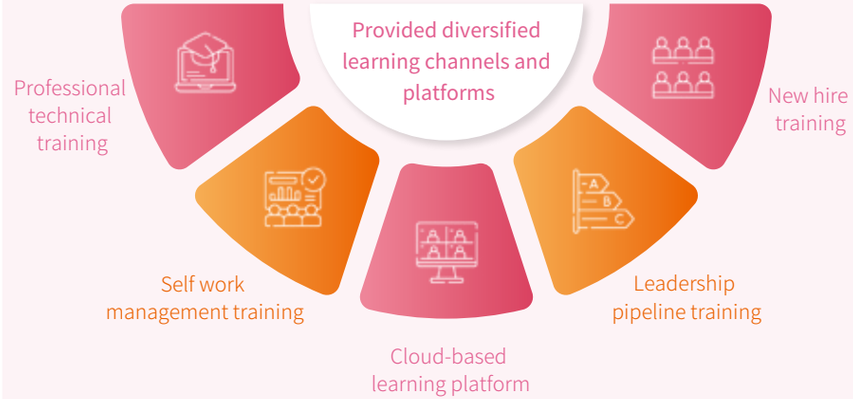
Each year, Winbond planned training and development programs based on strategy, vision, management decisions, and core culture, supported by training needs assessments. Under a dual-track talent development system, employees could choose pathways to strengthen management competencies or deepen professional expertise. In 2025, Winbond continued to prioritize digital transformation by establishing an AI learning roadmap and certification system and promoting data analytics tools, while advancing diversity and inclusion in the workplace. In 2025, Winbond (Taiwan) recorded 216,829 total training hours and an average of 71 hours per employee. Winbond Group recorded 350,164 total training hours and an average of 49 hours per employee. Total training expenditure of Winbond Group was NT$62.38 million, with average training cost exceeding NT$8,600 per employee.

Technical roles

Focused on deepening expertise in technical/ professional domains

- Senior technical roles
- Mid-level technical roles
- Entry-level technical roles

All employees



Management roles

Built responsibilities for team leadership and people management

- Senior managers
- Middle managers
- Frontline supervisors

Training effectiveness evaluation

To track training effectiveness, Winbond applied diverse evaluation methods based on course attributes and encouraged practical application at work. Selected courses included assessments such as tests, post-course assignments, project deliverables, and 1-on-1 interviews to reinforce adult learning principles of immediate application.

2025 satisfaction for talent development courses at Winbond (Taiwan):

- Average satisfaction for in-person courses: **4.4 / 5**
- Average satisfaction for digital courses: **4.2 / 5**

For direct employees, training emphasized on-the-job training, equipment operation training, and culture/strategy communications. For indirect employees, professional training was provided by competency and job level. As many female employees worked in administrative support functions where professional skills were developed through on-the-job learning, average training hours per male employee were slightly higher than those for female employees.

| Training participation: sessions and hours |

Course category	Number of courses	Number of trainees	Total training hours
Core	445	25,732	27,478
Professional	6,086	157,306	231,011
Data science	1,145	33,276	60,276
Management	988	11,307	31,399

| Total training hours by gender and employee category |

Total training hours (hours)	Managers	Non-managers	Total training hours
Female	8,484	68,754	77,238
Male	54,800	218,126	272,926
Total	63,284	286,880	350,164

| Number of employees trained by gender and employee category |

Category	Managers	Non-managers	Total number of employees
Female	125	1,301	1,426
Male	997	4,784	5,781
Total	1,122	6,085	7,207

Note: Training headcount was calculated on a global basis using (opening headcount + closing headcount) / 2 as the denominator.

| Average training hours by gender and employee category |

Training hours (hours)	Managers	Non-managers	Average training hours
Female	68	53	54
Male	55	46	47
Average training hours	56	47	49

Competency-based training architecture

The Winbond Group's training blueprint was designed around three dimensions—core competencies (corporate culture), professional competencies, and management competencies—enabling tailored capability development by role. In 2025, particular emphasis was placed on strengthening data science capabilities (AI competencies) within professional development.

The Winbond Group's training blueprint
- Core competencies
- Professional competencies
- Management competencies

New employee training

In 2025, Winbond (Taiwan) provided online onboarding courses through its e-learning platform during the new employee onboarding stage. The courses covered onboarding guidance, corporate culture communication, regulatory awareness, and introductions to Company policies, totaling 21 courses. The overall completion of the 2025 onboarding program reached 100%. In 2025, Winbond (Taiwan) also conducted a two-week New Employee Boot Camp, delivered in two cohorts in Zhubei and Kaohsiung. The curriculum covered work rules and systems, presentation and communication skills, problem analysis, and data science to strengthen new employees' core competencies. In response to AI development trends, additional modules on digital tools and Winbond use cases were introduced to enhance understanding and practical application of Company digital tools. The program design emphasized interaction and dialogue between new employees and managers. Each cohort included two team competitions, with department-level managers serving as judges and interacting with participants to guide practical application of learning and deepen training effectiveness. The competitions were held in an auditorium to create a formal learning environment and demonstrate the Company's commitment to new employee development. During the final presentation stage, managers provided professional feedback, and participants' direct managers were invited to attend, enabling them to directly understand learning progress and capability development and further strengthen the visibility and practical linkage of training outcomes. Overall, the 2025 New Employee Boot Camp achieved an average satisfaction score of 4.61 out of 5, indicating effective program design and execution and laying a solid foundation for subsequent talent development initiatives.

Management talent development and leadership pipeline deployment

A well-structured leadership talent development program enhances operational effectiveness. In 2025, Winbond (Taiwan) continued to prioritize management talent development and systematically advanced leadership pipeline development across business management, professional expertise, and leadership capabilities.

Continuous development of the leadership pipeline

In response to global operations, Winbond Group placed strong emphasis on the selection and long-term development of managers. Development efforts continued through assessment tools, job rotation, project-based assignments, management training programs, and overseas training at internationally renowned institutions, including Harvard, to strengthen management capability exchange and development.

- Frontline managers serve as a critical foundation for sustaining daily operations. A foundational talent development framework—"Assess → Learn → Practice → Evaluate" —supported managers in making effective talent selection decisions through systematic selection processes and in guiding employees to set clear goals, build confidence, and develop accountability within the performance management cycle, thereby enabling optimal performance outcomes.

Frontline Manager Management Capability Development Program

- Cumulative participation rate of frontline managers (% of all frontline managers): ***94*** %

Program pillars:

1. Mindset and thinking development, supporting the transition from individual contributor to team leader.
2. Reinforcing the Company's core values through a top-down approach.
3. Strengthening management skill by applying the "Assess → Learn → Practice → Evaluate" framework to observe how managers apply what they have learned, support effective team building, and enhance team effectiveness in achieving unit objectives. Employee retention reached 89%, reducing annual recruitment costs by approximately NT$2.8 million.
4. Advancing all-round management capability development to strengthen managers' leadership effectiveness, motivate employee growth, and enhance employability. The cumulative participation rate reached 94% of all frontline managers at Winbond (Taiwan), representing 18% of total headcount at Winbond (Taiwan).

L5 ROI: Annual recruitment cost savings of approximately NT$2.8 million.

L4 Outcome evaluation: The program supported newly appointed managers in accurately identifying talent aligned with team needs and corporate culture. In 2025, newly appointed managers trained under the program recruited 51 new hires, helping new employees integrate more quickly, strengthening employability, enhancing workplace achievement, and achieving an employee retention rate of 89%.

L3 Behavior evaluation: All (100%) of participants' direct managers understood their subordinates' learning outcomes and continued to encourage and observe application of learning.

L2 Learning evaluation: Pre- and post-course assessments indicated learning effectiveness improved by approximately 12%.

L1 Reaction evaluation: Post-course satisfaction score reached 4.82.

- Meetings were indispensable tools for organizational communication and decision-making. In 2025, senior executives were invited to design and deliver meeting management courses, strengthening employees' capabilities in meeting planning, facilitation, and participation. The courses enhanced agenda focus, consensus building, and action follow-through, thereby improving cross-functional collaboration and overall decision-making effectiveness and shaping an efficient, outcome-oriented meeting culture. Course satisfaction reached 4.8 (out of 5).

- To strengthen managers' leadership resilience and communication capabilities, Winbond (Taiwan) delivered multiple management courses to build trust and collaborative relationships with employees:

"Situational Leadership" course:

Supported managers in flexibly applying diverse coaching approaches based on differences in employees' tasks and capabilities, providing timely guidance and support. Course satisfaction: 4.9(out of 5).

"Questioning Skills" course:

Strengthened communication and coordination between managers and subordinates. Developed inquiry-based leadership to guide teams and stimulate innovative thinking. Course satisfaction: 4.6 (out of 5).

"Effective Motivation and Coaching Communication" course:

Focused on coaching mindset, effective listening, appropriate response, and clarification skills, integrated with effective communication strategies to support managers in building smooth and efficient daily interaction models. A refresher mechanism reinforced learning continuity and on-the-job application. Course satisfaction: 4.9 (out of 5).

- Professional and management experience represented critical internal resources. To support the continuation of globalization and resource-sharing strategies, Winbond continued to host internal business wisdom sharing sessions, inviting domestic and overseas mid- to senior-level managers to deliver 20–30 minute presentations. Within an enthusiastic learning culture, more than 80% of managers actively participated in 2025, fully demonstrating the Winbond Group' s core value of enthusiastic learning.
- Continuing to collaborate with renowned external professional consulting teams. More than 89% of mid- to senior-level managers have used assessment tools to understand their strengths and area for development, facilitating discussions and development of their individual development plans.
- In 2025, the Winbond Group partnered with the University of Washington for the first time to deliver a four-day overseas training program tailored for the senior management team. Through instruction by top-tier faculty and on-site visits and exchanges with benchmark companies including Microsoft and Amazon, the program enhanced global perspectives and insights into technology trends, deepened cross-cultural communication and innovative leadership capabilities, thereby comprehensively enhancing the management team' s core competitiveness.
- With full support from the Board of Directors, the "Senior Executive Development Committee" continued to enhance the Group' s governance capabilities in 2025 by inviting external experts for thematic sharing and in-depth exchanges on topics such as the international economic environment, technological innovation, and low-carbon energy technologies. These efforts focused on developing Group managers, enhancing their professional capabilities and international competitiveness, expanding business management horizons, and strengthening the leadership talent pipeline.

Embracing differences, achieving extraordinarily

In 2025, Winbond (Taiwan) advanced a friendly workplace environment for diversity and inclusion through multiple dimensions, including language subsidy programs, talent development courses, and lectures.

- To encourage cross-language talent exchange, the Company continued to provide language subsidy programs in English, Japanese, and Korean in 2025. Employees who met learning outcome criteria received a 50% subsidy for language training expenses; employees who achieved recognized language certification levels could also apply for additional incentives. The programs encouraged self-directed multilingual learning. Across the year, 12% of employees participated, and more than 60% of participants in the first cohort met learning outcomes and received subsidies. The annual plan also included English and Japanese lectures, including cross-cultural negotiation and AI applications in language learning, strengthening employees' understanding of cross-cultural workplace communication and enhancing workplace language capabilities.
- To strengthen employees' comprehensive understanding of ESG and embed related values in daily work, employees could participate in ESG training via the platform following the launch of the "Sustainability Performance Platform" in 2025. Average ESG training hours per employee increased by more than 70% compared with 2024, reaching 7.17 hours.
- In 2025, DEI series activities were delivered, including a DEI keynote lecture series. The series invited a Thai influencer, Lin Zhenghui (Alizabeth), for the talk "Standing Out Because You Are Not Accepted," sharing experiences of growing up, living, adapting, and transforming across cultures. The session helped employees understand challenges and opportunities in cross-cultural exchange. A total of 511 participants attended. Satisfaction score: 4.4 (out of 5).
- The lecture "Hello, I' m Wu Feng! Spreading My Wings Under a Foreign Sky" invited the well-known host, author, and YouTuber Wu Feng to share how, as a foreign national, he found bridges of understanding across cultural differences, bridge the gap, and forged his own path in Taiwan—demonstrating personal value and impact. A total of 575 participants attended. Satisfaction score: 4.6 (out of 5).
- Given rapid shifts in the global landscape, cross-cultural communication and negotiation represented critical topics. In 2025, the Company held a DEI series on global shifts and cross-cultural negotiation challenges across two sessions, featuring renowned negotiation expert Dr. Liu Birong. The sessions analyzed the international landscape and how differing cultural contexts and logic shaped negotiation processes, including: "Negotiation Amid Divergence: Understanding New Developments in the U.S.–China–Europe Economy and the Middle East" and "From Challenge to Opportunity: Entering a New Asia-Pacific Economic and Trade Landscape." Total attendance reached 869 participant-sessions, with an average satisfaction score of 4.8 (out of 5).
- To strengthen cross-level and cross-functional collaboration and improve understanding of different roles and perspectives, the Company planned a series on "Managing Up" and "Managing Laterally." Scenario-based case learning guided perspective-taking and built organizational interaction principles grounded in respect for differences and effective communication, improving overall communication efficiency and influence:

"Managing Up Golf" course:

Helped participants understand communication logic and influence levers across organizational levels and practice strategic expression and communication. The course strengthened individual influence and organizational collaboration efficiency by enabling professional contributions to be understood and ideas to be adopted, supporting participants in becoming key partners who advanced objectives alongside leaders. Satisfaction score: 4.8 (out of 5).

"Lateral Management Golf" course:

Supported participants in establishing appropriate cross-functional collaboration values, learning to reduce silo mentality, understand internal customer needs, and reflect on optimal techniques when facing communication conflict, improving interpersonal interaction and collaboration effectiveness. Satisfaction score: 4.8 (out of 5).

Leading an innovation culture: 2025 digital and AI hackathon and carnival

Core strategy	Bottom-up digital empowerment (Digital Empowerment)

In 2025, the Company successfully held the "Digital and AI Hackathon and Carnival," demonstrating a strong commitment to digital transformation and innovation culture. The event extended beyond a technical competition; its core values lay in enabling employees to "define real problems and apply AI tools," embedding innovation into daily operations. Through cross-functional collaboration, the event strengthened employees' proficiency with digital tools and accelerated progress toward intelligent governance.

Quantified outcomes and participation momentum

The event received strong cross-organization engagement, with participation spanning decision-makers to execution teams, building a comprehensive innovation ecosystem:

- Cross-domain participation: 76 teams registered, with 241 participants across 23 centers.
- Broad-based participation: A no-code/low-code self-developed event website enabled 1,800 employees to participate in a company-wide vote, with an overall voting participation rate of 30%.
- Professional evaluation: 15 internal managers and 3 external experts served as judges. An innovative AI judging mechanism (AI Agent Flow) was introduced to validate technology with technology, supporting objective selection and reinforcing technological leadership.

Practical application and digital value creation: from proof of concept to operational deployment

This Hackathon served not only as a competition arena but also as an incubator for the Company's digital transformation solutions. Submissions demonstrated strong employee proficiency with digital tools and applied AI capabilities precisely across five core domains: financial management, customer service, cross-functional collaboration, environmental safety, and smart manufacturing.

Through integration of AI agents and automated workflows, measurable organizational effectiveness improvements were achieved:

- Process automation and cycle-time acceleration: Deployment of digital assistants and RPA significantly optimized data queries and routine accounting operations, improving average response efficiency by 50% and enabling workforce redeployment toward higher-value decision analytics.
- Smart service and communication optimization: AI-driven customer service and collaboration platforms reduced response time by more than 50% and reduced information silos, improving cross-functional project collaboration efficiency by 40%.
- Precision production and green governance: In manufacturing, AI models replaced manual tool tuning, saving nearly 45 labor hours per month for a single department, and reducing human error risks. Digitized tracking mechanisms replaced paper-based processes, improving follow-up efficiency by 60%, and supporting environmentally friendly commitments under digital transformation.

The event achieved a strong operationalization rate. More than 30% of finalist solutions entered formal implementation. These highly replicable innovation models expanded progressively from point to line to plane, shaping an enterprise-wide digital innovation application ecosystem.

Promoting ai capability adoption and digital transformation: prompt design enabling plan

To strengthen employees' digital competitiveness in the AI era, Winbond (Taiwan) launched the "Prompt Design Enabling Plan" in 2025, using a structured approach to enhance practical capabilities in applying generative AI tools.

The plan aimed to strengthen organizational efficiency and information processing capabilities amid emerging technology development and served as a core talent strategy supporting the Company's transition toward intelligent operations.

The plan adopted a differentiated learning model—"assess first, then train" —to balance human resource efficiency with individual capability development needs:

1. Establishing a real-time capability assessment mechanism

   The Company built a "Prompt Skill Check" certification platform to assess employees' prompt design capabilities through three scenario-based questions. The first two questions were mandatory and required employees to complete instruction design, output optimization, and iterative revisions during the platform window to evaluate output quality, instruction clarity, and iteration effectiveness.

   To encourage self-directed learning, attempts were unlimited during the platform window, and the system recorded only the highest score to strengthen participation and learning motivation.

2. Tiered capability training and personalized learning pathways

   Employees who met the assessment threshold could obtain certification directly, reducing redundant training and enabling focus on business contribution. Employees who did not meet the threshold entered a three-month self-directed learning period, during which the Company provided online course resources covering practical applications and key techniques. Employees adjusted learning pace based on individual needs to continuously strengthen AI application capabilities.

3. Management participation and progress tracking mechanisms

   Certification outcomes were provided to managers on a regular basis to enable tracking of team learning progress and provision of appropriate support. Before the end of the learning period, the Company consolidated reassessment outcomes and learning effectiveness as key indicators of AI talent development effectiveness.

Embedding digital governance DNA and accelerating AI transformation enablement

Winbond (Taiwan) positioned digital technology as a core driver of sustainable operations. In 2025, initiatives focused on strengthening AI literacy for employees and managers through top-tier academic faculty and practical lectures, building a cross-domain collaboration culture from decision-making to execution.

- Structured AI literacy education:

  The Company promoted the online course “AI Literacy in the AI Era: Three Questions Senior Leaders Must Answer,” delivered by Professor Kung Ling-Chieh of National Taiwan University. The course supported leaders in defining problems precisely and optimizing talent strategies, emphasizing deep linkage between “technical” and “non-technical” talent. In 2025, more than 70% of managers at all levels completed the course, reflecting strong leadership commitment to AI literacy and digital governance capability building

- Practical lectures and cross-functional collaboration:

  To advance a paradigm shift toward smart manufacturing, the Company invited Professor Lee Chia-Yen of National Taiwan University for the lecture “AI Literacy—Smart Manufacturing and Paradigm Shift.” The session focused on core thinking for initiating AI projects and provided solution pathways for pain points and challenges in cross-functional collaboration. A total of 260 employees attended. The lecture strengthened practical capabilities to use AI for solving business problems, reduced cross-department communication barriers, and reinforced organizational collaboration momentum.

