



2024 ZYXEL GROUP SUSTAINABILITY REPORT



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About the Report

Zyxel Group has published a CSR report every year since 2011. The Company's implementation of corporate sustainability has been disclosed in detail for adherence to the initial goal and commitment to our first CSR report.

Zyxel Group is dedicated to the fulfillment of corporate responsibility, boosting customer trust in our good corporate governance, allowing the employees to be identified with the Company, and facilitating cooperation with our partners in creating a multi-win situation. The Report discloses our commitments and efforts in a detailed manner. We will continue the fulfillment of corporate responsibility and promise all stakeholders sustainable development.

Scope of the Report

This report, based on the materiality assessment, covers Zyxel Group in Taiwan, including its subsidiaries Zyxel Communications, Zyxel Networks, MitraStar Technology, Black Cat Information Security, and MitraStar Technology's subsidiary, Wuxi MitraStar. Other overseas subsidiaries are included only for financial and human resources information. Compared with the previous reporting period, there have been no changes in the reporting scope.

Content

Report period: January 1~December 31, 2024

Issues of Stakeholders' Concern

This part covers the consideration of the potential impacts of stakeholders on the Company as well as the identification of significant issues associated with the operations and actual achievements in terms of economy, environment and society and discloses the Company's strategies, implementation processes, and outcomes. The significant issues this year are slightly different from those in the report for the previous year. Please refer to Chapter "Communication with Stakeholders" for details.

UN Sustainable Development Goals (SDGs)

Zyxel Group supports the 17 SDGs set by the UN. We focused on 7 SDGs which were adopted as the core and achieved in a sustainable manner.

Zyxel Group Sustainability Committee" discussed economic, social and environmental issues concerning the Company's benefits and prioritized the issues discussed according to their significance for the Company and stakeholders and the importance of the issues to the management of Zyxel Group to formulate its CSR strategies in line with our SDGs. [UN Sustainable Development Goals \(Official Website\)](#)

Report Structure

In accordance with the "Regulations Governing the Preparation and Filing of Corporate Social Responsibility Reports by TWSE Listed Companies" and the "Corporate Social Responsibility Best Practice Principles for TWSE/TPEx Listed Companies," this report is prepared with reference to the Global Reporting Initiative (GRI) Standards, the Sustainability Accounting Standards Board (SASB) Standards, and the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). A disclosure framework comparison table is provided in the Appendix of this report. In addition, ESG-related financial impacts are disclosed in line with IFRS S1 and S2, and the implementation timeline, content, and response strategies for integrating material sustainability risks into financial reporting have been planned.

GRI Standards

The Report was prepared in accordance with the framework of the GRI Standards: Core option. Materiality analysis results, disclosures, and reviews will be described in the following respective chapters.

SASB Standards

The Company first adopted the disclosure framework of the SASB Standards in the Report to disclose information on MitraStar Technology in the "electronic manufacturing services (EMS) and original design manufacturing (ODM) industry" and on Zyxel Communications and Zyxel Networks in the "hardware industry".

TCFD

The opportunities and risks of the financial impacts of climate change, as well as the response measures, were evaluated and disclosed.

Internal Audit

This report has been disclosed only after internal audit.

Department review: Reviewed by the heads of relevant business departments.

Sustainability Committee: The Sustainability Committee's communications team compiles the information, drafts the report after discussing with relevant departments

Chief Sustainability Officer: submit for approval.

External verification: verification audit

Board of Directors: submit for approval by the Board of Directors

Disclosure on the official website

External Verification

Financial Information:

The financial figures in this report are prepared in accordance with the International Financial Reporting Standards (IFRS) as endorsed by the Financial Supervisory Commission (FSC), and have been audited and verified by KPMG. All financial data are presented in New Taiwan Dollars (NTD).

Report Assurance:

This report has been independently verified by AFNOR Asia Ltd., in accordance with the AA1000 Assurance Standard (v3), Type 2, Moderate level of assurance, as well as the GRI Standards. The independent assurance statement issued is included in Appendix IV of this report. Appendix 5

Report Publication

Zyxel Group publishes its Sustainability Report on an annual basis. The previous report was issued in August 2024, this report in August 2025, and the next report is scheduled for August 2026.

Management System Verification Certificates

- ISO 9001 Quality Management System
- TL 9000 Telecommunications Quality Management System
- ISO 14001 Environmental Management System
- ISO 45001 Occupational Health and Safety Management System
- ISO 14064-1 Greenhouse Gas Inventory Certificate
- ISO 14067 Carbon Footprint Verification
- ISO 27001 Information Security Management System
- QC 080000 Hazardous Substance Process Management System

Feedback

If you have any questions or suggestions regarding the content or activities of this report, please feel free to contact us.

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Telephone +886-3-5783942	Address No. 6, Innovation 2nd Rd., Hsinchu Science Park 300, Taiwan

Any revisions to the information in this report will be noted with a description of the changes at the relevant disclosure sections.