Digital transformation

Program focus Promoting digital transformation to achieve smart manufacturing and employee empowerment

- Share of full-time employees participating in the program: 50%

Key quantified benefit indicators

- Process Cpk improvement: CMP 20%, Etch 14%, TF 17%, DIFF 17%, WET 8%
- Litho photoresist coating quality: AI image recognition inspection rate 100%
- Fab parts and materials system governance coverage rate 100%
- Tool production efficiency improved 2.7%
- Fab productivity improved 9%
- Annual cost savings: NT$61.6 million; one-time cost savings: NT$262.2 million
- Carbon emissions reduced: 1,388 metric tons

Digital transformation benefits

- Improved product quality and yield
- Improved tool production efficiency
- Improved fab productivity
- Reduced costs and electricity consumption
- Improved labor productivity
- Strengthened innovation and agility
- Improved production efficiency
- Strengthened employee engagement and retention

5.3 Employee Communication and Relations

The Winbond Group regularly monitored industry and labor market trends and adjusted employee compensation and benefits accordingly. Supported by a comprehensive performance evaluation framework, the Winbond Group provided compensation and benefits that exceeded statutory requirements and remained competitive, with the objective of attracting and retaining high-caliber talent. In 2025, Winbond (Taiwan) and Nuvoton (Taiwan) joined the "2025 TALENT, in Taiwan – Taiwan Talent Sustainability Action Alliance," demonstrating a concrete commitment to corporate social responsibility. In the same year, Winbond (Taiwan) received the "2025 Happy Enterprise Silver Award" from 1111 Job Bank, while Nuvoton (Taiwan) was recognized as one of the "Taiwan Top 100 Sustainable Model Enterprises" by the Taiwan Corporate Sustainability Awards, underscoring strong performance in employee care and welfare.

5.3.1 Employment Engagement

Winbond respected employees' freedom of association and collective bargaining rights. Employee rights were clearly defined in accordance with the Responsible Business Alliance (RBA) Code of Conduct Management Procedures. Institutionalized meetings, transparent communication channels, and a rigorous grievance mechanism were established to facilitate constructive labor–management dialogue. Winbond (Taiwan) and Nuvoton (Taiwan) held quarterly labor–management meetings at each site, during which employee-elected representatives engaged with management on working conditions and employment terms, achieving 100% coverage of employees in Taiwan. Management discussion forums, production management and quality re-education meetings were held on a regular basis. Multiple communication channels were integrated on the employee intranet, and training programs were provided for both new hires and supervisors.

All feedback and grievance cases were handled with strict confidentiality, with absolute confidentiality obligations imposed on case handlers and supervisors. In cases involving unlawful workplace conduct or sexual harassment, investigation mechanisms were established in accordance with internal procedures, necessary support was provided, and retaliation was strictly prohibited. Even when allegations were not substantiated, follow-up actions and employee care continued. Where appropriate, de-identified cases were used for internal awareness and management education.

In 2025, Winbond (Taiwan) closed a total of seven internal grievance cases (including sexual harassment cases), with zero substantiated sexual harassment cases. A total of 22 submissions were received through the employee suggestion mailbox. Four management discussion forums were held, with 1,882 participants and an attendance rate of approximately 76%. A total of 12 labor–management meetings were conducted across all office locations. Nuvoton held four labor–management meetings, four quarterly management meetings, four management knowledge-sharing forums, and four Town Hall meetings during the year. No cases of unlawful workplace conduct or sexual harassment were reported. Eight cases were handled through EAP/internal communication channels, and 13 cases were submitted via NuVoice.

Winbond subsidiaries strengthened employee relations through localized approaches. Winbond (U.S.) primarily adopted direct communication. Certain subsidiaries utilized the Qast platform to share opinions and knowledge and supported anonymous proposals. Winbond (Israel) conducted regular informal exchanges through roundtable discussions. Winbond (Hong Kong) provided both named and anonymous channels, disclosed responses on the homepage of the internal website, and continuously collected feedback through focus groups and individual interviews. Onboarding training pathways were provided for new employees, workplace bullying was strictly prohibited, and cases were handled in accordance with internal procedures. Winbond (Japan) conducted monthly employee representative communications through the Occupational Safety and Health Committee (without a labor union); anonymous reporting was scheduled to be incorporated into work rules starting January of the following year.

Nuvoton (Japan) maintained a labor union and held regular labor–management meetings. Two-way communication was strengthened through anonymous employee surveys, one-on-one meetings between supervisors and subordinates, executive site visits by the President, and group forums. A grievance and feedback hotline and a workplace sexual harassment prevention policy were in place. No grievance cases were reported in 2025.

In summary, Winbond implemented consistent confidential grievance handling, non-retaliation principles, and professional investigation mechanisms, combined with localized feedback channels, to reinforce effective communication and to foster a respectful, inclusive, and safe workplace.

Employee relationship promotion activities

2 single-employee networking events

Winbond (U.S.): patent incentive programs, health training programs, and quarterly massage services

Winbond subsidiaries: work–life balance activities (e.g., e-sports tournaments and BBQ events), health and fitness budgets, promotion of outdoor activities, walking initiatives, monthly occupational physician consultations, and Company-subsidized year-end gatherings

Diverse channels for communication

Suggestion boxes	Suggestion boxes were installed near employee cafeterias and production line break areas, providing all employees with accessible channels to submit suggestions related to work and daily life.
Grievance hotline	Winbond established the employee grievance hotline 75234 (“I Want to Complain”). Employees were required to complete an Internal Grievance Form and submit it in writing or by email to the Human Resources function or to the designated Employee Feedback Box managed by the responsible unit, where cases were centrally handled by dedicated personnel. To safeguard the rights of employees and job applicants and to ensure a workplace free from sexual harassment, Winbond established the Workplace Sexual Harassment Prevention Measures in accordance with the Act of Gender Equality in Employment, launched a Sexual Harassment Prevention Awareness Website, and formed a Sexual Harassment Grievance Review Committee to handle related cases.
Factory communication meetings	Factory managers hosted direct communication meetings with frontline personnel every six months to facilitate two-way dialogue on management and production issues. Key re-education sessions on quality and the Responsible Business Alliance (RBA) Code of Conduct were also conducted.
Labor–management meetings	Labor representatives were re-elected and labor–management meetings were convened regularly in accordance with regulatory requirements. Quarterly meetings were used to collect employee feedback, coordinate labor–management relations, promote cooperation, and engage in thorough discussions on labor conditions, employee benefits, and productivity improvement, with the objective of resolving issues effectively.
Management conference	Management discussion meetings enabled all supervisors to engage in direct, two-way interaction with the Chairman and President, facilitating dialogue on company operations, management systems, and organizational development.

5.4 Occupational Safety and Health

5.4.1 Occupational Safety and Health

Occupational safety and health management system

Winbond Group adopted the《ESH Protection Policy》as its highest guiding principle, and it was signed by the Chairman. All manufacturing sites obtained ISO 45001 certification. The Winbond (Taiwan) sites additionally obtained TOSHMS (Taiwan Occupational Safety and Health Management Systems) certification, achieving 100% audit coverage. The Winbond Group also aligned with the Responsible Business Alliance (RBA) Code of Conduct and applicable local regulations. In 2025, there were no material violations of occupational health and safety laws or regulations, and no fire incidents requiring notification to the competent fire authority.

The management scope covered all operations and workers across the Winbond Group, including employees and other workers under the Company' s supervision. Non-employee worker categories included, but were not limited to, waste handling, finished and semi-finished goods transportation, environmental cleaning, security services, equipment and facility maintenance, gas supply, chemical supply and filling, catering services, and equipment vendors.

The Winbond Group committed adequate resources to provide a compliant, safe, and healthy workplace. The approach emphasized inherently safe design to eliminate hazards, reduce workplace safety and asset risks, and drive continuous improvement—strengthening occupational safety and health while advancing a safe, friendly, diverse, and inclusive workplace.

All sites maintained dedicated occupational safety and health functions. The Environmental, Safety and Health (ESH) Committee convened quarterly and was chaired by the General Manager. Together with employee representatives, the Committee reviewed implementation updates and improvement topics to ensure continuous improvement of the internal management system. Employee representative ratios on the Committee were 50% for Winbond (Taiwan), 36.4% for Nuvoton (Taiwan), and 45.5% for Nuvoton (Japan), all exceeding regulatory requirements.

Consultation and communication with workers

The Winbond Group respected frontline workers' voices. Through the Occupational Safety and Health Committee, employee representatives participated in consultations on policy updates, revisions to safety rules, safety and health proposals, incident investigations, and workplace monitoring activities. Each department also appointed ESH promoters to support implementation and communication, providing channels for face-to-face dialogue between employees and management and enabling broad participation. In 2025, no disputes related to occupational safety and health occurred.

For non-employee workers, in-person briefings and training were delivered through contractor coordination meetings to communicate safety requirements and establish two-way communication channels.

Training

The Winbond Group established clear training requirements based on local regulations. Winbond and Nuvoton (Taiwan) followed the ESH Training Standard; Nuvoton (Japan) followed the "Environmental and Labor Safety and Health Education Implementation Standard." Training covered general and task-specific occupational safety and health, internal auditors for ISO management systems, fire safety, and disaster prevention. The Winbond Group promoted diversified training formats, including safety management seminars and in-person simulations at facilities such as the XR Center occupational safety and disaster simulation training center and the Southern Toxic Disaster Response Consulting Center.

In 2025, the Winbond Group delivered 27,696 participant-sessions of occupational safety and fire emergency response training for employees. In addition to in-person and hands-on sessions, online courses were provided to improve coverage and accessibility. Training effectiveness was tracked through course surveys, satisfaction results, and pre-/post-training knowledge gaps.

For training outcomes for workers who are not employees, please refer to Chapter 2.3.3 Sustainability Engagement and Capacity Building.

Disaster prevention and control training

Conducted dedicated training programs at the National Fire Agency Zhushan Training Center, Hsinchu Minghu Training Center, Southern Toxic Disaster Emergency Response Consulting Center, and XR Center occupational safety disaster simulation training center

Safety management seminars

Invited experts to host safety seminars, expanding influence through in-person and online formats

New hire/on-the-job safety training

Hazard awareness training, safety awareness training, job transfer training, traffic safety, and other programs

Professional safety management training

Internal training for occupational safety and health management systems, equipment safety awareness training, pre-energization and pre-chemical supply safety inspection, practical supervision and on-site inspection for explosion-proof electrical works, fire response and smoke hazard control training

Hazard identification and risk assessment

Standardization of risk assessment procedures

The Winbond Group established ESH risk assessment procedures to identify hazards and assess risks for operations and workers, covering routine and non-routine activities. Each unit conducted at least one assessment annually. Additional assessments were conducted when significant changes occurred in processes, facilities, or work content, or when regulatory updates and external case learnings indicated potential impacts, to ensure control measures remained effective. Using a risk matrix, improvement priorities were determined. High-risk items accounted for 8% of occupational safety and health risks and 6% of fire safety risks. After applying controls—including elimination, substitution, engineering controls, signage/warnings/administrative controls, and personal protective equipment—high-risk ratios decreased to 7% and 0%, respectively. [Appendix 7: Risk Identification]

When imminent hazards were identified, preventive measures were implemented immediately. Training and hazard communication further reinforced the right to stop work and report risks when unsafe conditions were observed, without disciplinary consequences, prioritizing workers' safety and health.

Assessment of hazardous workplaces

The Winbond Group's Taiwan manufacturing sites met the requirements for Category A hazardous workplaces and applied Hazard and Operability Studies (HAZOP) to analyze equipment-related risks.

Case study Smart Safety Helmets Enabled Faster Location and Rescue

As site operating areas expanded, smart safety helmets were introduced for utilities areas. Duty staff in the central control room could monitor worker safety during patrols and operations in real time. If an operator could not report during an emergency, the system triggered alarms and text messages and supported location-based rescue to accelerate response.

- Accurate indoor and outdoor positioning
- Automatic emergency call when personnel remained motionless
- Fall detection alarm
- Manual emergency call button

Implementation verification

The Winbond Group encouraged onsite safety observations, inspections, and patrols to identify safety and fire risks. ESH inspection management enabled intensified controls in higher-risk areas to reduce incidents. Under the ESH management system internal audit procedure, Taiwan manufacturing sites conducted internal audits at least semiannually. Identified items were tracked in the system until 100% corrective actions were completed.

Procurement management

Winbond established the "Safety and Health Management Standard for Procurement of Equipment, Materials, and Raw Materials." Purchase requests and contract sign-off for machinery, tools, equipment, materials, raw materials, and personal protective equipment required review by the safety and health function. This ensured compliance with safety specifications before acceptance and use, reducing safety and health risks and enhancing operational safety.

For existing suppliers, cross-functional audit teams assessed areas such as fire safety and ESH performance, with corrective actions tracked to closure.

Management of change

Management of change was applied to the introduction or modification of personnel, environment, processes, raw materials (gases/chemicals), operating procedures, and equipment, as well as changes to existing safeguards. Pre-change evaluations strengthened preventive facilities and measures. Affected parties received appropriate communication and safety training to reduce change-related risks. In 2025, the Winbond Group executed 287 management-of-change cases.

Before introducing new chemicals, applications were reviewed under the ESH management-of-change standard. Systematic risk assessments covered procurement, use, storage, and disposal, including restricted substances screening and health risk controls. In 2025, 26 chemical change reviews were completed. In anticipation of evolving PFAS regulations, the Winbond Group identified 14 PFAS-related substances in use that were not yet regulated and provided the information to relevant units for early assessment.

Emergency response

To effectively control incidents and minimize losses, Winbond Group continues to enhance its disaster prevention and emergency response management system by incorporating lessons learned from major external incidents and updates to relevant government regulations. The Group reviews incident reporting and response procedures for fire and other hazards across prevention, early warning, mitigation, response, and training, and implements multiple improvement measures. In accordance with established emergency response plans, response procedures, team organization, and personnel training are carried out. Regular and unannounced drills are conducted, including joint disaster prevention training and coordinated emergency response exercises with government authorities and mutual aid networks, to strengthen overall emergency response capabilities. The emergency response team comprises 1,253 personnel, with readiness maintained through ongoing training and drills. The emergency response organization comprised 1,253 members and conducted regular and unannounced drills. In 2025, 229 drills were conducted covering scenarios such as earthquakes, fires, gas leaks, chemical spills, and earthquake evacuation, involving both employees and non-employees.

Manufacturing sites conducted evacuation drills in both the first and second halves of the year for employees and non-employees, covering day and night shifts. Non-manufacturing operating sites in Taiwan conducted one annual drill.

Winbond' s Kaohsiung fab actively participated in the Kaohsiung Science Park joint response drills and meetings. The plant also served as the leader of the Southern Toxic Disaster Joint Response Team No. 10, organizing training and inviting the Southern Toxic Disaster Response Center to share safety precautions, protective equipment introductions, and case studies. In 2025, Winbond hosted two joint response meetings onsite, including resource-sharing sessions with nearby hospitals and discussions on lithium battery safety with the Kaohsiung City Fire Department, Innolux, and fire equipment vendors.

Kaohsiung Fab hosted the Southern Taiwan Science Park Kaohsiung Park Safety Alliance Working Group meeting, and conducted a lithium battery safety seminar and hands-on demonstration.

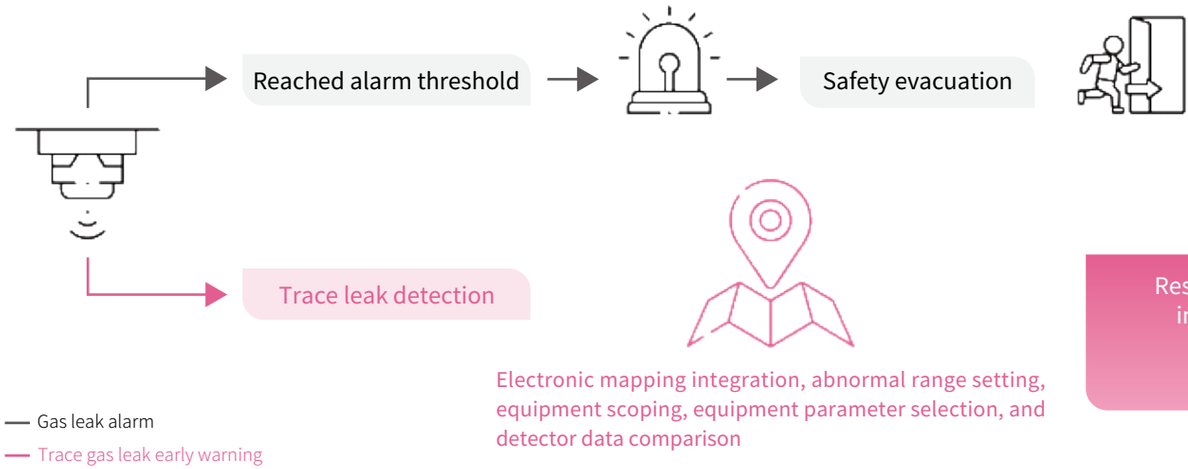
Contractor management

Contractor performance was incorporated into supplier selection criteria. After order award, contractors signed the site ESH Code of Conduct. Monthly contractor safety coordination meetings provided in-person communication, guidance, and training. Contractor ESH performance evaluations were reported in coordination meetings and used as references for project owners when selecting contractors.

All construction personnel entering sites received workplace hazard communication. High-risk tasks required special work certifications prior to execution. In 2025, contractor hazard communication courses recorded 2,980 participant-sessions, and special work professional certifications totaled 2,527 participant-sessions. A robust work permit system strengthened safety management before, during, and after construction activities. High-risk tasks were governed by corresponding safety standards, and 100% special work certification completion was required prior to execution.

Case study — Early Detection of Trace Special Gas Leaks Improved Leak Response Efficiency

Given the use of special gases in semiconductor processes, Winbond prioritized operator safety by installing 24/7 continuous gas detectors. When first-stage warning thresholds were reached, the system automatically notified personnel to inspect and address abnormalities; when second-stage thresholds were reached, evacuation broadcasts were triggered. To identify long-duration trace leaks below warning thresholds, Winbond developed an in-house "Micro-Leak Gas Detection System" through cross-functional collaboration among system monitoring, automation engineering, equipment engineering, and ESH teams. The system used digital mapping, equipment scoping, parameter selection, anomaly range settings, and detector data comparisons to calculate anomaly probabilities. It reduced manual comparisons, accelerated identification of high-probability tools, and improved response speed by 80%, enabling earlier detection before alarms and reducing escalation risks.



Incident investigation

To minimize injury and risk through a "no repeat" principle, the "Accident, Near-miss, and Nonconformity Corrective and Preventive Action Procedure" served as the investigation standard. The scope applied to employees and non-employee workers (including contractors and visitors). When an incident occurred, investigation levels were determined based on severity and type, and a corresponding investigation team was formed.