Message From Our Chairman

As industrialization continues to escalate, the exponential increase in direct and indirect carbon emissions from human activities has led to intensifying greenhouse effects, extreme climates, and escalating natural disasters. Our planet and its ecosystem cannot sustain such patterns without facing impending destruction. To counteract the worsening climate crisis, global initiatives have been undertaken to reduce carbon emissions and achieve net-zero emissions by 2050. International trade regulations and carbon tariffs have also been established to curb emissions across industrial supply chains, including those involving cross-border trade.

As responsible global citizens, and in alignment with customer and national expectations, we have a duty to ensure the reduction of carbon emissions in our own production processes and upstream supply chains. This commitment not only aligns with green operational resilience but also represents a critical competitive edge for our sustainable development.

At Zyxel Group, a leading international networking brand, our mission is to build a sustainable enterprise. Our vision entails creating economic value, fostering environmental sustainability, and promoting positive social values. To this end, we have established the Zyxel ESG Committee, guiding our sustainable development policies and strategies. From top to bottom, our group is dedicated to innovative breakthroughs, launching carbon reduction initiatives, and providing green product solutions. Our actions reflect our dedication to addressing the significance and expectations associated with ESG (Environmental, Social, and Governance) concerns among stakeholders.

We will continue to communicate with colleagues worldwide, urging collaborative efforts that influence positive change. Together with our customers and suppliers, we co-create green economic value, shaping a sustainable future.

“

Zyxel Group unites for sustainable innovation and impact, partnering with customers and suppliers to co-create green economic value and shape a sustainable future.

Dr. Shun-I Chu,
Chairman of Zyxel Group



Message From Our CSO

At Zyxel Group, we're more than just talking when it comes to sustainability - we take action. Our unwavering commitment to sustainable operations sets us apart from the competition. As global concerns about climate change and net zero continue to grow, we're proud to be leading the way in developing eco-friendly and energy-efficient products that minimize our environmental impacts.

We're also dedicated to strengthening our green supply chain, cultivating top talent, and giving back to the community. We don't just talk about making a difference - we actually make it happen. By implementing sustainable concepts across all aspects of our operations, we're empowered to create a positive impact on the world. So why not join us? Together, we can work towards achieving the United Nations Sustainable Development Goals (SDGs) and create a brighter, more sustainable future for all.

“

We're committed to driving positive change with a proactive approach toward a more sustainable future.

Join us to make a real difference.

Denise Lin,
CSO of Zyxel Group



About Zyxel Group

The Zyxel Group Corporation began operations on August 16, 2010 in Shin-chu Taiwan, as it was set up to reorganize from Zyxel Communications which is founded in 1989 by Dr. Shun-I Chu. Zyxel Group has Zyxel Communications and MitraStar Technology as its subsidiaries is listed in the Taiwan Stock Exchange (TSE) under ticker number 3704 replacing Zyxel Communications. Zyxel Group offer complete networking solutions of Telco, SME and digital Home for a wide range of deployment scenarios.

Zyxel Communication Corp. develops innovative products under the Zyxel brand for telco, enterprise and home customers, while MitraStar concentrates on customized hardware/software integration of advanced products and technology for industrial needs.

Zyxel Group emphasizes on customer-oriented product and application design; this core value has been extended into products and services from every affiliated companies. Despite striving for individual growth, all our companies focus on better competitive advantage as a whole to contribute to the advancement of communication technology, which in turn fulfills the needs of the evolving Internet and its demanding users. This not only differentiates us from the rest of the pack, but also fosters higher momentum of the Group on the market.

Today, Zyxel Group has subsidiaries in America, China, Southeast Asia, Europe and Middle East. and 150 global markets served. As a responsible corporate citizen, the Zyxel Group operates under highly open and proficient governance to maintain healthy value growth and their commitment to a green environment.

Organizational Development

August, 2010: Zyxel Group Holding Corporation was funded through a share swap with Zyxel Communications. Zyxel Communications has been a totally held subsidiary of Zyxel Group Holding Corporation from then on.

January, 2011: The Product R&D and Manufacturing Business Unit was separated from Zyxel Communications. Zyxel Group Holding Corporation established MitraStar Technology, another totally held subsidiary thereof. Zyxel Group Holding Corporation is the parent company with Zyxel Communications and MitraStar Technology as its main affiliates.

February, 2019: Zyxel Communications segmented its channel business units. Zyxel Group Holding Corporation founded Zyxel Networks. Since the organizational segmentation and adjustment were carried out, Zyxel Communications has concentrated on the development of its business in the telecommunication market to offer well-structured broadband solutions and application services to telecommunications service providers and meet their needs for customization. Zyxel Networks has been devoted to satisfying the needs of small and medium-sized enterprises as well as domestic users.