Reporting

- The unit where an incident occurred or was discovered reported immediately to ESH and relevant functions through established reporting mechanisms and implemented necessary emergency response and handling measures. If injuries or illnesses occurred, the health management function was notified immediately to initiate emergency medical response. Reporting applied to employees and non-employees (including onsite vendors, contractors, and visitors).
- When imminent danger was identified during work, workers could stop work and evacuate to a safe location without endangering others and then report the situation. No disciplinary action was taken for exercising the right to withdraw.

Investigation and corrective action development

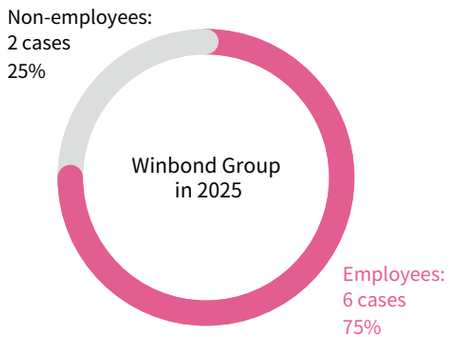
- The incident unit and the safety and health function jointly collected onsite evidence and conducted preliminary analysis. For injury cases, the health management function provided health support, follow-up, and return-to-work assessments.
- Corrective actions proposed by the incident unit were reviewed by the ESH function and then implemented.
- Progress was reported to the ESH Committee to ensure effective tracking.

Prevention of recurrence and standardization

- Effective corrective measures were developed based on root causes.
- Effective countermeasures were rolled out in parallel to relevant tools or processes. Operating procedures, manuals, and technical documentation were standardized accordingly, and risk assessments were performed to determine whether improvements were needed for the risk evaluation, reporting, or emergency response processes.

Occupational injury management

Occupational injury statistics followed the Occupational Safety and Health Act and the key disabling injury indicators published by the Global Reporting Initiative (GRI). In 2025, the Winbond Group recorded six recordable occupational injury (disabling injury) cases for employees, three fewer than in 2024, with a recordable disabling injury rate of 0.36. For non-employees, two disabling injury cases were recorded, with a recordable injury rate of 0.88. Over the past four years, the Winbond Group' s employee absenteeism rate remained stable and below the Company target of 1.5%. [Appendix 7: Statistics on Occupational Injuries, Occupational Diseases, and Disabling Injury Incident Types, and Winbond Group Absenteeism Rate]



2025 Work-related Injury Statistics, Improvement Plans, and Actions

Employees		Non-employees	
Causes:	Improvement measures:	Causes:	Improvement measures:
· Slips / falls	· Strengthened communications (warning signage) · Personnel education and training	· Slips / falls · Contact with high temperatures	· Strengthened pre-task inspections · Optimized use and wearing of protective equipment · Personnel education and training

Safety enhancements

Winbond continued to communicate the importance of safety awareness to frontline workers through inspections and safety observation activities, and continuously strengthened operational safety discipline.

Loss prevention measures

Semiconductor fab equipment was characterized by high precision, high value, and long lead times. Semiconductor processes also operated in cleanroom environments, resulting in high sensitivity to incidents. Winbond implemented corresponding measures for incident prevention and loss control to reduce risks of facility or equipment damage and business interruption arising from incidents.

Fire compartmentation design

Winbond fabs adopted strict fire compartmentation design. The cleanroom and hazardous materials supply areas were separated by two-hour fire-rated compartmentation. Chemical warehouses, gas supply areas, and power stations were located in separate buildings to reduce fire spread risks.

Application of non-combustible materials

Facility structures adopted non-combustible materials throughout, including reinforced concrete, aluminum honeycomb partition panels, and stainless-steel process exhaust ducts. Process tool enclosures were ensured to use stainless steel or materials certified to the FM 4910 flame-resistant standard, reducing fire load and limiting fire propagation.

Installed stainless steel ductwork to reduce fire load and prevent fire spread

Automatic fire protection systems

- The fab was fully equipped with automatic sprinkler systems designed to NFPA 13 international standards.
- Automatic water mist or automatic CO_2 fire suppression systems were installed for electrical equipment areas (e.g., transformers and generators). Process equipment handling flammable liquids was also protected with automatic CO_2 fire suppression systems.
- Very early smoke detection (air sampling) systems were installed in cleanroom areas to enable earlier fire detection and response.

Installed automatic gaseous fire suppression systems

Earthquake-resistant design

Facility structural design withstood MMI IX earthquakes. Additional seismic measures included:

- The Kaohsiung fab installed deep foundation piles and steel structural dampers to reduce earthquake impact.
- All equipment was securely anchored. Furnace tube equipment used seismic isolation platforms to reduce earthquake impacts on tools and products.
- Sprinkler systems included seismic bracing in accordance with NFPA 13 to ensure fire protection operability and reduce equipment water damage risks from leakage.
- Automatic process gas shutoff systems reduced leak risks and strengthened safety assurance.

Winbond introduced an “Earthquake Early Warning Integrated System,” using sensors to detect P-waves and AI to estimate S-wave intensity and arrival time. When seismic intensity exceeded thresholds, the system provided valuable protection time by initiating safeguards immediately, including pausing critical equipment actions.

Conducted regular testing of fire protection systems to ensure proper operation

Healthy and Well-being Workplace

The Winbond Group worked to build a safe and healthy workplace. Beyond regulatory requirements for nursing staffing, the Winbond Group provided 24/7 health services across sites, with 24 occupational health professionals. In Taiwan, contracted physicians provided 179 on-site service sessions. Health-related training reached 7,798 participant-sessions, and health management spending totaled approximately NT$42.4 million. The Employee Assistance Program (EAP) provided 263 consultations covering career and work, family and parenting, gender and relationships, mental and stress management, legal, financial, and workplace management topics. The Winbond Group viewed health as the foundation of employee well-being and a key enabler of sustainable development.

Health protection with dedicated support

The health management team provided occupational health services, health promotion, wellness management, hygiene and health consultations, and emergency medical support. In 2025, onsite nurses provided 224 instances of support based on operational needs. Taiwan operating sites also partnered with nearby teaching hospitals to establish a “green channel,” enabling employees to access high-quality medical resources when needed.

On-site physician consultation services

Monthly on-site physician consultation services exceeded regulatory requirements and provided 1,387 specialty consultations, covering occupational medicine, family medicine, psychosomatic medicine, ophthalmology, and other specialties. This enabled employees to access timely professional medical advice and support at the workplace.

Prevention of unlawful workplace violence

Annual workplace violence prevention management was conducted. In 2025, Winbond introduced one additional workplace environment improvement measure, while Nuvoton introduced none. Control and protective measures remained in place for previously identified risk factors.

Health management

Winbond conducts comprehensive annual health examinations for all employees, demonstrating a strong commitment to employee health management. The on-site medical office proactively follows up on re-examination needs and facilitates in-company physician consultations. In 2025, a 100% follow-up rate was achieved.

In addition to examinations required by applicable regulations, Winbond voluntarily provides a range of advanced health screening programs to strengthen its health risk management framework and deliver comprehensive employee care, including:

- Cardiovascular and cerebrovascular risk assessments, such as insulin levels, insulin resistance index, and glycated hemoglobin (HbA1c), enabling early identification of potential health risks.
- Cancer risk assessments, including alpha-fetoprotein (AFP) and prostate-specific antigen (PSA), supporting preventive health management for employees.
- Imaging examinations, such as abdominal ultrasound and breast ultrasound for female employees, allowing access to professional medical services in a familiar and convenient workplace environment.

Health promotion

The Winbond Group held 48 health seminars covering topics such as middle-aged and older adult health, weight management, exercise habits, chronic disease prevention, and mental health, with 7,217 participant-sessions. Onsite leisure centers, gyms, basketball and volleyball courts, and badminton courts were available to employees and family members. Free strength training classes were offered with professional coaches to promote correct exercise practices. The Winbond Group also maintained 39 sports clubs, including outdoor activities, yoga, and tai chi and martial arts.

Prevention of occupational diseases

Each year, the Winbond Group identified hazards and assessed risks across five categories—chemical, physical, ergonomic, biological, and psychosocial factors—associated with potential occupational incidents and diseases. The Winbond Group analyzed potential impacts on workers and implemented corresponding preventive measures. From 2020 to 2025, there were no employee or non-employee deaths due to occupational diseases, and no confirmed occupational disease or work-related illness cases diagnosed by occupational medicine specialists.

Chemical/physical factors

Work environment monitoring and special hazard health examinations

Work environment monitoring and exposure risk assessments were conducted in accordance with the Regulations for Workers' Work Environment Monitoring. Exposure assessments were performed to a standard stricter than regulatory requirements: the internal control threshold required the ratio to the Permissible Exposure Limit (PEL) to remain below 1/10. Exposure assessments were performed semiannually and results were disclosed. Ionizing radiation measurements and dedicated radiation source controls were also conducted on a regular basis.

- 0 occupational disease incidents due to chemical or physical exposure.
- 166 workers received statutory special hazard health examinations.
- 582 workers received special hazard health examinations beyond regulatory requirements.

Prevention of outdoor heat hazards

Contractors were informed of heat hazard tiered alerts based on site geography and could query warnings. Protective measures were emphasized for high-temperature outdoor work.

Ergonomic factors

Support for workers with musculoskeletal discomfort

The Company introduced a digital "Musculoskeletal Health Risk Assessment Questionnaire for Workplace Operators." Employees completed periodic questionnaires to proactively identify potential risks. Workers with potential risks were arranged for one-on-one consultations with occupational medicine specialists for professional guidance and health coaching.

In 2025, two cases were included in ergonomic musculoskeletal disease prevention management, and two workers required improvement actions after occupational physician assessment. Benefits for occupational musculoskeletal injuries were zero.

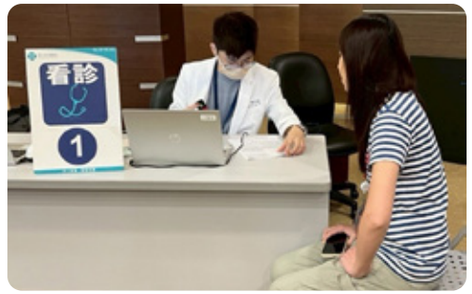
Health promotion and automation support

The Winbond Group advanced process automation development to reduce repetitive and high-load tasks. Employees were encouraged to participate in muscular endurance training and health promotion programs, improving physical fitness and work comfort and integrating health into daily work.

Biological factors

Health protection: free influenza vaccination

To reduce cluster infection risks, the Winbond Group provided free influenza vaccinations annually for all employees. In 2025, vaccination rates reached record highs: 56% for Winbond (Taiwan), 43% for Nuvoton (Taiwan), and 32% for Nuvoton (Japan), reflecting strengthened employee health awareness. Employees traveling to infectious disease prevalent regions received prevention kits and health education information.



Psychosocial factors

Smart reminder mechanism

Through automated system design, supervisors and employees received daily and monthly reminders to monitor working hours and adjust workloads in a timely manner, supporting health and efficiency in parallel.

Risk identification and tiered care

Annual employee surveys identified abnormal workloads and applied tiered care. Nurses provided individualized health education and, where needed, arranged professional physician consultations and EAP services.

- 174 potentially at-risk employees received professional physician consultation in 2025.
- All employees received individualized nurse-led health education, including stress management and sleep support consultations and/or EAP referral as appropriate.

Maternal health management for female employees

The Winbond Group supported maternal health through comprehensive measures to ensure that pregnant employees felt safe, respected, and well cared for at work. In 2025, 53 pregnant employees and employees within one year postpartum received maternal health protection.

Professional health consultation and health education

Nurses conducted proactive interviews to identify potential workplace hazards, performed risk assessments, confirmed work content, and provided health education for pregnancy and postpartum periods.

Maternal benefits and resource support

Pregnant employees received a “Pregnancy Care Gift” prepared by a public welfare organization and monthly nutrition vouchers. A “Pregnancy Care Card” outlined available benefits and rights to ensure clarity and support throughout the maternity journey.

Supportive facilities

Dedicated midday rest rooms and reserved parking spaces for pregnant employees were provided to create a safe and comfortable workplace environment.

Lactation rooms

Comfortable and private lactation rooms were provided for employees and made available to visiting guests and onsite vendors, reflecting respect and care for all workers entering Winbond sites.

Whole-of-life health

Winbond (Taiwan) strengthened health literacy and action through diversified exercise incentives, health seminars, and individualized health education, demonstrating concrete actions to support workplace well-being and sustainable operations.

Prioritizing personal health

- InBody devices were installed at manufacturing sites and office buildings to ensure equal access to health resources across locations.
- Precision health management enabled periodic checks of body fat percentage, muscle mass, and basal metabolic rate, strengthening health awareness.
- Participation and motivation were enhanced by encouraging goal setting and progress tracking as part of exercise incentive programs.

Building sustainable exercise habits

- Regular broadcasts reminded employees to stretch and move after prolonged work.
- A self-directed exercise program recorded 46,213 exercise participations and total energy expenditure of 16,436,727 kcal. More than 50% of participants exercised over 240 minutes per month, and nearly 40% exercised over 600 minutes per month, exceeding WHO recommendations.
- Measurable health outcomes were achieved across age and gender groups, including cumulative body fat reduction of 317.6 kg and muscle gain of 46.3 kg.

Diversified health seminars

- Seminars covered physical and mental health topics, including middle-aged and older adult health, weight management, exercise habits, chronic disease prevention, and mental health.
- Group-wide resource sharing with Nuvoton enabled 48 seminars and 7,217 participant-sessions.

Individualized health education measures

InBody results were combined with health education guidance to support personalized exercise and dietary strategies.

5.5 Social Inclusion

To advance its ESG vision, Winbond aligned with the United Nations Sustainable Development Goals (SDGs) and continued to invest resources under three core strategies: “Talent Development,” “Social Welfare and Environmental Education,” and “Nature-based Solutions.” By integrating internal and external resources—such as stakeholders including customers, suppliers, public-sector entities, universities, and NGOs—the Company promoted community development and environmental improvement and amplified the impact of social inclusion initiatives.

Social inclusion framework

- Campus talent development programs
- Academic sponsorship

- Support for disadvantaged groups
- Social care
- Environmental education

- Nature-related Financial Disclosures (TNFD)
- Safeguarding biodiversity

Talent Development

Leveraging core business capabilities, the Winbond Group promoted semiconductor science education through collaboration with industry, government, academia, and research institutions, aligned with national technology policies. By focusing on semiconductor talent development, the Winbond Group strengthened students’ knowledge and skills and narrowed the gap between learning and application. The Winbond Group also provided campus career development programs and internship opportunities to support students’ growth in STEM education and help them gain early exposure to practical work.

Campus talent development programs

Semiconductor Leadership Program

Winbond (Taiwan) invested close to NT$10 million each year to cultivate future talent. Since 2022, Winbond supported National Cheng Kung University (NCKU) in establishing the Academy of Intelligent Semiconductors and Sustainable Manufacturing and co-developed the Semiconductor Leadership Program, including a 3-credit course. Senior executives from Winbond (Taiwan) contributed to program and course design, integrating practice and expertise. Joint research projects and industry–academia exchange strengthened students’ R&D capabilities and horizons and laid a foundation for leadership in semiconductors and artificial intelligence, enhancing future employability.

729
cumulative students enrolled in the “Semiconductor Key Technologies and Leadership Practice” course

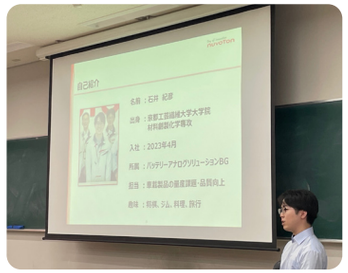
18
industry instructors actively participated in teaching

Campus talent development programs

Industry–Academia Co-creation to Build a Next-generation Technology Talent Pipeline

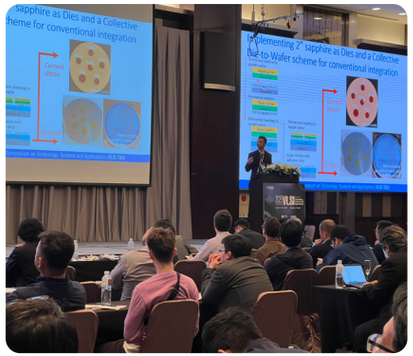
In 2025, the Winbond Group pursued semiconductor talent resilience through three dimensions: cross-border exchange, hands-on experience, and knowledge dissemination. The Winbond Group helped young talent connect with leading-edge technologies, engineering operations, and career development early in their education to improve alignment between learning and practice and strengthen employability. A total of 33 activities were delivered across the year, including company briefings, online semiconductor seminars, and career education talks, deepening campus engagement and industry awareness. Cumulatively, more than 1,000 students were reached through short-term internships, semiconductor career education programs, and campus talks.

- Winbond (Taiwan) promoted semiconductor science education. Through the Sasebo High School Taiwan visit program in 2025, 46 students and teachers visited the Taichung production line to learn about memory technology innovations and industry dynamics, strengthening Taiwan–Japan industry–academia exchange and communicating Winbond' s core values to the next generation of global talent.



- In 2025, Nuvoton (Japan) hosted three in-depth "Semiconductor Industry Career Education" talks at Osaka University, Osaka Metropolitan University, and Kyoto Institute of Technology, attracting 183 international young participants.

Academic Sponsorship



- Winbond (Taiwan) has long sponsored international conferences and industry platforms including VLSI-TSA, VLSI-DAT, and the Taiwan Semiconductor Industry Association annual meeting. By promoting advanced technical exchange among researchers in semiconductor process and design, the Company strengthened industry–academia–research collaboration, supported ICT industry upgrading, and enhanced Taiwan' s semiconductor competitiveness.
- Since 2019, Winbond (Taiwan) has sponsored National Yang Ming Chiao Tung University' s "Chair Professor Research Fund" program for seven consecutive years, supporting academic excellence, talent attraction and retention, and continuous advancement in teaching and research, while contributing to talent development in ICT and strengthening the semiconductor ecosystem through academia collaboration.

Social Welfare and Environmental Education

Social welfare

The Winbond Group upheld its commitment to social fairness and inclusion and adopted sustainable models such as “purchase-to-donate” and “long-term educational support,” transforming corporate influence into tangible change. From supporting disadvantaged students to visiting youth shelters and purchasing indigenous natural farming products, the Winbond Group mobilized diverse resources to narrow opportunity gaps and build a scalable, sustainable social support network for vulnerable communities.

Supporting vulnerable groups

Donations for the Growth of Disadvantaged and Rural Children

Since 2017, Winbond (Taiwan) partnered with the Taiwan Fund for Children and Families to promote the “Scholarship Fundraising for Underprivileged Students.” The program supported students from financially disadvantaged families by strengthening access to educational resources and stabilizing school attendance. Employees were mobilized to participate, demonstrating organizational cohesion and social care, and contributing to reduced disparities in educational resources and improved social equity. Across 2017–2025, the program accumulated 8,404 donation participations and total donations of NT$29.824 million, benefiting 7,456 student participations. In 2025, employee participation reached a record high of 1,208 contributors, raising NT$4.112 million and supporting 1,028 elementary school students for a full school year. Nuvoton (Taiwan) also supported disadvantaged and rural children in partnership with Ren-Ai Children’ s Home and the Boyo Social Welfare Foundation, donating NT$340,000.

Reading and Education Promotion

Nuvoton (Japan) continued to promote reading as a core focus and strengthened investment in local education and community support. In support of Nagaokakyo City’ s “Book Support Program,” employees collected and donated secondhand books, with proceeds donated to the Kyoto Crime Victim Support Center. In 2025, 187 books were collected, extending the value of knowledge through reuse. The Company also provided one-year newspaper subscriptions for local elementary students to build vocabulary and stable reading habits. In 2025, the investment totaled NT$18,958, expanding access to learning resources and strengthening positive connections with local communities.

The volumes collected by Nuvoton (Taiwan) are acquired by Shu Bao second-hand bookstore, resulting in the accumulation of “love book points,” which are entirely donated to long-term partner educational institutions affiliatedwith the second-hand bookstore.In 2025, Nuvoton (Taiwan) successfully collected a total of 1,126 books, converting them into purchasing points amounting to 9,720 points, which represents more than double the total accumulated in the preceding year. Since2022, the cumulative number of participants has surpassed 199, resulting in the donation of a total of 4,033 books and the accrual of purchasing points totaling 25,535.

Happy Breakfast Program for Rural Schoolchildren

To address nutritional imbalance among children in remote areas, Winbond (Taiwan) provided long-term support for a “Happy Breakfast Program” for rural elementary schoolchildren in regions including Hsinchu through a nonprofit foundation. By ensuring stable breakfast resources, the program supported basic nutrition and health and strengthened students’ ability to attend school and develop learning outcomes. From 2011 to 2025, cumulative investment exceeded NT$8.03 million. In 2025, approximately NT$750,000 continued to be invested as breakfast funding, reinforcing support for children’ s health and educational opportunities.

Supporting vulnerable groups

Supporting Social Inclusion for Disadvantaged Youth

In 2025, Winbond (Israel) visited the "Shanti House" youth shelter, which provided a safe haven for at-risk youth aged 14–21 facing survival crises. Through meaningful interactions and dialogue with the residents, employees gained deeper insight into the challenges experienced by vulnerable groups and explored ways in which corporate resources could support the rebuilding of social connections and pathways to stability.

Charity Rice Paddy Program

Winbond (Taiwan) partnered with the Taiwan Association for Waiting Babies to advance the "Caring Rice Field Initiative." In 2025, the initiative mobilized 105 employees as rice field volunteers, engaging them directly in farming and harvesting activities to strengthen their connection with the land and support stress relief. Following the activities, the Group donated 50 kg of rice and 20 cartons of fresh fruits and vegetables to childcare institutions, helping ensure balanced nutrition for children. The initiative successfully established a sustainable public welfare ecosystem that integrates employee engagement, support for environmentally friendly farming practices, and the protection of vulnerable groups.

"Safe Growth" Child Care Support Program

Winbond (Taiwan) partnered with Taichung Infant Home, Hsinchu Ren-Ai Children's Home, and Luzhu Little Angels Home to strengthen child placement support. A total of 316 volunteer participations contributed 842.5 service hours, and NT$80,000 was invested to improve environmental safety, benefiting approximately 200 children. Onsite service and financial support reduced maintenance burdens and improved living quality, strengthening employee awareness and expanding a scalable, sustainable welfare support model.

Supporting vulnerable groups

Charity Fundraising Sale

Winbond (Taiwan) connected employees with social welfare organizations through a charity fundraising sale, supporting vulnerable groups in their path toward independence and delivering practical assistance and positive change for children and persons with disabilities. The initiative further strengthened employee social responsibility, embedding participation into daily life. Proceeds totaled NT$40,400.

Beneficiary Feedback

- **Shang-Shang Foundation:**
  Thank you for providing this opportunity; children felt a strong sense of achievement and hope to participate again in the future.
- **Ren-Ai Children's Home:**
  Thank you for providing the venue; employees were enthusiastic and sales supported us significantly. Children were delighted to sell their handmade products and were encouraged by the feedback cards.
- **Eden Social Welfare Foundation:**
  Handmade cookies sold extremely well; volunteers and supported persons with disabilities were very happy. Thank you for employees' strong support.

"Sweet Dreams" Indigenous Children Support Program

Nuvoton (Taiwan) implemented the "Sweet Dreams" program using a purchase-to-donate model by purchasing naturally farmed peaches from Jianshi Township and allocating 20% of proceeds to indigenous education. An investment of NT$9,700 supported travel and training costs for tribal students participating in the 2025 IYRC international robotics competition, helping rural children connect with global opportunities.

"Connecting Silicon Hands for Sustainable Basketball" Basketball Purchase-to-Donate Initiative

Winbond (Taiwan) promoted a "Sustainable Basketball" purchase-to-donate initiative to practice circular economy and educational support. Employees purchased 555 basketballs made from recycled silicon sludge and donated them to 20 elementary schools in the southern Kaohsiung area, including all eight schools in Luzhu District. The initiative supported environmentally friendly recycled materials while promoting students' sports development and sustainability education.

Support for Sporting Events

Nuvoton (Japan) sponsored the "Nuvoton Youth Soccer Championship," donating NT$20,850 in 2025. The sponsorship supported elementary students' sports participation in the Nagaokakyo area and reflected a long-term commitment to improving quality of life and advancing community development.

Social Care

Blood Donation

The Winbond Group continued blood donation initiatives to demonstrate a strong commitment to the value of life and to provide stable, critical blood resources to healthcare systems. In 2025, 576 donation participations contributed more than 989 bags of blood across the Winbond Group, reflecting strong employee resonance and the Company's sustained investment in public health and social resilience through cross-border participation.

Emergency Response Volunteers

Nuvoton (Taiwan) donated a CPR training mannequin (CPR Annie) valued at NT$16,500 to a volunteer fire brigade for training purposes. Employees also served as ambulance volunteers and helped teach CPR skills. In 2025, they participated in 119 emergency response missions totaling 198 hours.

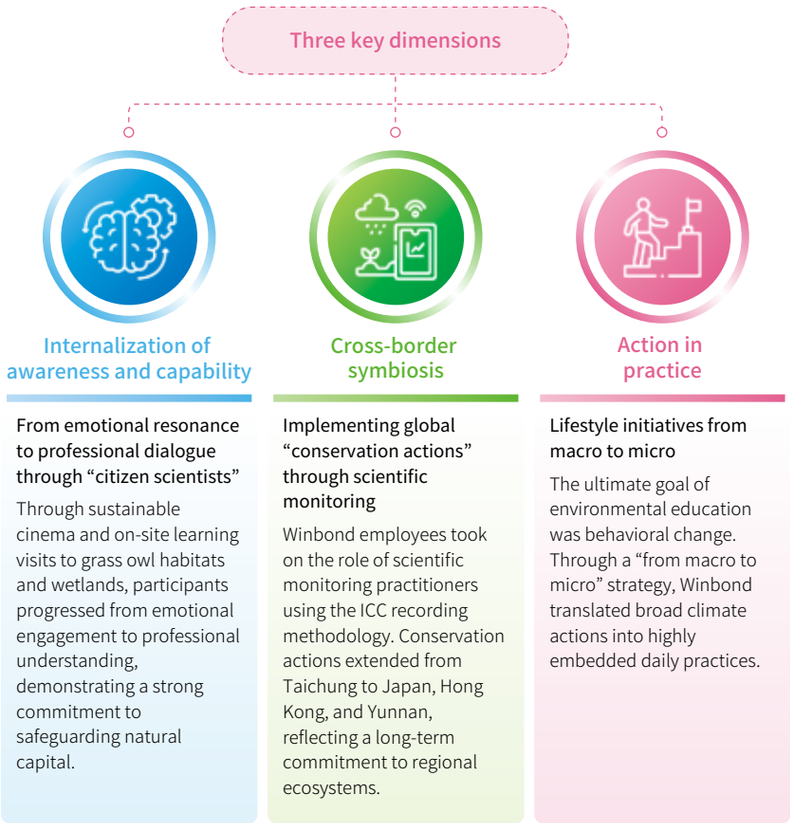
Employee Emergency Assistance

When employees or their family members faced emergencies such as disability, death, or accidents that significantly affected household livelihoods, the Winbond Group provided emergency assistance and loan programs to help alleviate financial burdens and support stable living, enabling employees and families to maintain peace of mind in work and life.

Environmental Education

Winbond moved beyond the traditional one-way model of "indoor lectures" and transformed "environmental responsibility" into a core part of employees' "life DNA." By referencing the framework advocated by the United Nations Educational, Scientific and Cultural Organization (UNESCO), environmental education was structured into three key dimensions: awareness, capability, and action.

This represented a shift in the education model "from individuals to the collective." Winbond demonstrated through action that when enterprises inspire emotional engagement and equip participants with professional skills, every participant could become a key driver of change for the ecological future.



Internalization of awareness and capability: from emotional resonance to professional dialogue through "citizen scientists"

- Emotional initiation: when sustainability entered the big screen

  The Group positioned "Sustainable Cinema" as a soft bridge to break echo chambers and initiate cross-departmental dialogue. Unlike traditional one-way communication, immersive experiences such as The Sleeping Underwater Giant used visual impact to trigger ecological awareness, transforming employees from "passive recipients" into "active empathizers" and strengthening collective consciousness toward protecting natural capital.

- Professional awareness: entering natural capital restoration sites

  Winbond (Taiwan), together with professional organizations, led employees on visits to the "Green 21" grass owl habitat and Yong' an Wetland to deepen professional understanding of natural capital conservation. Through on-site learning, participants gained in-depth insights into grass owl habitat creation, artificial habitat design, and how scientific water-level management created a "waterbird grand hotel." Employees personally observed endangered species such as the black-faced spoonbill and recognized the critical role of wetlands in biodiversity conservation and climate adaptation, underscoring the Company's commitment to partnering with professional organizations to protect biodiversity.

Environmental Education

Cross-border symbiosis: implementing global “conservation actions” through scientific monitoring

Winbond transformed environmental awareness into systematic ecological restoration practices, allocating resources precisely according to activity characteristics to safeguard natural capital across global operating sites:

- Scientific monitoring and marine conservation

  Winbond (Taiwan) introduced the ICC International Coastal Cleanup recording methodology in the Dadu River cleanup, where 85 employees tracked waste sources through data collection and removed 158 kg of waste. In parallel, Winbond (Taiwan) collaborated with the Society of Wilderness, with 105 volunteers removing 487 kg of beach waste at Nanliao Fishing Harbor, demonstrating a gentle yet firm commitment to ocean protection. Winbond (Hong Kong) also mobilized participation in the Sai Kung Sha Ha beach cleanup, successfully removing approximately 20 kg of waste and deepening professional understanding of marine pollution issues.

- Habitat restoration and species protection

  Winbond (Taiwan) engaged 65 employees at the Yuanzhonggang Wetland to remove invasive species and 147 kg of waste, restoring water purification functions and protecting biodiversity. Winbond (China) mobilized 34 partners at Yulong Snow Mountain in Yunnan, achieving a 70% waste recycling and reuse rate and conveying the beauty of sustainability through the distribution of “plannable seed medals.”

- Routine maintenance and community symbiosis

  Since 2024, Winbond and Nuvoton(Japan) had regularly engaged in volunteer cleanups in Nagaokakyo City communities and along the Obata River, improving public hygiene through routine environmental maintenance. In 2025, Winbond (Taiwan) invested NT$ 562,000 to adopt the Taichung Houfeng Bikeway, assuming responsibility for regular cleaning and tree pruning to enhance public recreational quality.

- Policy alignment and sustainability practices

  Nuvoton (Taiwan) actively responded to the Ministry of Environment’ s “Salute to the Ocean” initiative, translating marine protection into concrete action. In September 2025, 50 participants took part in a cleanup initiative at Nanliao Fishing Harbor, guided by five key pillars including cleanup, reduction, treatment, transparency, and education. The initiative successfully removed approximately 190 kg of waste, demonstrating tangible support for marine conservation and environmental sustainability.

Environmental Education

Action in practice: lifestyle initiatives from macro to micro

- Co-creating a low-carbon dietary culture – World Food Day – Clean plate ambassadors

  Winbond promoted sustainable food systems. Nuvoton (Taiwan) collaborated with the Fenghezi Association to protect local farmland, adopting eco-friendly rice and organic vegetables in group catering while offering employee purchase programs. Procurement supported small farmers and enabled employees to practice low-carbon concepts through daily diets. In response to World Food Day, the "Clean Plate Ambassadors" campaign successfully reduced food waste by 158.85 kg and promoted plastic reduction and the ban on disposable tableware. From eco-friendly farming to clean plate actions, the Company established a model for promoting low-carbon diets and ecological balance.

- Low-carbon daily life: building green commuting and sustainable office culture

  Through "World Car-Free Day and Green Transportation Month," Winbond encouraged employees to use public transportation and reduce commuting and travel-related carbon emissions. The Group also continuously promoted a "New Green Office Lifestyle" by reusing stationery, introducing environmentally friendly materials, and fully deploying umbrella quick-dry machines (discontinuing single-use plastic umbrella covers), embedding carbon reduction and the circular economy into daily work. From green mobility to zero-waste offices, sustainability was integrated into employees' daily habits through concrete actions.

Nature-based Solutions

Nature-related Financial Disclosures (TNFD)

Winbond recognized that safeguarding ecosystems and the natural environment was fundamental to sustainable development. In recent years, climate-related risks became a focal point for stakeholders, while "Biodiversity Loss" was increasingly regarded as one of the most consequential material issues. To respond to the Global Goal for Nature and biodiversity-related issues, Winbond referenced the assessment methodology proposed by the Taskforce on Nature-related Financial Disclosures (TNFD) and collaborated with the Chung-Hua Institution for Economic Research.

Based on the four-step approach—Locate, Evaluate, Assess, and Prepare (LEAP)—Winbond developed an in-depth understanding of the interdependencies between ecosystems surrounding its Taiwan sites and those of its suppliers.

Through systematic analysis, Winbond identified nature-related risks and opportunities and incorporated them into its enterprise risk management (ERM) framework to strengthen risk controls, safeguard operational continuity, protect stakeholder interests, and address the Company's dependencies and impacts on natural resources, thereby further shaping its biodiversity conservation strategy.

In parallel, to reduce environmental impacts arising from operations, Winbond committed to continuously lowering its impacts on the natural environment through green product innovation and science-based decarbonization, while advancing nature and biodiversity conservation and afforestation programs to assume responsibility for mitigating overall ecological impacts.

Starting from within the organization, Winbond called on the value chain and all operating sites to prevent any deforestation, and continued to plan the steps of avoidance, impact minimization, and restoration, systematically deploying Nature-based Solutions (NBS) toward the shared goals of No Net Loss and Net Positive Impact, and striving to balance technological advancement with ecological conservation.

Scope	Winbond conducted an initial scan of operating sites across the organization and upstream/downstream value chain, set priority assessment scope, and determined that first-time disclosure would start from core operations, prioritizing wafer manufacturing sites, and then progressively expand to global operating sites and upstream/downstream value chain stages.
Locate	**Identified nature-sensitive hotspots** Winbond (Taiwan) combined global protected area database information with Taiwan's local ecology and biodiversity data to identify the linkages between Winbond (Taiwan) sites and surrounding ecosystems and to determine nature-sensitive hotspots.
Evaluate	**Screened dependency and impact factors** Winbond referenced international databases and assessment tools, designed survey templates, and consolidated dependencies on ecosystem services and impacts from changes in nature conditions through external consultant interviews.
Assess	**Analyzed nature-related risks and opportunities** Winbond (Taiwan) assessed dependencies on ecosystem services and impacts from changes in nature conditions, and refined dependency and impact profiles based on operating activities to form an important basis for evaluating nature interdependencies.
Prepare	**Response strategies and action implementation** Winbond monitored corporate resource use and biodiversity impacts and proactively advanced ecological actions.

Winbond upheld the principle of harmonious social inclusion with neighboring communities and society, incorporated external stakeholder perspectives, and promoted sustainable development through environmental education, environmental compensation, and the practice of nature-based solutions

Biodiversity and natural carbon sink strategy

I. Vision and governance commitment: advancing net positive impact (NPI)

Winbond embedded sustainability as a core foundation and positioned biodiversity as a strategic priority. In 2024, the Chairman signed the"Winbond Electronics Biodiversity Commitment," formally announcing the ambitious targets of achieving Net Positive Impact (NPI) and No Net Deforestation. This commitment extended beyond Winbond' s own operations to the supply chain and the broader value chain. Guided by the Mitigation Hierarchy, Winbond advanced green manufacturing, natural carbon sink research, and sustainable supply chain collaboration, while strengthening environmental education and outreach to mitigate biodiversity loss and safeguard ecosystem integrity.

II. Terrestrial ecosystem conservation: ex situ and in situ restoration practices

A "learning from nature" approach transformed fab sites and office buildings into biodiversity refuges and ecological stepping stones, advancing Nature Positive practices.

1. Ex situ conservation and germplasm preservation

Theaceae conservation and breeding program

Located in the hilly terrain of Baoshan Township, Hsinchu County, the area has long sustained a small-scale, diversified agricultural landscape that coexisted with surrounding forests. In collaboration with WinMosa (a Winbond affiliated entity; hereinafter "WinMosa") and National Chung Hsing University, Winbond established a native Taiwanese Theaceae germplasm repository in the Baoshan Park area.

Theaceae plants are foundational species in evergreen broad-leaved forests. In addition to habitat loss caused by development, some Theaceae species face pressures driven by their economic value. Winbond' s conservation work in Baoshan did not impose new agriculture on local communities; instead, it continued the Hakka hillside tradition of "right land, right crops," repurposing farmland gradually exiting production into a site that integrates conservation, research, and education to support long-term germplasm preservation and subsequent breeding efforts.

- Results:
  Of the 42 Theaceae plant species in Taiwan, 38 species were successfully collected and cultivated in 2025 (including 1 critically endangered, 1 endangered, 7 vulnerable, and 5 near threatened). A reinforced steel-frame greenhouse, supported by a remotely controlled environmental management system, was established to enable practical management and research for conservation and breeding, ensuring sustained progress.

Winbond native wildflower garden (Zhubei / CTSP):

- Zhubei Building: A "Native Wildflower Garden" was created using 20 native plant species, including 7 threatened species listed in the Red Book.
- CTSP Fab: In 2024, 25 native species and 149 plants suitable for the central Taiwan low-mountain forest zone were planted (including 3 critically endangered plants and 27 vulnerable plants). In 2025, an additional 17 native species and 484 native seedlings were planted (including 22 critically endangered, 55 endangered, and 16 vulnerable plants).