June, 2023: The company changed its English name from "Unizyx Corporation" to "Zyxel Group Corporation."



4.1

NT\$4.1 billion Capital

25.97

NT\$25.97 billion
Revenue in 2024

3,690

Total Employees in 2024

Products & Services




The Zyxel Group offers service providers, businesses and home users with products and services through the Zyxel brand and MitraStar DMS services. In collaboration with customers, suppliers and all partners, Zyxel Group strives to stay ahead of the digital wave with its advanced, reliable broadband connectivity products and solutions.

To satisfy every demand from consumer devices to remote central office equipment, wired to wireless, home to cloud applications, we at Zyxel Group created a solid foundation with next-generation network technologies built into every new product for customers to design their own integrated applications. The efforts also allow the Zyxel Group to have a cross-the-board understanding on the global market and to create a more comprehensive range of solutions that empowers users to enjoy the best contemporary, smart networking experience.

We share the same values with our customers, and we are eager to satisfy them as well. Backed by our experienced teams, outstanding products and exceptional customer services, we are confident about every promise with our name on it.

For more details of products and services, please visit the [Zyxel Communications](#), [Zyxel Networks](#), [MitraStar Technology](#) websites.

Target Market

Service Provider	Business	Home
		
EMPOWERING SERVICE PROVIDERS TO UNLOCK THE POTENTIAL OF BROADBAND	EXPERIENCE A TRUE ONE NETWORK LIKE NO OTHER	INSPIRE SMART DIGITAL LIFE

Key Products

Zyxel Group takes the new generation of network communication technology as the core, and focuses on the product development and manufacturing of wired and wireless broadband networks, new generation networks, digital home multimedia and smart life applications, as well as Zyxel brand expansion. The main products and solutions can be divided into the following areas:

Broadband access equipment		Fiber optic equipment		Equipment for Businesses			Home Network			
Wireless and mobile customer premise equipment	Fixed line Customer premise equipment	Optical network units	Central office equipment	Wireless and mobile customer premise equipment	Fixed line Customer premise equipment	Optical network units	Central office equipment	Wireless and mobile customer premise equipment	Fixed line Customer premise equipment	Optical network units

Global Market

Zyxel Group currently has markets in the Americas, China, Southeast Asia, Europe and the Middle East, serving 150 regional markets around the world. More information: [2024 Zyxel Group annual report Page90.](#)

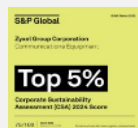
Sustainability Performance

Awards & Recognition

2025 S&P Global Ratings

Top 5%

Communications
Equipment Industry



FTSE Russell

Top 13%

Global Communications
Equipment Industry



MSCI ESG Indexes

ESG Ratings

A



EcoVadis

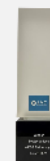
Zyxel Communications

Platinum Award



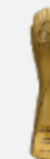
JAC Supplier Management Best Practice Awards

Supplier Risk Analysis



TCSA Taiwan Corporate Sustainability Awards

Taiwan Top 100 Sustainable
Role Model Enterprises Award



TCSA Sustainability Report

Sustainability Report

Platinum Award



TCSA Taiwan Corporate Sustainability Awards

Information Security
Leadership Award



CommonWealth Magazine

Corporate Carbon
Reduction Index

Outstanding Performance



2024 Cyber Security Award

Zyxel Networks

Innovation Award



Business Weekly Magazine

Carbon Competitiveness
Top 100



Healthy Workplace Certification

MitraStar Technology

Health Promotion Mark



Sustainable Achievements

Governance Aspect

Business Continuity Management Plan

Complete risk plans and drills for supply chain disruptions and production interruptions.

Employee Business Ethics

Completion rate of employee business ethics education and trainings **99.84%**
Major business ethics violations: **0**

Information Security Management

Major information security incidents: **0**
Obtained the **ISO 27001 certificate**

Customer Relations

Business confidential protection course completion rate: **99.52%**

Supplier Sustainability Management

Held **2 Sustainability Supplier Conferences** in Hsinchu and Wuxi.
Key suppliers achieving **100%** completion in both the signing of the Supplier Code of Conduct and the participation in ESG training courses.

Environmental Aspect

Science Based Targets initiative

In 2025, the company was officially validated by the SBTi, receiving certification for both its near-term and net-zero targets.

Low-carbon Transformation Plan

Implemented the MOEA subsidy program: **Lead the Supply Chain's Low-Carbon Transformation and Upgrade.**

Greenhouse Gas Reduction and Inventory

Conducted **Scope 3** GHG inventory, achieving a **22.76%** reduction in 2024 compared to the 2021

Biodiversity Risk Assessment

Using the **WWF Biodiversity Risk Filter** to evaluate global operations and suppliers.

Establish national standard for product environmental footprint

Developed **standards for calculating environmental information exposure for the Ministry of Environment.**

Social Aspect

Women in Technology

Women as Senior Managers: **18.4%**
Women in STEM positions: **24.3%**

Human Resource

Human capital investment return rate: **6.52**
Average training hours: **28.9 hours**

Human Rights Due Diligence

Released **human rights due diligence questionnaire**
Major human rights violations: **0**
Human rights-related training courses completion rate: **99.71%**
Migrant workers onboard with zero recruitment

Talent Training, Social Care

Shun-I Chu Scholarship: NT\$88.4 million was awarded to 349 students. Sponsored 8 talent cultivation and social care activities, organized the Christmas charity event "Love in Christmas: Shoebox of Love", and donated networking equipment through the Taiwan and Thailand subsidiaries.

Sustainability Highlights

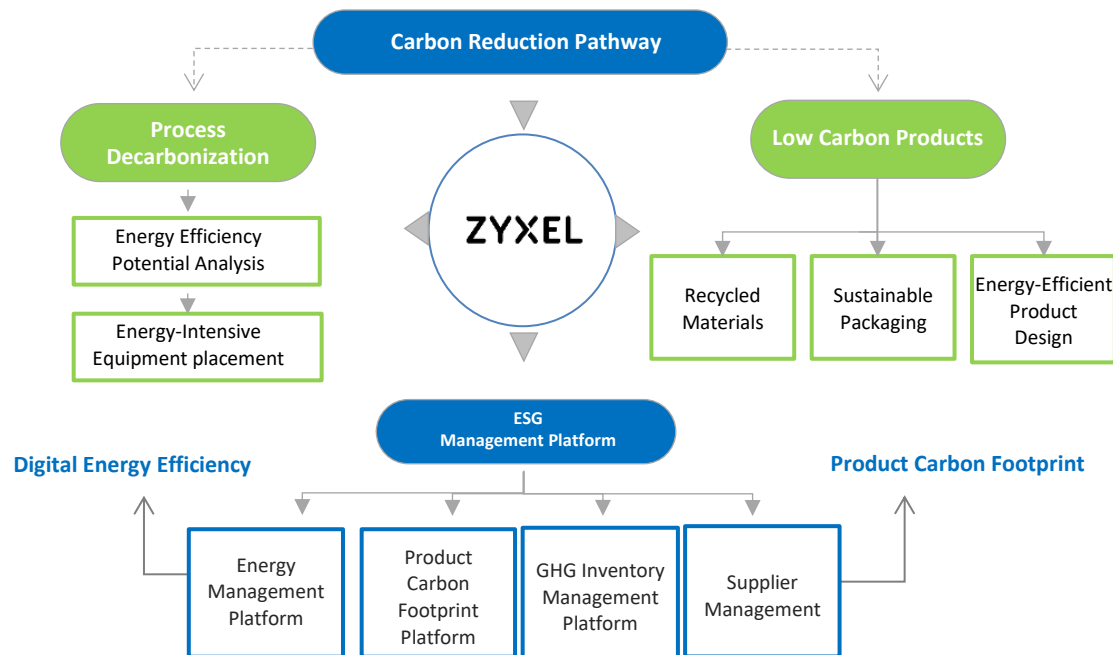
Lead the Supply Chain's Low-Carbon Transformation and Upgrade

Project Background

Zyxel Group, through its subsidiary MitraStar Technology, has received a subsidy from the Industrial Development Administration, Ministry of Economic Affairs, for the project “Low-Carbon and Smart Transformation of Manufacturing through Large Enterprises Supporting SMEs.” The project, running from 2023 to September 2025, brings together resources from industry, government, and academia. By working hand in hand with its supply chain partners, the initiative focuses on energy-saving technologies, equipment upgrades, carbon reduction, and digital carbon data management, driving a new path toward low-carbon transformation.

Green & Sustainable Supplier Conference

In 2024, Zyxel Group hosted supply chain conferences at both its Taiwan headquarters and MitraStar's Wuxi plant, under the theme “Co-Creating a Resilient Supply Chain for a Sustainable Future.” Nearly 200 key supplier partners were invited to participate. The conferences highlighted topics such as sustainable supply chain governance, Zyxel Group's sustainability achievements, green product design requirements, and digital carbon management. In addition, outstanding ESG-performing suppliers were recognized, encouraging all partners to actively respond to sustainability and carbon reduction initiatives, demonstrating Zyxel Group's mission and responsibility as a leader in the networking industry.



▲Supplier Conference at Taiwan Headquarters



▲Outstanding Sustainable Supplier Awards



▲Supplier Conference in Wuxi

Zyxel Group Signs MOU with the Ministry of Justice to Build a Stronger National Cybersecurity Defense

Against the backdrop of escalating global cybersecurity threats, Zyxel Group and the Investigation Bureau of the Ministry of Justice signed a Memorandum of Understanding (MOU) in December 2024 on “National Cybersecurity Joint Defense, Trade Secret Protection, and Intelligence Sharing.” This agreement not only demonstrates a new level of public-private collaboration in Taiwan’s cybersecurity domain, but also marks a significant milestone in cross-sector cooperation to safeguard the nation’s critical infrastructure.