2. In situ conservation and species monitoring

- Protecting endangered Spiranthes populations:
  At the CTSP Fab and the Tainan Building, "environmentally friendly vegetation management" was adopted by postponing weeding during the flowering and fruiting period (around Tomb Sweeping Day) and strictly prohibiting chemicals, ensuring seed reproduction and successfully preserving natural populations.
- Protecting endangered plants:
  At the Zhubei Building, "ecology-friendly" management was implemented by suspending mowing during the growth period and fully prohibiting herbicides and chemical agents to protect habitats and native populations.
- Restoration of the Formosan Purple Emperor Butterfly:
  For this vulnerable species listed in the Red Book, Nuvoton (Taiwan) collaborated with the Forestry and Nature Conservation Agency and the Bailan Tribe in Wufeng Township, applying aerial remote sensing to monitor the distribution of its host plant, the hackberry tree. Maintenance patrols and long-term monitoring established a sustainable urban–rural blueprint.
- Grass Owl habitat protection:
  Winbond actively followed habitat-related issues and partnered with the Kaohsiung Wild Bird Society to host the seminar "Understanding Endangered Species: Grass Owl Restoration and Habitat Creation," with 976 participants, promoting nature conservation concepts and supporting wildlife-friendly habitats.

Biodiversity and natural carbon sink strategy

III. Natural carbon sinks and sustainable forest management

To advance its net zero vision, Winbond focused on Nature-based Solutions (NBS) and positioned “green carbon” as a key pathway for removing atmospheric carbon dioxide.

1. Science-based management framework

   Following recommendations from academia and experts, Winbond established a sustainable forest management system to ensure afforestation aligns with six standards: right land, right species, right seedlings, right timing, right methods, and right maintenance. Significant resources were invested across the full process—from seedling cultivation and selection, to land preparation, new planting, and nurturing management—to secure long-term stability of forest carbon sinks and ecosystem resilience.

2. Afforestation performance and ecological value

   Based on expert recommendations, Winbond systematically planned new afforestation operations following the six-step approach—right land, right species, right seedlings, right timing, right methods, and right maintenance. Extensive time and effort were invested across afforestation design, seedling cultivation and selection, land preparation, new planting, nurturing, and sustainable harvesting to deliver a comprehensive sustainable forest management plan. Through tripartite collaboration among industry, government, and academia, afforestation projects were advanced at Winbond’ s Kaohsiung Fab, on state-owned forest land in Tainan City and Chiayi County, and in Sanxing, Yilan—removing carbon while maximizing biodiversity benefits.

IV. Sustainable impact: environmental education and employee empowerment

Winbond believed that biodiversity protection required shared understanding and strong local connections. Through diverse capacity-building programs and social participation, conservation concepts were translated into tangible actions.

1. Company-wide stewardship: strengthening shared values

   High-participation training programs embedded biodiversity into corporate culture and expanded the scope of influence.

   - Group ecological seminars: Biodiversity seminars were held in 2025, with 1,026 participants.
   - In-depth capacity-building workshops: Two workshops were held at the end of 2025, developing 26 core seed members.

2. Rooted in place: community and cultural heritage

   Winbond strengthened connections with local Hsinchu culture through hands-on participation, advancing sustainable urban–rural development concepts.

   - Donghai Village food-and-farming experience: Approximately 70 employees and family members participated in manual rice planting, reinforcing community ties through traditional farming practices.
   - Citizen science: In partnership with the Bailan Tribe in Wufeng, community participation was promoted in hackberry patrols and phenological surveys, integrating traditional territorial knowledge with modern scientific investigation to build a shared learning and co-prosperity conservation model.

3. Social communication: Professional education and open participation

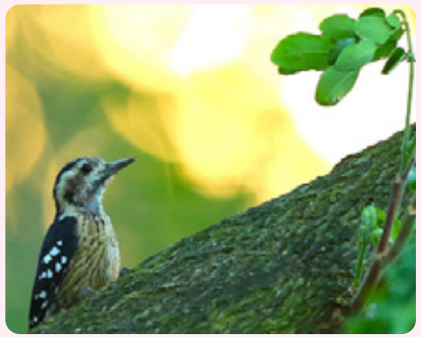
   - Ecological interpretation system: Interpretive signage was installed at key conservation sites (Zhubei Wildflower Garden and Nuvoton restoration areas).
   - Vision amplification: Local cultural inheritance remained a focus to ensure biodiversity initiatives co-developed with communities and delivered long-term ecosystem service value.

Case Study – Biodiversity Project

Afforestation program

- Forest drumming: woodpeckers responded to winbond' s green commitment Kaohsiung Fab

  In the lush greenery of Kaohsiung Fab, woodpeckers quietly appeared. They moved among branches, nested, and roosted—seemingly signaling that this had become a recognized home. This response from nature reflected Winbond' s long-term investment in the Afforestation Plan. Winbond partnered with National Chung Hsing University to implement a 30-year afforestation program at Kaohsiung Fab, planting five native tree species—Bischofia javanica, Palaquium formosanum, Acacia confusa, Melia azedarach, and Fraxinus griffithii—to deliver carbon sequestration, landscape greening, and air purification functions, supporting ecological stability.



- Public–private partnership for afforestation

  Winbond collaborated with the Chiayi Branch of FANCA to plant four native tree species—Zelkova serrata, Liquidambar formosana, Acacia confusa, and Melia azedarach—on 29,400 square meters of state-owned forest land in Tainan City and Chiayi County. The program aimed to restore hillside vegetation cover and, through ongoing tending operations, maintain local vegetation patterns, enhance local biodiversity and habitats, sustain ecological stability, and deliver ecosystem service functions including soil and water conservation, disaster risk reduction, soil fertility maintenance, and flow regulation (EcosystemServices).

- Smart forestry integrated with carbon sink management

  In 2024, WinMosa partnered with National Ilan University to improve forest land that had been abandoned as a gravel site and overgrown with weeds and leucaena, restoring the original floodplain ecology of the Lanyang River. The program planned to integrate drone technologies to operate sustainable smart forestry and develop green technologies, with the goal of enhancing land use and carbon sink capacity while aligning ecological benefits and added value, and ensuring healthy forest ecosystems under land development activities.

Industry–academia collaboration in Baoshan township

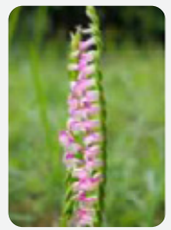
Theaceae Conservation Corporation Site Industry–Academia Collaboration Located in the forests of Baoshan Township, Hsinchu, the Theaceae Conservation Corporation forest park was preserved by the Company over the long term, forming a continuously functioning natural system. Through low-intervention management, Winbond safeguarded native broadleaf forests and bamboo groves, maintaining intact forest structure and diversified habitat functions, and consistently supporting biodiversity, soil and water conservation, and microclimate regulation. In collaboration with academic institutions, the Company applied scientific methods to quantify the forest' s ecological value and natural carbon sink benefits, translating intangible ecosystem services into a governable natural capital baseline. The Theaceae Conservation Corporation site not only served as a critical Nature-based Solutions (NbS) response to climate risk, but also as a foundational platform for biodiversity management, natural carbon sink strategy, and sustainability disclosures, demonstrating a long-term commitment to nature-positive coexistence built on time and patience.

Creating ecological landscapes with native plants

Winbond selected 20 native Taiwanese plant species to create a native wildflower garden in Zhubei Building, including 1 species assessed as critically endangered in the Red Book, 3 species as endangered, and 3 species as vulnerable. Based on the concept of Wild Gardening, the garden used 20 native Taiwanese species to create an ecological landscape within approximately 1.6 ping of green space, forming a small patch of native plant ecology in an urban setting.

At the CTSP Fab, greening was planned with species suitable for the central Taiwan low-mountain forest zone, with 149 plants already planted. This included 3 critically endangered species (3 plants), 3 vulnerable species (27 plants), 5 near-threatened species (53 plants), and 14 other endemic species (66 plants). Through biodiversity restoration, ex situ conservation of disappearing rare plants was integrated into the fab' s green landscape, preserving native Taiwanese plant germplasm on site and creating ecological stepping stones within the Central Taiwan Science Park through small green patches. In 2025, an additional 17 native species and 484 native seedlings were planted (including 22 critically endangered, 55 endangered, and 16 vulnerable plants).

Spiranthes sinensis



Spiranthes was once a widespread and resilient plant across Taiwan' s plains. In recent years, shrinking habitats led to its inclusion in the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Natural Spiranthes populations were found in the green spaces of Winbond' s CTSP Fab and Tainan Building, supported by the absence of herbicide use. To conserve these populations, weeding was postponed during the flowering and fruiting period to ensure opportunities for reproduction through rhizomes and seeds. Wild plants are a cornerstone of biodiversity. By protecting endangered wild plants, Winbond aimed to maintain the health of Taiwan' s biodiversity and ecosystems and contribute to the conservation of this land.

Sasakia charonda formosana

The Formosan Purple Emperor Butterfly is an endangered species protected under wildlife conservation regulations. It is assessed as vulnerable in the IUCN Red List and is found only in mountainous areas of Jianshi Township in Hsinchu County and Fuxing Township in Taoyuan County. During its life cycle, eggs are laid on hackberry branches or leaves, and larvae overwinter in leaf litter beneath the trees. Habitat shrinkage and the decline in mature hackberry trees directly reduced butterfly populations. Nuvoton (Taiwan), in collaboration with the Forestry and Nature Conservation Agency and the Bailan Tribe in Wufeng Township, used aerial remote sensing to record hackberry distribution and phenology. A community patrol team maintained the trees and built a long-term monitoring database for ecological interpretation, supporting appropriate development of eco-tourism routes. By integrating technology with conservation, Nuvoton (Taiwan) partnered with local communities to protect their homeland and promoted environmental education to advance a sustainable urban–rural blueprint.

An Endemic Fern Species

This endemic fern species is a rare native plant in Taiwan’ s lowland areas. In recent years, urban development, frequent lawn maintenance, and herbicide use reduced suitable habitats. A naturally established population was identified in the Zhubei Building’ s green space, supported by stable microhabitat conditions and the absence of herbicide application. During its growth period, green space maintenance was adjusted by postponing mowing and fully prohibiting chemical agents to reduce disturbance and provide the necessary conditions for completing its life cycle and natural reproduction. Wild plants are a foundational element of biodiversity and an important medium for environmental education. Through native plant conservation and ecology-friendly maintenance practices, Winbond strengthened employees’ and visitors’ understanding and respect for nature, positioning green spaces as learning-oriented environments that also support biodiversity conservation and urban ecological sustainability.

Taiwan native plant conservation and breeding program

In 2021, Winbond integrated group resources to launch a conservation and breeding program in the Baoshan Park area, selecting Theaceae plants for native Taiwanese plant germplasm collection and cultivation. Theaceae species form a major component of evergreen broad-leaved forests. Beyond habitat destruction caused by development, some Theaceae plants faced risks driven by their economic value—for example, Camellia japonica was often stolen in earlier years for grafting rootstock or ornamental use; Camellia formosensis was frequently stolen and dwarfed due to the high value of its tea leaves; and high economic value of tea leaves and tea oil led farmers to introduce foreign tea species for hybridization, creating confusion in the wild gene pool of native Camellia species. These pressures harmed native Theaceae populations. Theaceae plants also grow slowly, making recovery difficult after damage. In response, Winbond upheld the principle of “protecting native Taiwanese plants and preserving Theaceae genetic resources.” Through collaboration with WinMosa and National Chung Hsing University, the program advanced three goals: conservation and breeding, ecological education, and sustainable forestry—preserving a forest park with conservation, educational, and cultural value amid rapid societal development and expansion.

Appendix 1 GRI Content Index

- Statement of Use: Winbond Electronics Corporation prepared this report in accordance with the GRI Standards, covering the reporting period from January 1, 2025 to December 31, 2025.
- GRI standards used: GRI 1: Foundation 2021.
- Applicable GRI Sector Standards: No GRI Sector Standards were applicable during the reporting period of this report.

GRI Standard	2025 Disclosure	Page	Remarks
GRI 1: Foundation (2021)			
GRI 2: General Disclosures (2021)			
1. Organizational profile and reporting practices			
2-1 Organizational details	About this Report Winbond Group Overview	1 5	
2-2 Entities included in the organization's sustainability reporting	About this Report Winbond Group Overview	1 5	
2-3 Reporting period, frequency, and contact point	About this Report	1	
2-4 Restatements of information	About this Report	1	Due to the expansion of the reporting boundary to cover the entire Group, certain data differed slightly from prior periods. Historical data were updated to enhance comparability.
2-5 External assurance	Appendix 9: Independent Assurance Statement	192	
2. Activities and workers			
2-6 Activities, value chain, and other business relationships	1.3.1 Business Performance 3.1.1 Innovative Technologies and Services	60 95	
2-7 Employees	5.2.1 Workforce Structure	129	
2-8 Workers who are not employees	5.4 Occupational Safety and Health	151	
3. Governance			
2-9 Governance structure and composition	1.1.1 Board of Directors	35	
2-10 Nomination and selection of the highest governance body	1.1.1 Board of Directors	35	
2-11 Chair of the highest governance body	1.1.1 Board of Directors	35	
2-12 Role of the highest governance body in overseeing the management of impacts	1.1.1 Board of Directors ESG governance framework	35 35	
2-13 Delegation of responsibility for managing impacts	1.1.1 Board of Directors 1.2 Risk Management	35 41	
2-14 Role of the highest governance body in sustainability reporting	About this Report Materiality Analysis and Stakeholder Engagement	1 22	
2-15 Conflicts of interest	1.1.1 Board of Directors	35	
2-16 Communication of critical concerns	1.1.1 Board of Directors	35	
2-17 Collective knowledge of the highest governance body	1.1.1 Board of Directors	35	
2-18 Evaluation of the performance of the highest governance body	1.1.1 Board of Directors	35	
2-19 Remuneration policies	1.1.2 Business Integrity	39	
2-20 Process to determine remuneration	1.1.2 Business Integrity	39	
2-21 Annual total compensation ratio	5.2.3 Compensation and Benefits	137	
4. Strategy, policies, and practices			
2-22 Statement on sustainable development strategy	Message from our Chairman Message from our President	2 3	
2-23 Policy commitments	2.1 Supply Chain Overview 5.1 Human Rights Management	71 125	
2-24 Embedding policy commitments	5.1 Human Rights Management	126	
2-25 Processes to remediate negative impacts	1.2 Risk Management 5.3.1 Employment Engagement	41 149	
2-26 Mechanisms for seeking advice and raising concerns	1.1.2 Business Integrity 1.2 Risk Management 5.3.1 Employment Engagement	39 41 149	
2-27 Compliance with laws and regulations	1.1.2 Business Integrity	39	
2-28 Membership associations	Appendix 6: Public Participation	183	
5. Stakeholder engagement			
2-29 Approach to stakeholder engagement	Materiality Analysis and Stakeholder Engagement 5.3.1 Employment Engagement	22 149	

GRI Standard	2025 Disclosure	Page	Remarks
2-30 Collective bargaining agreements	5.3 Employee Communication and Relations	149	Only Winbond(AMTC) and Nuvoton (Japan) have an established labor union. Other entities within the Group do not have union organizations; therefore, no employees were covered by collective bargaining agreements. Labor-management communication was conducted through labor-management consultation meetings.
GRI 3: Material Topics (2021)			
3-1 Process to determine material topics	Materiality Analysis and Stakeholder Engagement	22	
3-2 List of material topics	Materiality Analysis and Stakeholder Engagement	22	
3-3 Management of material topics	Materiality Analysis and Stakeholder Engagement	22	
Material Topic: Business Integrity and Corporate Governance			
GRI 205: Anti-Corruption 2016			
205-1 Operations assessed for risks related to corruption	1.1.2 Business Integrity	39	
205-2 Communication and training about anti-corruption policies and procedures	1.1.2 Business Integrity	39	No corruption incidents occurred.
205-3 Confirmed incidents of corruption and actions taken	1.1.2 Business Integrity	39	
GRI 206: Anti-Competitive Behavior 2016			
206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	1.1.2 Business Integrity	39	No incidents of anti-competitive behavior occurred.
Material Topic: Risk Management			
GRI 204: Procurement Practices 2016			
204-1 Proportion of spending on local suppliers	2.1.1 Supplier Composition and Structure	71	
GRI 308: Supplier Environmental Assessment 2016			
308-1 New suppliers that were screened using environmental criteria	2.2.2 Supplier Management Processes and Mechanisms	74	
308-2 Negative environmental impacts in the supply chain and actions taken	2.2.2 Supplier Management Processes and Mechanisms	74	
GRI 408: Child Labor 2016			
408-1 Operations and suppliers at significant risk for incidents of child labor	5.2.1 Workforce Structure 2.2.3 Sustainable Supply Chain Risk Management	78 129	No incidents of child labor occurred in operations or among suppliers.
GRI 414: Supplier Social Assessment 2016			
414-1 New suppliers screened using social criteria	2.2.2 Supplier Management Processes and Mechanisms	74	
414-2 Negative social impacts in the supply chain and actions taken	2.2.2 Supplier Management Processes and Mechanisms	74	
Material Topic: R&D and Innovation			
Self-defined topics			
Self-defined topics	3.1 R&D and Innovation	95	
Material Topic: Productivity and Business Performance			
GRI 201: Economic Performance 2016			
201-1 Direct economic value generated and distributed	1.3.1 Business Performance	60	
201-2 Financial implications and other risks and opportunities due to climate change	1.2.3 Climate Change Management	49	
201-3 Defined benefit plan obligations and other retirement plans	5.2.3 Compensation and Benefits	137	
201-4 Financial assistance received from government	1.4 Tax Management	65	
Material Topic: Green Product			
GRI 418: Customer Privacy 2016			
418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	3.3.1 Customer Privacy Protection	108	No substantiated complaints occurred regarding breaches of customer privacy or loss of customer data.
Material Topic: Energy and Greenhouse Gas Management			
GRI 302: Energy 2016			
302-1 Energy consumption within the organization	Energy Management	115	

GRI Standard	2025 Disclosure	Page	Remarks
302-2 Energy consumption outside of the organization	Energy Management	115	
302-3 Energy intensity	Energy Management	115	
302-4 Reduction of energy consumption	Energy Management	115	
302-5 Reductions in energy requirements of products and services	3.1.1 Innovative Technologies and Services	95	
GRI 305: Emissions 2016			
305-1 Direct (Scope 1) GHG emissions	Greenhouse Gas Management	114	
305-2 Energy indirect (Scope 2) GHG emissions	Greenhouse Gas Management	114	
305-3 Other indirect (Scope 3) GHG emissions	Greenhouse Gas Management	114	
305-4 GHG emissions intensity	Greenhouse Gas Management	114	
305-5 Reduction of GHG emissions	Greenhouse Gas Management	114	
305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	4.5 Air Pollution Prevention	123	
Material Topic: Water Resource Management			
GRI 303: Water and Effluents 2018			
303-1 Interactions with water as a shared resource	4.3 Water Stewardship	118	
303-2 Management of water discharge-related impacts	4.3 Water Stewardship	118	
303-3 Water withdrawal	4.3 Water Stewardship	118	
303-4 Water discharge	4.3 Water Stewardship	118	
303-5 Water consumption	4.3 Water Stewardship	118	
Material Topic: Talent Management			
GRI 401: Employment 2016			
401-1 New employee hires and employee turnover	5.2.2 Talent Recruitment and Performance Evaluation	132	
401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	5.2.3 Compensation and Benefits	137	
401-3 Parental leave	5.2.3 Compensation and Benefits	137	
GRI 403: Occupational Health and Safety 2018			
403-1 Occupational health and safety management system	5.4 Occupational Safety and Health	151	
403-2 Hazard identification, risk assessment, and incident investigation	5.4 Occupational Safety and Health	151	
403-3 Occupational health services	5.4 Occupational Safety and Health	151	
403-4 Worker participation, consultation, and communication	5.4 Occupational Safety and Health	151	
403-5 Worker training on occupational health and safety	5.4 Occupational Safety and Health	151	
403-6 Promotion of worker health	5.2.3 Compensation and Benefits 5.4 Occupational Safety and Health	137 151	
403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	2.3 Supply Chain Engagement and Impact 2.4 Conflict Minerals	81 91	
403-8 Workers covered by an occupational health and safety management system	5.4 Occupational Safety and Health	151	
403-9 Work-related injuries	5.4 Occupational Safety and Health	151	
403-10 Work-related ill health	5.4 Occupational Safety and Health	151	No work-related ill health cases occurred among employees or contractors.
GRI 404: Training and Education 2016			
404-1 Average hours of training per year per employee	5.2.4 Talent Development and Learning Outcomes	143	
404-2 Programs for upgrading employee skills and transition assistance programs	5.2.4 Talent Development and Learning Outcomes 5.2 Talent Management	129 143	
404-3 Percentage of employees receiving regular performance and career development reviews	5.2.2 Talent Recruitment and Performance Evaluation	132	
GRI 405: Diversity and Equal Opportunity 2016			
405-1 Diversity of governance bodies and employees	5.2.1 Workforce Structure	129	
405-2 Ratio of basic salary and remuneration of women to men	5.2.3 Compensation and Benefits	137	
GRI 406: Non-discrimination 2016			
406-1 Incidents of discrimination and corrective actions taken	5.1 Human Rights Management	126	No incidents of discrimination occurred.