As the wave of digitalization accelerates, cybersecurity has become an indispensable part of business operations and a vital cornerstone of corporate sustainability. Zyxel Group continues to invest in the field of information security, not only strengthening protective mechanisms within its own operations, but also transforming its cybersecurity capabilities into a service advantage—providing customers with comprehensive and reliable information security solutions.

MOU on National Cybersecurity Joint Defense :

1. Threat Intelligence Sharing and Joint Defense Collaboration

Establishing a real-time threat intelligence exchange mechanism to build a comprehensive joint defense network and enhance overall protection efficiency.

2. Incident Response and Legal Support

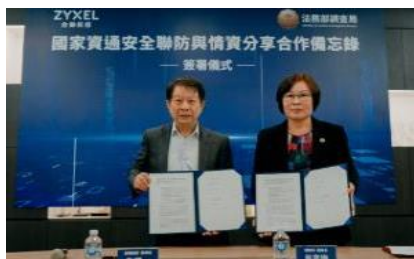
Collaborating on cybersecurity incident handling by providing traceability, investigation, and legal foundations to ensure that response measures are both legitimate and comprehensive.

3. Cybersecurity Drills and Enhanced Response Capabilities

Simulating diverse attack scenarios to strengthen defense mechanisms and improve the response capabilities of all units.

4. Case Sharing and Technical Exchange

Promoting the sharing of cybersecurity experiences and the advancement of technical applications to foster the maturity and development of the cybersecurity ecosystem.



Zyxel Honored with Domestic and International Awards for Innovation and Sustainability

Zyxel has received the Red Dot Product Design Award, Golden Pin Design Award, and Taiwan Excellence Award, recognizing its innovation and sustainability. These honors underscore its R&D progress and commitment to intelligent, sustainable broadband solutions for telecom operators and SMEs.

The Minimal Series

1. Sustainable Design

The casing is made of 100% recycled plastic, cutting carbon emissions by up to 80%*. Packaging uses 100% recycled kraft paper with plant-based ink, and all inner packaging is plastic-free.

2. Circular Economy

The modular snap-fit casing allows easy assembly, disassembly, and replacement, significantly boosting refurbishment efficiency. Its independent antenna design minimizes performance risks during refurbishment, prolongs product lifespan, and supports circular use. (More details on [Zyxel Communications'](#) official website.)

* Compared with products made from virgin ABS plastic.



USG LITE 60AX Cybersecurity Router

Enhanced Sustainable Design to Cut Carbon Footprint:

The casing uses up to 95% PCR recycled plastic, reducing carbon emissions by about 81%. Packaging is halogen-free, printed with soy-based ink, and 40% smaller in volume, improving transport efficiency and reducing environmental impact—showcasing a full life-cycle green commitment.

Performance, Security, and Cloud Management for Efficient Operations:

Powered by a quad-core processor and WiFi 6 for high speed with low energy use. Built-in security blocks ransomware and malware in real time without extra subscriptions. Integrated with the Nebula cloud platform, it reduces on-site maintenance and improves both manpower and energy efficiency. (More details on [Zyxel Networks'](#) official website.)



ESG EDM

To convey Zyxel Group's core values of sustainable development, we launched a Sustainability e-Newsletter in 2023 as a communication platform to share our latest sustainability initiatives with stakeholders. The e-Newsletter also aims to educate and inspire subscribers to access sustainability-related information and join us in collective action. It reflects our commitment to the environment and society, fosters an internal culture of continuous improvement, and creates a positive impact on both society and the environment. Moreover, the digital format effectively reduces resource consumption, aligning with the principles of sustainable development.



Zyxel Group has been listed in S&P Global's Sustainability Yearbook 2024. The company's standout performance earned it a spot in the Top 5% and Industry Mover categories, underscoring its unwavering commitment to sustainable environmental, social, and governance (ESG) practices.



In the CSA assessment, Zyxel excelled in key areas including energy consumption, product design, and process innovation. Particularly noteworthy is Zyxel's attainment of full marks for its IT network security measures. A strong emphasis on human rights in the workplace further contributed to Zyxel's outstanding performance. This recognition further underscores Zyxel Group's dedication and achievements in sustainable development.

The DJSI Corporate Sustainability Assessment (CSA) is a rigorous evaluation process conducted by S&P Global that measures the sustainability performance of companies across 62 industries worldwide. Through a comprehensive assessment methodology, the CSA evaluates companies in 23 different key themes based on economic, social, and environmental criteria, providing insights into their sustainability practices and performance.



Dr. Shun-I Chu, our Founder and Chairman, recently invited by both Taiwan National Chiao Tung University and National Tsing Hua University to present the Shun-I Chu Zyxel Scholarship to a total of 39 outstanding students. For over 26 years, this scholarship has empowered more than 6,000 students, with the scholarship fund now totaling NT\$160 million.

Zyxel is passionate about nurturing the next generation of talent. Through annual scholarships, funding, and diverse talent development programs, Zyxel is dedicated to providing students with the resources they need to succeed. [\(Press release \(in Chinese\)\)](#)



Zyxel Foundation's Pioneer Project: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for rural students

Zyxel Foundation, in collaboration with Taiwan IC Broadcasting and Hsuan Chuang University, has launched the "Pioneer Seeding Project" summer camp to bring cutting-edge technology and cultural insights to underprivileged children in Taiwan rural areas.

This initiative supports the United Nations' fourth Sustainable Development Goal (SDG14) and over 50 students and teachers participated in this project.



Zyxel Group is actively advancing toward its net-zero emissions goal. Beyond reducing its own carbon footprint, Zyxel Group leverages its influence to support smaller companies by establishing a Zero Carbon Academy, conducting audits, and assisting suppliers in greenhouse gas and product carbon footprint inventories. Through hands-on guidance, Zyxel Group empowers suppliers in carbon reduction and carbon literacy, joining forces with partners on the path to net-zero transformation. [\(Full report in Business Weekly\)](#)



Zyxel Group has published its 2023 Sustainability Report, highlighting key achievements across multiple ESG dimensions. These include partnering with suppliers to build a green supply chain, strengthening Business Continuity Management (BCM), investing in green product development, advancing diverse initiatives in talent development and environmental protection, and receiving international ESG awards in recognition of its sustainability efforts.

We invite you to explore the [2023 Sustainability Report](#) and witness our unwavering commitment to a sustainable future.

Ecological restoration initiative and employee nature experience

The Zyxel Foundation has sponsored the "Nature Valley Environmental Initiative Restoration Project," aimed at restoring endangered fern species that were once threatened by disease. This initiative exemplifies a tangible commitment to environmental sustainability and biodiversity.



Zyxel Group recently held its annual supplier conferences at its headquarters in Hsinchu, Taiwan, and its Wuxi facility in China, bringing together nearly 200 key supply chain partners. The conference focused on sharing Zyxel's supply chain governance principles, key achievements, product design guidelines, and success stories.

To strengthen collaboration and align efforts with Zyxel's sustainability strategies, Zyxel presented awards to three top-performing suppliers at each event. These award recipients shared their best practices and achievements, inspiring all partners to collectively advance sustainability initiatives and create a more resilient, sustainable supply chain. [\(Read more\)](#)



Zyxel Group partnered with MJIB empower national cybersecurity

Dr. Shun-I Chu, Chairman of Zyxel Group, signed a Memorandum of Understanding (MOU) with Taiwan's Ministry of Justice Investigation Bureau (MJIB), a key government agency safeguarding national security. This collaboration underscored Zyxel's core competence in leading national cybersecurity technology.

The MOU focused on establishing a comprehensive nationwide framework for shared threat intelligence, cybersecurity drills, incident response, and legal support. This collaboration positioned Zyxel Group as a trusted partner in the nation's top initiatives.

| Sustainable Governance

A. Strategy & Blueprint

B. Sustainability Committee

C. Stakeholder Communication



A. Strategy & Blueprint

Zyxel Group's sustainable management framework is based on our visions and integrated with our sustainability policies. We supervise sustainability matters and formulate and execute strategies through the Company's management platforms, such as the Board of Directors, Advisory Committee and Sustainability Committee.

The Sustainability Committee responds to the UN's SDGs and analyzes and identifies the material issues of the main stakeholders' concern, e.g., investors, customers, government agencies, suppliers, employees, and communities, thereby setting the Company's sustainable development goals. Our sustainability policies are implemented on the basis of our five main sustainability focuses, namely sustainable management, corporate governance, environmental protection, sustainable products, and friendly workplace and social welfare in communities.



B. Sustainability Committee

Zyxel Group takes the Zyxel Group Sustainability Policy as our highest guiding principle for our sustainable development, and has established the Zyxel Group Sustainability Committee as the highest-level management for the planning, implementation, and supervision of our sustainable development strategy. The Zyxel Group Sustainability Committee formulates policies and goals for its three subsidiaries to operate sustainably. It discloses the vision and mission of sustainable development, sees to it that the subsidiaries carry out operations sustainably, and regularly reviews the implementation results.

The Zyxel Group Sustainability Committee is composed of Board of directors, senior executives, and members of relevant departments. The members include Zyxel Group and its three subsidiaries Zyxel, ZNet, and MitraStar. This steering committee acts as a strategic guidance unit. The chairman of Zyxel Group serves as the committee chairman to supervise the sustainability work and report to the board of directors about the subsidiaries' implementation of sustainable operations. °

In 2022, the former Chief Operating Officer of Zyxel Communications was appointed as the dedicated Chief Sustainability Officer. The establishment of the "Sustainability Office" followed, overseeing and supervising sustainability initiatives, reporting to the board of directors, and providing guidance to subsidiary companies on their various sustainability efforts.