Appendix 2 SASB (Sustainability Accounting Standards Board) Index

Topic	Code	Metric	Category	2025	Section
Greenhouse Gas Emissions	TC-SC-110a.1	(1) Gross global Scope 1 emissions	Quantitative	• Taiwan fabs: 48,536 tCO_2e • Subsidiaries: 27,771 tCO_2e	4.2 Greenhouse Gas and Energy Management
	TC-SC-110a.1	(2) Perfluorinated compound (PFC) emissions	Quantitative	• Taiwan fabs: 11,014 tCO_2e • Subsidiaries: 5,592 tCO_2e	
	TC-SC-110a.2	Discussion of long-term and short-term strategies for managing Scope 1 GHG emissions, including emission-reduction targets, and performance against those targets	Discussion and Analysis	For details, please refer to Greenhouse Gas Reduction. Key measures included reductions in FCs through process improvements and the installation of abatement systems, electricity-saving initiatives through process optimization and efficiency enhancement, and increased use of renewable energy. In response to the SBTi, Winbond set targets to achieve 50% renewable electricity use at Taiwan fabs by 2030, reduce Scope 1 and Scope 2 emissions by 42% from the 2023 baseline, and reach net zero emissions across all operations by 2050. In 2025, Scope 1 and Scope 2 emissions declined by 15% compared with the 2023 baseline, while Scope 3 emissions (within the SBTi boundary) decreased by 8.5%. GHG emissions intensity in 2025 was 11.6 $kgCO_2e$, compared with 12.7 $kgCO_2e$ in 2024, representing a year-on-year reduction of approximately 8.7%.	4.2 Greenhouse Gas and Energy Management
Energy Management in Manufacturing	TC-SC-130a.1	(1) Total energy consumed	Quantitative	• Taiwan fabs: approximately 3,006,534 GJ • Subsidiaries: approximately 866,198 GJ	4.2 Greenhouse Gas and Energy Management
	TC-SC-130a.1	(2) Percentage grid electricity	Quantitative	• Taiwan fabs: 86.9% • Subsidiaries: 77.7%	
	TC-SC-130a.1	(3) Percentage renewable energy	Quantitative	• Taiwan fabs: 7.6% • Subsidiaries: 1.0%	
Water Management	TC-SC-140a.1	(1) Total water withdrawn; percentage from areas with high or extremely high baseline water stress	Quantitative	• Taiwan fabs: 4,432 megaliters • Subsidiaries: 3,501 megaliters • All operating sites were located in areas with low water-stress risk.	4.3 Water Stewardship
	TC-SC-140a.1	(2) Total water consumed; percentage from areas with high or extremely high baseline water stress	Quantitative	• Taiwan fabs: 1,328 megaliters • Subsidiaries: 431 megaliters • All operating sites were located in areas with low water-stress risk.	

Topic	Code	Metric	Category	2025	Section
Waste Management	TC-SC-150a.1	Hazardous waste generated during manufacturing and recycling rate	Quantitative	• Taiwan fabs: hazardous waste 10,538 metric tons; recycling rate 91.8% • Subsidiaries: hazardous waste 449 metric tons; recycling rate 95.2%	4.4 Sustainable Resource Management
Workforce Health & Safety	TC-SC-320a.1	Description of efforts to assess, monitor, and reduce exposure of workforce to human health hazards	Qualitative	The Group conducted annual hazard identification and risk assessments covering chemical, physical, ergonomic, biological, and psychosocial hazards to evaluate potential impacts on employees and implement corresponding preventive measures. In 2025, no fatalities, diagnosed occupational diseases, or work-related illness cases occurred among employees or non-employees.	5.4 Occupational Safety and Health
	TC-SC-320a.2	Total monetary losses as a result of legal proceedings associated with employee health and safety	Quantitative	No material violations of occupational health and safety-related regulations occurred in 2025.	5.4 Occupational Safety and Health
Recruiting & Managing a Global & Skilled Workforce	TC-SC-330a.1	Percentage of employees requiring a work visa	Quantitative	2.94%	5.2 Talent Management
Product Lifecycle Management	TC-SC-410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	Quantitative	No products contained IEC 62474 declarable substances.	
	TC-SC-410a.2	Processor energy efficiency at a system level for: (1) servers, (2) desktops, and (3) laptops	Quantitative	Not producing servers, desktops and laptops.	
Materials Sourcing	TC-SC-440a.1	Description of risks associated with the use of critical raw materials	Qualitative	All suppliers committed to and signed the Winbond Code of Business Ethics. The sustainability due diligence completion rate for Tier-1 Significant suppliers reached 100%, and the completion rate of sustainability improvement programs for Tier-1 high-risk suppliers also reached 100%.	2.2 Sustainable Supply Chain Management
Intellectual Property Protection & Competitive Behaviour	TC-SC-520a.1	Total monetary losses as a result of legal proceedings associated with anti-competitive behavior	Quantitative	No violations of anti-competitive regulations occurred in 2025.	1.1 Corporate Governance
Activity Metrics	TC-SC-000.A	Total production	Quantitative	• Total wafer output: 390 thousand wafers • Total die output: 7,704,517 thousand units	1.1 Corporate Governance
	TC-SC-000.B	Percentage of production from owned facilities	Quantitative	Winbond: 100%; Nuvoton: 26.9%; Nuvoton (Japan): 0%	1.1 Corporate Governance

Appendix 3 Climate Related Disclosure Index

1. Implementation Status of Climate-related Information

Climate change risks and opportunities affecting the Company, and corresponding response measures adopted by the Company (For details, please refer to 1.2.3 Climate Change Management or the Winbond 2025 TCFD Independent Report).

<table>
<tr><th>Item</th><th>Implementation Status</th></tr>
<tr><td>Describe the oversight and governance of climate-related risks and opportunities by the Board of Directors and management.</td><td>• The Board of Directors served as the highest governance body for climate change, responsible for directing the Company's responses and decisions related to climate change.
• The ESG Committee was established under the Board of Directors, chaired by the Chairman of the Board, and convened at least twice a year. The Committee regularly reported its execution outcomes—including climate change matters—to the Board of Directors to ensure the implementation and execution of corporate sustainability initiatives.</td></tr>
<tr><td>Describe how the identified climate risks and opportunities affected the Company's business, strategy, and finances (short-, medium-, and long-term).
Describe the financial impacts of extreme weather events and transition actions.</td><td>• Winbond assessed the potential financial and operational impacts of major climate risks and opportunities with higher severity and likelihood, and formulated corresponding response plans.
• Winbond defined short-term as the next year, medium-term as 2 to 5 years, and long-term as more than 5 years.

Potential Impacts of Climate Risks

1. Increased operating costs from responding to SBTi (short- and medium-term)
• Implementing carbon reduction actions raised related operating expenses and capital expenditures.
2. Increases in carbon fee pricing (short-, medium-, and long-term)
• Higher carbon fees raised operating costs.
• Implementing carbon reduction actions in response to higher carbon fees raised related operating expenses and capital expenditures.
• Cost pass-through from upstream suppliers raised procurement costs.
3. Power supply instability (short-term)
• ・Power supply disruptions could result in production losses or equipment downtime.
• Maintaining backup power systems raised operating costs.
4. Water shortage (short-term)
• Persistent water shortages could limit water withdrawal and constrain production capacity.
• Adopting alternative water sources during shortages raised water sourcing costs.
• Advancing water management and backup measures raised operating costs and capital expenditures.
5. Tropical cyclones (short-term)
• Production lines continued operations during typhoon leaves, with legally required overtime pay raising labor costs.
• Disasters could damage facilities or undermine the operational stability of the Company and its suppliers.
• Natural disaster insurance premiums could rise over the long term.

Potential Impacts of Climate Opportunities

1. R&D of green products (medium- and long-term)
• Strengthened product competitiveness and expanded market opportunities requiring sustainability and low-carbon solutions.
• Required continued investment in product R&D expenses.
2. Development of Renewable Energy Products (short-, medium-, and long-term)
• Met customer demand for renewable electricity, helping sustain orders and revenue growth.
• Use of renewable electricity in manufacturing and OSAT stages raised operating costs.
3. Development of low-carbon technologies (short-, medium-, and long-term)
• Reduced carbon intensity in manufacturing and met customer demand for low-carbon supply chains.
• Process optimization improved production efficiency and reduced operating costs.
• Required continued investment in process R&D expenses.</td></tr>
</table>

<table>
<tr><th>Item</th><th>Implementation Status</th></tr>
<tr><td>Describe how the climate risk identification, assessment, and management processes were integrated into the overall risk management system.</td><td>Winbond incorporated climate change risks into its enterprise risk management framework. In 2025, climate risks were identified in accordance with the TCFD framework and with reference to SASB disclosure topics. Senior executives from the parent and subsidiary companies were convened to assess and rank climate risks and to formulate corresponding management measures and response strategies.</td></tr>
<tr><td>If scenario analysis was used to assess resilience to climate change risks, describe the scenarios, parameters, assumptions, analytical factors, and main financial impacts.</td><td>Winbond used scenario analysis to assess operational resilience to climate change, covering both transition and physical risks:
• Transition risk scenarios: The government's net zero pathway, the IPCC AR6 SSP1-1.9 scenario, and the Science-Based Targets Net zero pathway were used to analyze the financial impacts of regulations, technology, markets, and reputation.
• Physical risk scenarios: SSP1-2.6, SSP2-4.5, SSP3-7.0, and SSP5-8.5 were used to simulate extreme weather impacts under different warming scenarios.
<table>
<tr><th>Category</th><th>Scenario</th><th>Assumption</th><th>2030 Financial Impact</th></tr>
<tr><td>Carbon tax imposition</td><td>SSP1-1.9 & SBT-NZ</td><td>Based on SSP1-1.9, reaching US$650/$tCO_2e$ by 2050</td><td>> NT$2.5 billion</td></tr>
<tr><td rowspan="2">Carbon fee imposition</td><td rowspan="2">Government net zero pathway</td><td>Estimated using a single-fab carbon emission exemption of 25,000 tCO_2e/year and a carbon fee of NT$300/$tCO_2e$</td><td>< NT$200 million</td></tr>
<tr><td>Estimated using a single-fab carbon emission exemption of 25,000 tCO_2e/year and a carbon fee of NT$50/$tCO_2e$</td><td>< NT$50 million</td></tr>
<tr><td>Use of renewable electricity</td><td>Government net zero pathway; SSP1-1.9; SBT-NZ</td><td>Procurement costs were estimated using Taipower's average wholesale price for renewable electricity plus transmission fees; operation and maintenance costs for solar PV facilities were estimated based on average O&M costs in the IRENA report.</td><td>≈ NT$300 million</td></tr>
</table></td></tr>
<tr><td rowspan="2">If transition plans for managing climate-related risks existed, describe the plan content as well as the indicators and targets used to identify and manage physical and transition risks.</td><td>Transition Plans for Climate-Related Risks</td><td>Climate-Related Management Indicators and Targets</td></tr>
<tr><td>Green Products:
• Reduced product size
• Reduced product power consumption and extended battery life
• Reduced carbon footprint in manufacturing and packaging stages

Sustainable Supply Chain:
• Continued to strengthen supply chain resilience
• Promoted green and low-carbon supply chains
• Advanced the internal three-arrow carbon reduction initiative
• Improved sustainable procurement performance year by year
• Continued to monitor low-carbon management performance of OSAT suppliers
• Actively built an internal green logistics system</td><td>Green Products:
• By 2030, achieved a 20% reduction in cradle-to-gate carbon emissions (including process evolution) across the full DRAM product line
• By 2030, achieved an annual reduction of 110,000 tCO_2e in cradle-to-gate carbon emissions (including process evolution) across the full Flash memory product line

Sustainable Supply Chain:
• By 2030, increased the localization ratio of key raw material procurement to 42%
• ・Disclosure ratio for major suppliers’ energy and resource use and savings ≥ 95%[1]</td></tr>
</table>

<table>
<tr><th>Item</th><th colspan="3">Implementation Status</th></tr>
<tr><td></td><td>Transition Plans for Climate-Related Risks</td><td colspan="2">Climate-Related Management Indicators and Targets</td></tr>
<tr><td rowspan="3">If transition plans for managing climate-related risks existed, describe the plan content as well as the indicators and targets used to identify and manage physical and transition risks.</td><td>Energy and GHG Management:
• Implemented electricity-saving measures
• Increased the share of renewable energy use
• Implemented GHG management mechanisms, conducted periodic inventories, and proposed reduction plans
• Built a carbon emissions information platform to improve emissions data management efficiency</td><td colspan="2" rowspan="2">Environmental Sustainability:
• GHG emissions:
(1) By 2030, reduce Winbond Group Scope 1 and Scope 2 emissions by 42% and Scope 3 emissions by 25% (baseline year 2023)
(2) By 2050, the Winbond Group will achieve net zero emissions
• Total electricity savings: cumulative savings of at least 15% by 2030 (baseline year 2021)
• Renewable energy share: 50% renewable electricity use at Winbond's Taiwan fabs by 2030
• Site-wide water recycling rate: ≥ 80% by 2030</td></tr>
<tr><td>Water Resources Management:
• Advanced water conservation measures
• Increased the reuse rate of recycled water
• Established backup water source mechanisms, ensuring operational stability through storage ponds and alternative water sources</td></tr>
<tr><td>Climate Resilience Enhancement:
• Enhance facility protection measures and emergency response mechanisms</td><td colspan="2">Climate Risk Adaptation:
• Days of operational disruption due to climate disasters: 0 days</td></tr>
<tr><td>If internal carbon pricing was used as a planning tool, describe the basis for setting the price.</td><td colspan="3">The Group did not use internal carbon pricing as a planning tool during the reporting year.</td></tr>
<tr><td>If climate-related targets were set, describe the activities covered, GHG emission scopes, planning horizons, and annual progress; if carbon offsets or Renewable Energy Certificates (RECs) were used to achieve such targets, describe the source and quantity of carbon credits offset or the quantity of RECs.</td><td>Climate-Related Targets
Winbond set GHG reduction and renewable energy use targets:
• By 2030: Winbond Group Scope 1 and 2 emissions reduced by 42% and Scope 3 emissions reduced by 25% (baseline year 2023)
• By 2030: 50% renewable electricity use at Winbond's Taiwan fabs
• By 2050: Net zero emissions</td><td>Activities Covered by Climate-Related Targets
• Process gas reduction and exhaust gas abatement
• Energy efficiency improvement, renewable energy use, and low-carbon value chain promotion
• Afforestation initiatives to reduce atmospheric CO_2 concentration</td><td>Progress Toward Climate-Related Targets
• In 2025, Winbond Group Scope 1 and Scope 2 emissions decreased by 15% compared with 2023
• In 2025, Winbond Group Scope 3 emissions decreased by 8.5% compared with 2023
• In 2025, 63,143 Renewable Energy Certificates (T-RECs) were obtained, and the renewable electricity share at Winbond's Taiwan fabs reached 8.7%</td></tr>
<tr><td>GHG inventory and assurance status, and reduction targets, strategies, and specific action plans. (Provided separately in 1-1 and 1-2)</td><td colspan="3">Please refer to 1-1 GHG Inventory and Assurance Status for the Past Two Years, and 1-2 GHG Reduction Targets, Strategies, and Specific Action Plans.</td></tr>
</table>

1-1. GHG Inventory and Assurance Status for the Past Two Years

- GHG inventory information: Describe GHG emissions (tCO_2e) and intensity (tCO_2e/NT$ million) for the past two years, and the data coverage.
- GHG assurance information: Describe assurance for the past two years, including assurance scope, assurance provider, assurance criteria, and assurance opinion.

| Company Basic Information |

Paid-in Capital	Category
Companies with paid-in capital of NT$10 billion or more, the steel industry, and the cement industry	■
Companies with paid-in capital of NT$5 billion or more but less than NT$10 billion	□
Companies with paid-in capital of less than NT$5 billion	□

| Minimum Disclosures Required under the Sustainable Development Roadmap for TWSE/TPEx Listed Companies |

Item	Status
Parent company entity-level inventory	■
Consolidated financial statement subsidiaries inventory	■
Parent company entity-level assurance	■
Consolidated financial statement subsidiaries assurance	□

| GHG Inventory and Assurance Status |

Scope	Entity	2025 (tCO_2e)	Intensity (tCO_2e/NT$ million)	Assurance Provider	Description
Scope 1	Winbond	48,536	0.859	BSI Taiwan	Of the Company's total disclosed GHG emissions, 48,536 tCO_2e (100% of total emissions) was assured by the assurance provider under ISO 14064-3, with a reasonable assurance opinion.
	Subsidiaries	27,771	0.844	DNV Taiwan	Of the subsidiaries' total disclosed GHG emissions, 27,771 tCO_2e (100% of total emissions) was assured by the assurance provider under ISO 14064-3, with a reasonable assurance opinion.
	Total	76,307	0.853	-	-
Scope 2	Winbond	314,430	5.566	BSI Taiwan	Of the Company's total disclosed GHG emissions, 314,430 tCO_2e (100% of total emissions) was assured by the assurance provider under ISO 14064-3, with a reasonable assurance opinion.
	Subsidiaries	81,374	2.472	DNV Taiwan	Of the subsidiaries' total disclosed GHG emissions, 81,374 tCO_2e (100% of total emissions) was assured by the assurance provider under ISO 14064-3, with a reasonable assurance opinion.
	Total	395,803	4.427	-	-

Scope	Entity	2024 (tCO_2e)	Intensity (tCO_2e/NT$ million)	Assurance Provider	Assurance Description
Scope 1	Winbond	49,316	1.039	BSI Taiwan	Of the Company's total disclosed GHG emissions, 49,316 tCO_2e (100% of total emissions) was assured by the assurance provider under ISO 14064-3, with a reasonable assurance opinion.
	Subsidiaries	40,507	1.187	DNV Taiwan	Of the subsidiaries' total disclosed GHG emissions, 40,428 tCO_2e (99.8% of total emissions) was assured by the assurance provider under ISO 14064-3, with a reasonable assurance opinion.
	Total	89,823	1.101	-	-
Scope 2	Winbond	346,858	7.305	BSI Taiwan	Of the Company's total disclosed GHG emissions, 346,858 tCO_2e (100% of total emissions) was assured by the assurance provider under ISO 14064-3, with a reasonable assurance opinion.
	Subsidiaries	85,390	2.502	DNV Taiwan	Of the subsidiaries' total disclosed GHG emissions, 85,008 tCO_2e (99.6% of total emissions) was assured by the assurance provider under ISO 14064-3, with a reasonable assurance opinion.
	Total	432,248	5.297	-	-

1-2. GHG Reduction Targets, Strategies, and Specific Action Plans

Describe the GHG reduction baseline year and its data, reduction targets, strategies, specific action plans, and progress toward reduction targets.