The "Sustainability Office" has a Corporate Communication and Planning Group which is responsible for resource integration, communication, and coordination between Zyxel Group and the three subsidiaries. It guides the implementation of the strategy of the committee from above and communicates with each executive team from top to bottom to enforce policies in a horizontally cascaded manner.

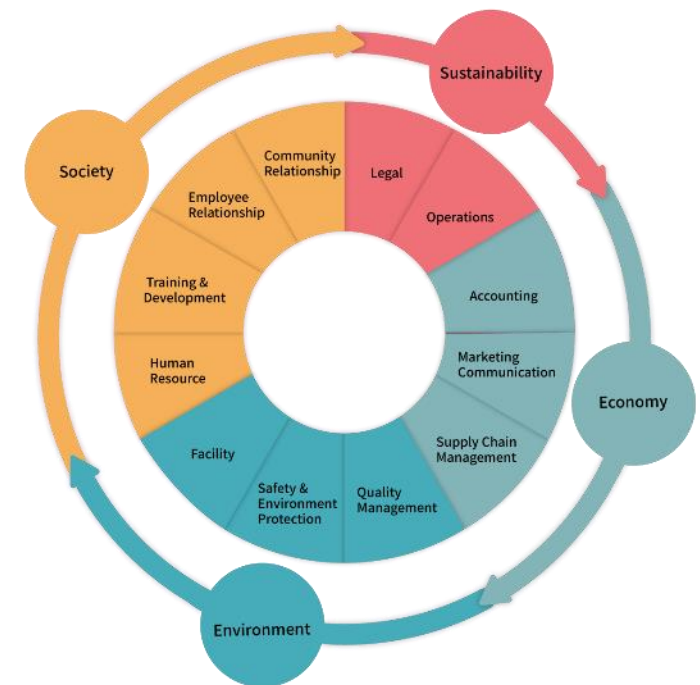
The Zyxel Group Sustainability Committee is composed of a number of sustainability working groups, headed by the top managers of relevant departments, who set annual and long-term goals, implement sustainable operations, and regularly report implementation results.

The Zyxel Group Sustainability Committee holds weekly reports where the sustainability working groups take turns to have dialogues, discuss with the Sustainability Manager, review the implementation status of related businesses, and check for continuous improvements. All of the sustainability working groups also report to the chairman of the steering committee every month to review the short, medium, and long-term sustainability goals and the blueprint for sustainable development. At the quarterly board meeting, the chairman of the steering committee and the communications team report to the directors on major decision-making issues, sustainability plans, and work progress.