1. Baseline Year and Data

   In 2023, Winbond Group's Scope 1 and Scope 2 GHG emissions were 555,276 tCO_2e. Scope 3 GHG emissions from purchased goods and services and from the use of sold products totaled 10,922,631 tCO_2e.

2. Reduction Targets and Progress

Reduction Target	Progress
By 2030, reduce Winbond Group Scope 1 and 2 GHG emissions by 42% from the 2023 baseline.	In 2025, Winbond Group Scope 1 and Scope 2 emissions decreased by 15% compared with 2023.
By 2030, reduce Winbond Group Scope 3 GHG emissions by 25% from the 2023 baseline.	In 2025, Winbond Group Scope 3 emissions decreased by 8.5% compared with 2023.
The 2025 unit GHG emissions intensity indicator was set at 12.6 kg CO_2e/layer (average GHG emissions per mask layer in 12-inch wafer production).	In 2025, the unit GHG emissions intensity indicator was 11.6 kg CO_2e/layer.

3. Strategy

   Going forward, Winbond will continue to advance FC process gas reduction (such as process improvements and the installation of exhaust abatement systems), electricity savings (process optimization, efficiency improvement, and smart energy conservation), and renewable energy use to continually reduce carbon emissions.

4. Specific Action Plan

   For details, please refer to Energy-saving Action Plan.

Appendix 4 UN Global Compact

Principles			Explanation and Policies	Corresponding Section
Human Rights	1	Businesses should support and respect the protection of internationally proclaimed human rights.	Winbond committed to adhering to internationally recognized human rights standards as the highest guiding principles. These standards included the United Nations Guiding Principles on Business and Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, and the Universal Declaration of Human Rights. Winbond implemented relevant guidelines from the Responsible Business Alliance (RBA) Code of Conduct to support and safeguard human rights and to ensure a safe and ethically sound working environment. For details, please refer to 5.1 Human Rights Management and the Human Rights Policy.	5.1 Human Rights Management
	2	Make sure that they are not complicit in human rights abuses.		
Labour	3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	Winbond placed significant emphasis on human rights development and actively engaged in human rights governance. To comprehensively assess human rights risks and facilitate continuous improvement, Winbond conducted a human rights due diligence survey covering all employees in 2022. The results did not identify any high-risk issues. Winbond continued to optimize and mitigate the occurrence and impact of six key human rights issues. For details on the assessment process, improvement measures, and tracking items, please refer to 5.1 Human Rights Management and the 2025 Human Rights Due Diligence Report.	5.1 Human Rights Management 5.3 Employee Communication and Relations
	4	The elimination of all forms of forced and compulsory labour.		5.1 Human Rights Management
	5	The effective abolition of child labour.		5.1 Human Rights Management 5.2 Talent Management
	6	The elimination of discrimination in respect of employment and occupation.		5 Human Rights and Social Inclusion
Environment	7	Businesses should support a precautionary approach to environmental challenges.	In its business operations, Winbond actively practiced sustainable development in line with international trends. Through corporate citizenship, Winbond aimed to enhance national economic contributions, improve the quality of life for employees, communities, and society, and foster sustainable development as a competitive advantage. For details, please refer to the Sustainable Development Best Practice Principles.	4 Environmental Sustainability
	8	Undertake initiatives to promote greater environmental responsibility.	Winbond stood shoulder to shoulder with global nations and enterprises in advancing green sustainability. Winbond actively reduced the environmental impact of operational processes and aligned its actions with the Sustainable Development Goals (SDGs).	4 Environmental Sustainability
	9	Encourage the development and diffusion of environmentally friendly technologies.	Winbond's vision is to “be a hidden champion in providing sustainable semiconductors to enrich human life.” Winbond focused on developing high-performance, compact, energy-efficient, and high-quality green memory products and processes, and leveraged innovative technologies to deliver energy-saving and low-carbon solutions.	3.1 R&D and Innovation
Anti-Corruption	10	Businesses should work against corruption in all its forms, including extortion and bribery.	Business integrity was Winbond's highest ethical standard. The Human Resources Department was responsible for cultivating a culture of business integrity through system establishment, continuous improvement, monitoring and control mechanisms, whistleblowing channels, confidentiality protection, and education and training. Winbond adhered to the Responsible Business Alliance (RBA) Code of Conduct and the Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies. For details, please refer to the Procedures for Ethical Management and Guidelines for Conduct and the Ethical Management Violation Handling Instruction.	1.1.2 Ethical Business Conduct

Appendix 5 TWSE Sustainability Index – Semiconductor Industry

No.	Indicator	Indicator Type	Unit	Annual Disclosure
1	Total energy consumption, percentage of purchased electricity, and utilization rate (renewable energy)	Quantitative	Gigajoules (GJ), %	Total energy consumption: • Taiwan fabs: 3,006,534 GJ • Subsidiaries: 866,198 GJ Purchased electricity: • Taiwan fabs: 2,613,127 GJ • Subsidiaries: 673,025 GJ Renewable energy utilization rate: • Taiwan fabs: 8.7% • Subsidiaries: 1.3%
2	Total water withdrawn and total water consumption	Quantitative	Thousand cubic meters (1,000 m^3)	Total water withdrawn: • Taiwan fabs: 4,432 thousand m^3 • Subsidiaries: 3,501 thousand m^3 Total water consumption: • Taiwan fabs: 1,328 thousand m^3 • Subsidiaries: 431 thousand m^3
3	Total hazardous waste generated and percentage recycled	Quantitative	Metric tons (t), %	Hazardous waste generated: • Taiwan fabs: 10,538 t • Subsidiaries: 449 t Hazardous waste recycling rate: • Taiwan fabs: 91.8% • Subsidiaries: 95.2%
4	Types of, number of employees in, and rate of occupational accidents	Quantitative	%, number	In 2025, the Group recorded a total of six recordable occupational injuries involving employees (lost-time injuries), resulting in a recordable lost-time injury rate of 0.36. Two recordable lost-time injuries involved non-employees, with a recordable injury rate of 0.87. Injury types in 2025: (1) Employees: falls (4 persons, 67%); rolling or falling from height (2 persons, 33%). (2) Non-employee workers: falls (1 person, 50%); contact with high temperature (1 person, 50%).
5	Product Lifecycle Management Disclosure: including weights of scraps and electronic waste and percentage recycled (Note 1)	Quantitative	Metric tons (t), %	Waste generated: • Taiwan fabs: 17,458 t • Subsidiaries: 2,560 t Overall waste recycling rate: • Taiwan fabs: 93.7% • Subsidiaries: 29.3%
6	Description of the management of risks associated with the use of critical materials	Qualitative	Not applicable	2025 sustainable management outcomes for significant suppliers: • All suppliers committed to and signed compliance with the Winbond Code of Business Ethics. • Sustainability due diligence implementation rate for Tier-1 Significant suppliers: 100%. • Completion rate of sustainability improvement programs for Tier-1 high-risk suppliers: 100%.
7	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations	Quantitative	Reporting currency	No violations of anti-competitive regulations occurred in 2025.
8	Production by product category	Quantitative	Varies by product category	• Total wafer output: 390 thousand wafers. • Total die output: 7,704,517 thousand units.

Note 1: Descriptions including the sale of scraps and the recycling and processing of waste were provided.

Appendix 6 Public Participation

To enhance the operational quality of Taiwan's industries, the Company actively participated in various industry associations and societies, holding positions as directors, supervisors, and representatives in these organizations. Through these industry associations, the Company exchanged operational experiences with peers and shared the latest market trends, supply and demand changes, and technological information with the industry, aiming to contribute to the overall industry.

| List of Industry Associations and Societies |

Unit: NT$

Winbond Group	2022	2023	2024	2025	Type of Organization	Significant Role
Taiwan Climate Partnership (TCP)	150,000	50,000	50,000	50,000	TCP responded to the requirements of international brand customers through practical actions and, at the same time, enhanced the awareness of Taiwanese companies and various stakeholders regarding climate change through international initiatives and linkages.	Served as a director
Business Council for Sustainable Development Taiwan (BCSD Taiwan)	–	90,000	60,000	60,000	BCSD Taiwan was the sole global alliance partner of the World Business Council for Sustainable Development (WBCSD) in Taiwan.	Served as a member
The Allied Association for Science Park Industries	540,000	540,000	540,000	594,000	The Association was established to assist Taiwanese companies in developing sustainable strategies and to introduce guidelines and related sustainability issues from international markets and research institutions.	Served as a director
Taiwan Semiconductor Industry Association (TSIA)	320,000	320,000	320,000	320,000	TSIA served as a bridge between the government and industry for policy communication and feedback, handled matters of common interest to industry participants, and promoted the stable development of science park enterprises.	Served as a director
Taiwan Electrical and Electronic Manufacturers' Association (TEEMA)	84,000	84,000	84,000	84,000	TEEMA primarily promoted cooperation and development within the semiconductor industry, actively participated in the formulation of international standards and related activities, represented the industry in international negotiations, provided consultation and services on semiconductor industry development, reflected industry opinions and needs, and assisted the government in formulating relevant policies.	Winbond: Served as Advisor Nuvoton: Served as Representative
Chinese National Association of Industry and Commerce (CNAIC)	63,200	40,000	40,000	40,000	CNAIC acted as a bridge between the government and businesses, providing members with diversified services including expansion of international trade, promotion of international relations, support for industry development, information services, legal consulting, and talent development.	Served as a member
Global Semiconductor Alliance (GSA)	782,250	808,500	992,250	1,039,500	GSA was a leading industry organization dedicated to creating a highly efficient, profitable, and sustainable global ecosystem for the semiconductor and high-tech industries, bringing together global industry leaders to foster innovation and accelerate industry growth.	Served as a member
SEMI	–	689,073	663,264	823,694	SEMI was a global industry association dedicated to connecting member companies and professionals across the global semiconductor and electronic design and manufacturing supply chain to drive industry development. Through initiatives in advocacy, talent development, sustainability, and supply chain management, SEMI promoted collaboration and innovation among industry members and enhanced the competitiveness of the semiconductor industry in Taiwan and globally.	Served as a member

Winbond Group	2022	2023	2024	2025	Type of Organization	Significant Role
TPIDC Industry-Academia Alliance for Digital Transformation and Sustainable Development	–	–	–	50,000	The TPIDC Industry-Academia Alliance for Digital Transformation and Sustainable Development, led by National Taiwan University, comprised more than 50 participating companies and institutions, including MediaTek, Wistron, and ASUS. Participation facilitated exchanges with member companies and focused on digital transformation and sustainable development strategies and practices.	Served as a member
Micro Sensors and Actuators Industry-Academia Consortium (MEMS Consortium)	20,000	20,000	20,000	20,000	The MEMS Consortium provided technical services and talent training covering upstream, midstream, and downstream segments of the micro sensor and actuator industries, including design, manufacturing, packaging, and testing, and played a role in technical support and resource integration.	Served as a member
Japan Electronics and Information Technology Industries Association (JEITA)	1,713,768	2,007,314	2,984,671	3,317,600	As one of the largest industry associations in Japan, JEITA aimed to serve as a platform that brought together diverse stakeholders, with the IT and electronics industries at its core, to address social issues toward Society 5.0.	Served as a director
Semiconductor Industry Association in Japan (JSIA)	0	0	0	0	As one of JEITA's subcommittees, JSIA aimed to address short-, medium-, and long-term challenges commonly faced by the Japanese semiconductor industry.	Served as a member
The Institute of Electrical Engineers of Japan	6,363	6,363	6,363	6,363	An academic organization in Japan, established in 1888 and composed of scholars and engineers. Its purpose was to contribute to society through research and investigative activities in the field of electrical engineering, including electronics, information, energy, and the environment, and to present results from an international perspective.	Served as a member
Total Amount	3,679,581	4,655,250	5,760,548	6,355,394		

Note: The data was presented in New Taiwan Dollars (NTD). The financial data of Nuvoton (Japan) was converted using the Winbond Group's 2025 average exchange rate of JPY 1 to NT$0.22.

[Winbond Group Public Affairs Participation Expenditures]

Unit: NT$

Category	2022	2023	2024	2025
Participation in industry unions, trade organizations, or non-profit organizations	3,679,581	4,655,250	5,760,548	6,355,394
Interest group lobbying	0	0	0	0
Donations to local, regional, or national political activities or candidates	0	0	0	0
Other (such as expenditures related to elections or referendums)	0	0	0	0

Appendix 7 ESG Index

Environmental Data

| Return on Environmental Investments |

Unit: NT$ thousand

Item	2022		2023		2024		2025	
	Winbond (Taiwan)	Subsidiaries	Winbond (Taiwan)	Subsidiaries	Winbond (Taiwan)	Subsidiaries	Winbond (Taiwan)	Subsidiaries
Capital investment	829,235	22,005	373,724	51,594	225,569	80,951	90,804	11,456
Operating expenses	504,720	44,841	568,087	48,018	654,181	107,781	710,736	83,092
Total expenses(= Capital Investment + Operating Expenses)	1,333,955	66,846	941,811	99,612	879,751	188,733	801,541	94,547

Scope: 2022 and 2023 covered Winbond (Taiwan) and Nuvoton (Taiwan); 2024 and 2025 covered the Winbond Group.

| Economic Benefits of Environmental Investment |

Unit: NT$ thousand

Item	2022	2023	2024	2025	
				Winbond (Taiwan)	Subsidiaries
Waste recycling revenue	6,324	5,786	9,313	9,651	14,216
Benefits from electricity-saving measures	329,639	419,553	656,264	96,788	5,423
Benefits from water-saving measures	9,180	13,243	10,848	10,778	465
Total economic benefits	345,143	438,581	676,425	117,218	20,104

Data Scope: 2022–2024 covered Winbond (Taiwan); from 2025 onward, the data covered the Winbond Group.

| Environmental Indicator |

Category	Indicator	Unit	2022		2023		2024		2025	
			Winbond (Taiwan)	Subsidiaries	Winbond (Taiwan)	Subsidiaries	Winbond (Taiwan)	Subsidiaries	Winbond (Taiwan)	Subsidiaries
Greenhouse gas	Scope 1	tCO_2e	44,373	36,326	44,149	55,865	49,316	40,507	48,536	27,771
	Scope 2	tCO_2e	353,523	35,786	356,535	98,727	346,858	85,390	314,430	81,374
	Scope 3	tCO_2e	443,204	90,433	2,718,493	8,313,820	3,305,840	8,041,584	3,496,569	6,622,893
	Perfluorocarbons (PFCs)	tCO_2e	13,071	11,355	11,631	9,143	11,868	8,217	11,014	5,592
	Unit production emission (Scope 1 + Scope 2)	$kgCO_2e$/layer	13.2	-	15.5	-	12.7	-	11.6	-

Category	Indicator		Unit	2022		2023		2024		2025	
				Winbond (Taiwan)	Subsidiaries	Winbond (Taiwan)	Subsidiaries	Winbond (Taiwan)	Subsidiaries	Winbond (Taiwan)	Subsidiaries
Energy	Purchased electricity (excluding renewable)		GWh	689	72	720	72	702	188	663	186
			GJ	2,479,988	260,259	2,592,983	258,670	2,527,712	678,216	2,388,072	667,864
	Renewable energy (electricity)		GWh	-	-	2	0.1	44	1	63	2
			GJ	-	-	7,571	447	158,266	3,675	227,300	8,864
	Natural gas		10,000 m^3	854	22	938	27	1,061	489	1,059	298
			GJ	314,966	7,526	345,558	9,903	393,096	217,302	387,092	118,530
	Liquefied petroleum gas (LPG)		metric tons	-	-	-	-	-	936	-	1,407
			GJ	-	-	-	-	-	47,261	-	64,144
	Fuel oil (heavy oil)		m^3	-	-	-	-	-	410	-	158
			GJ	-	-	-	-	-	16,498	-	6,350
	Diesel		m^3	285	-	310	4	132	-	76	6
			GJ	10,023	-	10,899	148	4,776	-	2,742	206
	Vehicle gasoline/diesel		m^3	67	1	56	1	49	13	42	8
			GJ	2,200	26	1,823	35	1,557	416	1,327	240
	Total non-renewable energy use		GJ	2,807,177	267,811	2,951,263	268,756	2,972,142	959,694	2,779,234	857,334
	Electricity consumption per unit of production capacity		kWh/layer	22.76	-	27.98	-	23.85	-	23.31	-
	Electricity consumption per unit of production capacity		GJ/layer	82.0	–	100.7	–	85.8	–	83.9	-
Water	Withdrawal	• Third-party tap water	megaliters	4,131	410	4,356	396	4,564	485	4,432	497
		• Groundwater	megaliters	-	-	-	-	-	3,446	-	3,004
		• Ultrapure water consumption	m^3	6,753,960	485,106	8,416,193	451,900	8,590,883	1,585,360	4,345,005	1,407,627
	Discharge	• Reprocessing by third-party wastewater treatment plant	megaliters	3,172	312	2,924	317	3,204	406	3,105	420
		• Groundwater	megaliters	-	-	-	-	-	3,185	-	2,651
		• Tertiary treatment	megaliters	3,172	0	2,924	0	3,204	0	3,105	0
		• Secondary treatment	megaliters	0	312	0	317	0	3,561	0	3,019
		• Untreated or no treatment required	megaliters	-	-	-	-	-	30	-	52
	Recycle	• Recycled water volume	megaliters	11,150	-	13,150	-	13,693	2,134	14,068	2,418
		• Recycling rate	%	81	-	82	-	82		82.7	
	Water consumption	• Total water consumption	megaliters	959	98	1,432	79	1,360	340	1,328	431
		• Change in water storage	megaliters	0	0	0	0	0	0	0	0

Category	Indicator		Unit	2022		2023		2024		2025	
				Winbond (Taiwan)	Subsidiaries	Winbond (Taiwan)	Subsidiaries	Winbond (Taiwan)	Subsidiaries	Winbond (Taiwan)	Subsidiaries
Water	Water use per unit production capacity		L/layer	174	-	170	-	147	-	143	-
	Ultrapure water per unit production capacity		m^3/layer	0.285	-	0.329	-	0.277	-	0.141	-
Waste	General waste	• Recycled	metric tons	4,784	93	7,030	93	7,569	268	6,679	324
		• Landfilled	metric tons	0	18	0	67	0	32	0	19
		• Incinerated (with energy recovery)	metric tons	185	173	172	108	190	307	217	145
		• Incinerated (without energy recovery)	metric tons	0	0	0	0	0	1,001	0	1,062
		• Chemically treated	metric tons	7	0	6	0	56	722	24	562
		• Total generated	metric tons	4,976	284	7,208	268	7,815	2,330	6,920	2,111
		• Recycling rate	%	96.1%	32.7%	97.5%	34.7%	96.9%	11.5%	96.6%	15.3%
		• General waste per unit production capacity	kg/layer	0.21	-	0.28	-	0.25	-	0.22	-
	Hazardous waste	• Recycled	metric tons	3,849	503	5,331	387	8,097	479	9,671	427
		• Landfilled	metric tons	0	0	0	0	0	0	0	0
		• Incinerated (with energy recovery)	metric tons	756	25	1,054	19	1,132	24	837	11
		• Incinerated (without energy recovery)	metric tons	0	0	0	0	0	0	0	9
		• Solidified	metric tons	3	10	2	1	7	1	13	1
		• Chemically treated	metric tons	0	0	0	0	0	0	16	0
		• Total generated	metric tons	4,608	529	6,387	407	9,236	504	10,538	449
		• Recycling rate	%	83.5%	95.1%	83.5%	95.1%	87.7%	95.0%	91.8%	95.2%
		• Hazardous waste per unit production capacity	kg/layer	0.19	-	0.25	-	0.30	-	0.34	-
	Overall recycling rate		%	90.1%	73.3%	90.9%	71.1%	91.9%	26.8%	93.7%	29.3%
	waste per unit production capacity		kg/layer	0.404	-	0.531	-	0.550	-	0.565	-
Air pollutants	Nitrogen oxides (NOx)		metric tons	12.18	3.14	13.65	3.36	16.13	12.45	16.02	14.11
	Sulfur oxides (SOx)		metric tons	0.47	1.52	0.54	0.89	0.50	2.77	0.82	3.77
	Volatile organic compounds (VOCs)		metric tons	4.26	3.24	4.30	2.74	4.67	2.35	5.53	1.95
	VOCs per unit production capacity		kg/layer	0.00018	-	0.00017	-	0.00015	-	0.00018	-

Note 1: GHG data for 2022 covered Winbond (Taiwan) and Nuvoton (Taiwan); from 2023 to 2025, the data covered the Winbond Group. Other environmental data for 2022 and 2023 covered Winbond (Taiwan) and Nuvoton (Taiwan); from 2024 to 2025, the data covered the Winbond Group.
Note 2: Scope 3 data included purchased goods and services, fuel- and energy-related activities, upstream transportation and distribution, operational waste treatment, business travel, employee commuting, and use of sold products (this category was newly added from 2023 onward).
Note 3: To unify the basis for calculating ultrapure water consumption, from 2025 onward, calculations were adjusted in accordance with the R8 version of the water-balance diagram published by the Science Park.
Note 4: "layer" refers to the energy and resource consumption or GHG emissions per mask layer in 12-inch wafer production.

| 2025 Third-party testing of wastewater discharged to sewerage |

Unit: mg/L

Parameter	Type	Winbond (Taiwan) — CTSP	Winbond (Taiwan) — STSP Kaohsiung Park	Nuvoton (Taiwan) — HSP (Hsinchu)	Nuvoton (Japan) — Nagaokakyo plants	Nuvoton (Japan) — Uozu fab	Nuvoton (Japan) — Arai fab
Chemical Oxygen Demand (COD)	Legal standard	400	450	500	600	25	160
Chemical Oxygen Demand (COD)	Monitored value	2.37–47.6	58.5–286	33.1–43.2	-	2.2–2.6	1.5–1.7
Suspended Solids (SS)	Legal standard	300	250	300	600	90	50
Suspended Solids (SS)	Monitored value	11.2–16.4	2.5–51.6	8.3–18.8	13.3–16.3	0.3–0.7	1.5–1.7
Biochemical Oxygen Demand (BOD)	Legal standard	240	250	300	-	-	-
Biochemical Oxygen Demand (BOD)	Monitored value	1.0–17.0	<1.0	Not required	-	-	-

Scope: Winbond Group manufacturing sites.
Nuvoton (Japan): Effluent was discharged in compliance with local regulatory standards after in-house treatment processes, including the removal of heavy metals, nitrogen, and phosphorus.

Social Data

| Human Capital Return on Investment |

Item	2022	2023	2024	2025
Human capital return on investment	4.4514	4.0391	4.4866	4.4543

Note: Human capital return on investment = (Operating Revenue - (Operating Expenses - Labor Costs)) /Labor Costs.

| Occupational Health and Safety Risk Identification |

Category	Level	Winbond		Subsidiaries		Winbond Group	
		Risk identification	After engineering and administrative controls	Risk identification	After engineering and administrative controls	Risk identification	After engineering and administrative controls
Occupational Safety and Health	High risk	16%	0%	8%	7%	8%	7%
	Medium risk	69%	44%	3%	3%	4%	4%
	Low risk	15%	56%	90%	90%	88%	89%
Fire Safety	High risk	19%	0%	0%	0%	6%	0%
	Medium risk	79%	94%	9%	9%	30%	34%
	Low risk	1%	6%	91%	91%	65%	66%

Scope: Winbond Group manufacturing sites.

Statistics on Work-Related Injuries, Occupational Diseases, and Disabling Injuries

2025 Statistics	Indicator	Winbond		Subsidiaries		Winbond Group
		Employees	Non-employees	Employees	Non-employees	Total
Total working hours		7,725,944	1,468,199	8,657,841	809,772	16,274,669 / 2,268,971
Work-related injuries	• Number of recordable work-related injuries	3	2	3	0	6 / 2
	• Rate of recordable work-related injuries	0.38	1.36	0.35	0	0.36 / 0.88
	• Number of serious work-related injuries / rate	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
	• Fatalities resulting from work-related injuries / rate	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
Occupational diseases	• Number of recordable occupational disease cases	0	0	0	0	0 / 0
	• Fatalities from occupational diseases / rate	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0

Notes:
- Scope: Winbond Group operational sites (Winbond and its subsidiaries; Nuvoton, Nuvoton (Japan), and their subsidiaries).
- Other non-employee workers: Workers who were not employees of the organization but whose work and/or workplace was under the organization's control. The average daily on-site headcount was calculated by dividing the annual total person-times by 365 days. Types of non-employee workers included, but were not limited to: waste, finished goods, and semi-finished goods transport; environmental cleaning; security; equipment and facility maintenance; gas and chemical supply and refilling; kitchen catering; and equipment vendors. Statistics were compiled based on access control records and contractor entry logs at each operational site, and included only workers whose work was managed by the Company or controlled by operational specifications and who actually entered the operational sites; remote service personnel were not included. Given that such workers were predominantly short-term or project-based, the overall situation during the reporting period was presented in person-times.
- Number of recordable disabling work-related injuries: The number of workers experiencing fatalities, permanent total disabilities, permanent partial disabilities, or temporary total disabilities due to occupational accidents. 2025 accident types: (1) Employees — falls 4 persons (67%), rolling or falling from height 2 persons (33%); (2) Other non-employee workers — falls 1 person (50%), contact with high temperature 1 person (50%).
- Rate of recordable work-related injuries: Number of disabling injuries × 1,000,000 / Total hours worked.
- Number of serious work-related injuries: Workers requiring hospitalization (excluding observation stays) following medical diagnosis due to occupational accidents. 0 cases in 2025.
- Rate of serious work-related injuries: Number of serious work-related injuries (excluding fatalities) × 1,000,000 / Total hours worked.

Absenteeism Rate

Employee absenteeism rate %	2022	2023	2024	2025
Winbond Group total	1.10%	1.11%	0.92%	0.89%

Note: Absenteeism rate (%) = (Total absence hours during the fiscal year / Total work hours during the fiscal year) × 100%. Employee absences included occupational injury leave, personal leave, and sick leave.

Appendix 8 IFRS Sustainability Disclosure Standards

Background and Implementation Strategy

In accordance with the "Roadmap for Adoption of IFRS (International Financial Reporting Standards) Sustainability Disclosure Standards in Taiwan" issued by the Financial Supervisory Commission (FSC) on August 17, 2023, Winbond (Taiwan), as a company with paid-in capital exceeding NT$10 billion, is required to apply the IFRS Sustainability Disclosure Standards starting in 2026.

The 2026 sustainability information prepared in accordance with the IFRS Sustainability Disclosure Standards will be disclosed in the dedicated section of the annual report in 2027. Winbond continues to monitor the implementation of the adoption plan in line with reference guidelines and related regulations issued by the competent authorities.

To ensure the smooth adoption of the IFRS Sustainability Disclosure Standards, Winbond adopted the following strategies:

1. Established a cross-departmental project team and periodically reported progress to the Board of Directors to ensure the implementation and execution of adoption activities.
2. Promoted internal education and training to enhance relevant personnel's understanding of the standards.
3. Partnered with external consultants to support efficient completion of the adoption process.

Going forward, Winbond will continue to refine its sustainability risk and opportunity governance processes, internal controls, and operating procedures to strengthen sustainability management.

Implementation plan schedule and scope of work

Stage	Work Item	Execution steps and procedures	Estimated completion schedule
Stage 1: Analysis and Planning	1-1. Establish a cross-departmental project team for the adoption of IFRS Sustainability Disclosure Standards	1. Hold an IFRS Sustainability Disclosure Standards adoption meeting for senior management and obtain the support of the Board of Directors and the Audit Committee. 2. Select qualified members for the project team. 3. Convene the first project team meeting. 4. Assign responsibilities, confirmed the duties of each member, and established the operating model.	Completed in Q4 2024
	1-2. Preliminary identification of material differences and impacts between current sustainability information and the IFRS Sustainability Disclosure Standards	1. Review the IFRS Sustainability Disclosure Standards requirements, including IFRS S1 and S2 exemptions—such as the option to disclose only climate-related risk and opportunity information in the first year, and the exemption from disclosing Scope 3 GHG emissions in the first year. 2. Identify material differences and potential impacts between Winbond's current sustainability information (such as those prepared in accordance with GRI, TCFD, or SASB) and the IFRS Sustainability Disclosure Standards.	
	1-3. Preliminary identification of the reporting entity	1. Preliminarily identify the reporting entity (under the IFRS Sustainability Disclosure Standards, the reporting entity must be consistent with that of the consolidated financial statements). 2. Actively communicate with subsidiaries to collaborate in executing the various stages of the IFRS Sustainability Disclosure Standards adoption plan.	
	1-4. Formulate the adoption plan	Formulate the adoption plan based on Winbond's operational scale and input from internal and external professionals.	

Stage	Work Item	Execution steps and procedures	Estimated completion schedule
Stage 2: Design and Execution	2-1. Identify sustainability-related risks and opportunities and their financial impacts, and assess material sustainability-related financial information	1. Identify material information on sustainability-related risks and opportunities that could reasonably be expected to affect Winbond's prospects, covering governance, strategy, risk management, and metrics and targets. 2. Identify the potential impacts of sustainability-related risks and opportunities on current and anticipated financial performance. 3. Assess material information on the aforementioned sustainability-related risks and opportunities (considering whether such information could reasonably be expected to influence the decisions of investors, lenders, and creditors).	Completed in Q2 2025
	2-2. Identify and collect required data	1. Based on the material sustainability-related financial information assessed under 2-1, identify data within the reporting boundary and across the value chain that Winbond is required to collect. 2. Confirm that the data to be collected meet the requirements of the IFRS Sustainability Disclosure Standards and related sustainability regulations. 3. Identify and evaluate data collection sources, and align data collection schedules with the sustainability reporting timeline (e.g., climate-related scenario analysis, GHG emissions). 4. Evaluate the linkages between the collected sustainability-related data and the data used in financial reporting (such as inputs and parameters).	Completed in Q3 2025
	2-3. Adjust and refine Winbond's processes, financial and non-financial reporting workflows, information systems, supply chain management processes, internal controls, and daily operations across departments	Propose selected solutions addressing the operational impacts of adopting the IFRS Sustainability Disclosure Standards, identify processes and systems requiring adjustment, and execute the necessary modifications.	Completed in Q4 2025
Stage 3: Implementation	3-1. Pilot preparation of the sustainability-related financial information of the annual report	In accordance with the IFRS Sustainability Disclosure Standards and the annual report disclosure requirements, pilot the preparation of the annual report's sustainability-related financial information under the IFRS Sustainability Disclosure Standards. The pilot will serve as the basis for improving reporting processes upon formal filing.	Expected to be completed in Q3 2026
	3-2. Continuously update IFRS sustainability information-related internal control operating manuals and conduct training	1. Adjust and modified internal control operating procedures in accordance with the IFRS Sustainability Disclosure Standards, and updated or added related operating manuals, such as the establishment and modification of authorization levels in the reporting process (including the information collection stage). 2. Assess training needs of relevant personnel, schedule training plans, and conduct education and training.	Expected to be completed in Q4 2026
Stage 4: Adjustment and Improvement	4-1. File the sustainability-related financial information of the annual report	Disclose sustainability-related financial information of the 2026 annual report in accordance with the IFRS Sustainability Disclosure Standards, with publication and filing completed concurrently with the 2026 financial statements.	Expected to be completed in Q1 2027

Appendix 9 Independent Assurance Statement

INDEPENDENT ASSURANCE OPINION STATEMENT

Winbond 2025 Sustainability Report

The British Standards Institution is independent to Winbond Electronics Corporation (hereafter referred to as Winbond in this statement) and has no financial interest in the operation of Winbond other than for the assessment and verification of the sustainability statements contained in this report.
This independent assurance opinion statement has been prepared for the stakeholders of Winbond only for the purposes of assuring its statements relating to its sustainability report, more particularly described in the Scope below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the independent assurance opinion statement may be read.
This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by Winbond. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate.
Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to Winbond only.

Scope

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

1. The assurance scope is consistent with the description of Winbond 2025 Sustainability Report.
2. The evaluation of the nature and extent of the Winbond's adherence to AA1000 AccountAbility Principles (2018) and the reliability of specified sustainability performance information in this report as conducted in accordance with type 2 of AA1000AS v3 sustainability assurance engagement.

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

Opinion Statement

We conclude that the Winbond 2025 Sustainability Report provides a fair view of the Winbond sustainability programmes and performances during 2025. The sustainability report subject to assurance is materially correct without voluntary omissions based upon testing within the limitations of the scope of the assurance, the information and data provided by the Winbond and the sample taken. We believe that the performance information of Environment, Social and Governance (ESG) are correctly represented. The sustainability performance information disclosed in the report demonstrate Winbond's efforts recognized by its stakeholders.
Our work was carried out by a team of sustainability report assurors in accordance with the AA1000AS v3. We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that Winbond's description of their approach to AA1000AS v3 and their self-declaration in accordance with GRI Standards were fairly stated.

Methodology

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

- a top level review of issues raised by external parties that could be relevant to Winbond's policies to provide a check on the appropriateness of statements made in the report.
- discussion with managers on Winbond's approach to stakeholder engagement. Moreover, we had sampled 2 external stakeholders to conduct interview.
- interview with 45 staffs involved in sustainability management, report preparation and provision of report information were carried out.
- review of materiality assessment process.
- review of key organizational developments.
- review of the extent and maturity of the relevant accounting systems for financial and non-financial reports.
- review of the findings of internal audits.
- the verification of performance data and claims made in the report through meeting with managers responsible for gathering data.
- review of the processes for gathering and ensuring the accuracy of data, followed data trails to initial aggregated source and checked sample data to greater depth during site visits.
- the consolidated financial data are based on audited financial data, we checked that this data was consistently reproduced.
- review of supporting evidence for claims made in the reports.
- an assessment of the organization's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness, and Impact as described in the AA1000AP (2018).

Conclusions

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

Inclusivity

In this report, it reflects that Winbond has continually sought the engagement of its stakeholders and established material sustainability topics, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. There are fair reporting and disclosures for the information of Environment, Social and Governance (ESG) in this report, so that appropriate planning and target-setting can be supported. In our professional opinion the report covers the Winbond's inclusivity issues and has demonstrated sustainable conduct supported by top management and implemented in all levels among organization.

Materiality

The Winbond publishes material topics that will substantively influence and impact the assessments, decisions, actions and performance of Winbond and its stakeholders. The sustainability information disclosed enables its stakeholders to make informed judgements about the Winbond's management and performance. In our professional opinion the report covers the Winbond's materiality assessment process and material issues.

Responsiveness

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

Impact

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

Performance information

Based on our work described in this statement and with no conflict of interest with the Winbond in relation to providing the assurance of ESG performance information, which has been assured, specified sustainability performance information such as GRI Standards disclosures disclosed in this report, Winbond and BSI have agreed upon to include in the scope. In our view, the data and information contained within Winbond 2025 Sustainability Report are reliable.

GRI Sustainability Reporting Standards (GRI Standards)

Winbond provided us with their self-declaration of in accordance with GRI Standards 2021 (For each material topic covered in the applicable GRI Sector Standard and relevant GRI Topic Standard, including the disclosures of applicable economic, environmental, and social information, comply with all reporting requirements for disclosures). Based on our review, we confirm that sustainable development disclosures with reference to GRI Standards' disclosures are reported, partially reported, or omitted. In our professional opinion the self-declaration covers the Winbond's sustainability topics.

Assurance level

The high level assurance provided is in accordance with AA1000AS v3 in our review, as defined by the scope and methodology described in this statement.

Responsibility

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

Competency and Independence

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

For and on behalf of BSI:

Joe Hsieh, Managing Director Northeast Asia, APAC Assurance

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Statement No: SRA-TW-804825

2026-05-05

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