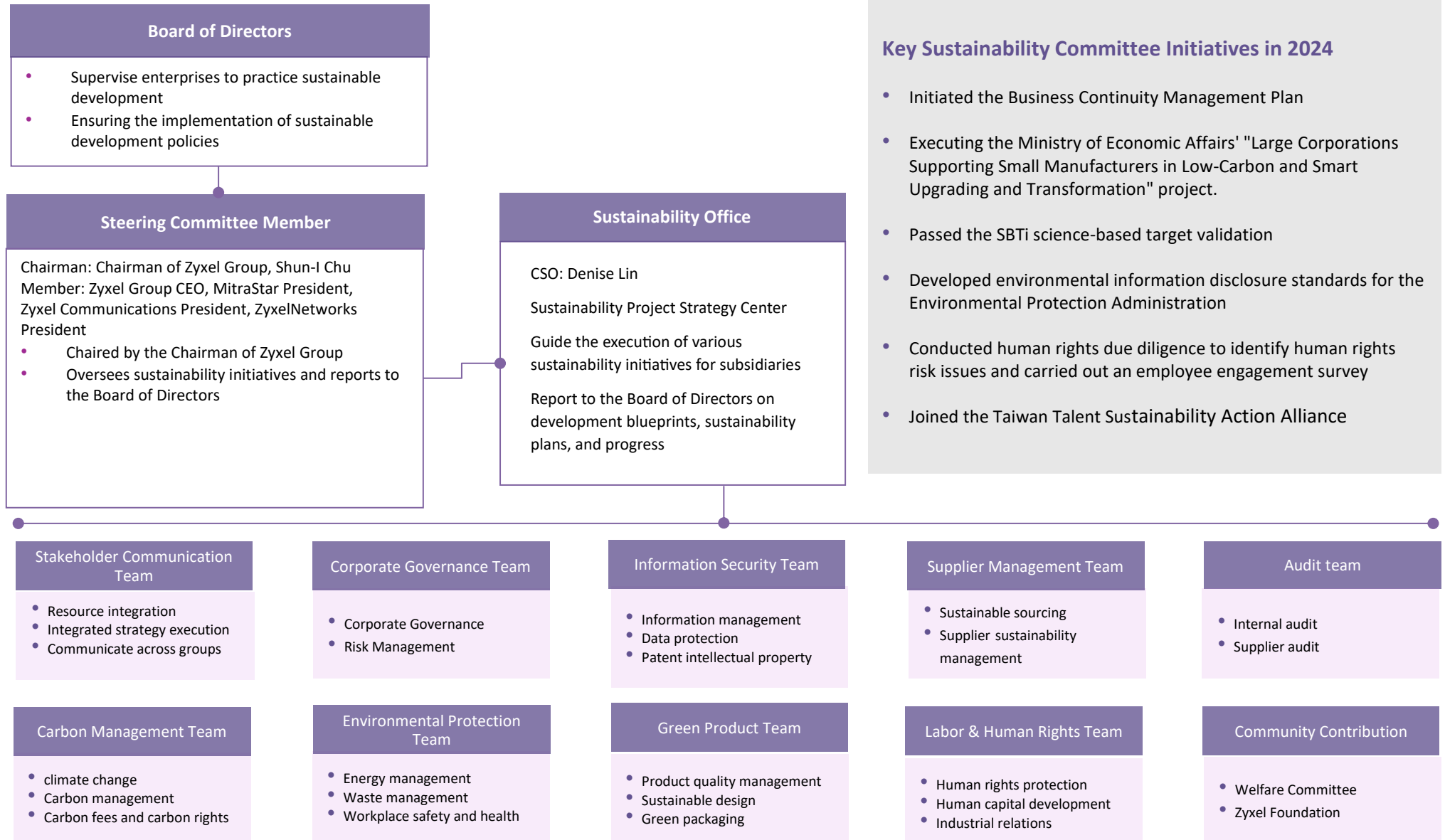
The Sustainability Committee also releases ESG newsletters to promote our ESG initiatives and accomplishments to employees and customers, as well as providing ESG knowledge education. Additionally, in accordance with the functions of the committee's working groups, educational training is arranged periodically to progressively integrate sustainability principles and practices into the DNA of employees, thereby fostering a company culture that collectively achieves our sustainability objectives.

Departmental ESG KPIs

To enhance the effectiveness of ESG governance, each department comprising the Sustainability Committee is assigned annual ESG Key Performance Indicators (KPIs) based on Zyxel Group's established sustainability goals. This ensures the concrete implementation of these objectives. These KPIs are designed to align with each department's responsibilities and the company's sustainability strategy, encompassing aspects such as carbon emission reduction, resource efficiency, supply chain sustainability, employee development, social engagement, and internal and external sustainability promotion. These KPIs are integrated into the performance evaluation system to strengthen accountability and drive execution. Through regular meetings for review and progress tracking, we ensure that sustainability goals are integrated into daily operations, further enhancing overall sustainability management effectiveness and organizational resilience.



Sustainability Committee Management Structure



C. Stakeholder Communication

In managing stakeholder concerns, Zyxel Group has established a stakeholder management process with reference to the Global Sustainability Standards Board (GSSB) Universal Standards, including GRI 3: Material Topics (2021), the SASB industry standards, and the IFRS Sustainability Disclosure Standards. In addition, the process aligns with the principle of double materiality set forth in the European Sustainability Reporting Standards (ESRS) issued by the European Financial Reporting Advisory Group (EFRAG) under the EU Corporate Sustainability Reporting Directive (CSRD), as well as the Enterprise Risk Management (ERM) framework for identifying, assessing, responding to, and monitoring risks that may affect the achievement of corporate objectives.

Through the identification of stakeholders and analysis of their concerns, Zyxel Group determines its key stakeholders. Applying the ESRS principle of double materiality, the company conducts assessments of financial materiality (impact on operations) and sustainability materiality (impact on sustainable development). Combined with stakeholder surveys on the level of attention to sustainability topics, Zyxel Group evaluates both the positive and negative impacts of these issues on business operations and sustainable development, thereby defining the company's material topics.

Based on these results, Zyxel Group formulates strategies, establishes implementation guidelines, defines management procedures, and sets short-, medium-, and long-term targets. The company also builds communication channels and develops action plans to strengthen stakeholder engagement. Progress and outcomes of stakeholder engagement and material topics are reported to the Board of Directors annually and disclosed on the company's website and in its Sustainability Report. Zyxel Group continues to monitor, review, and improve the effectiveness of these measures to reinforce its corporate responsibility toward stakeholders.

Materiality Analysis Project

Stakeholder Issue Survey Project

To comprehensively engage with our stakeholders and understand their concerns regarding the company, we launched the "Zyxel Group Stakeholder Issue Survey Project" in 2022, commissioning the Center for Corporate Sustainability at Tunghai University as a third-party consultant. The Zyxel Group Sustainability Committee first underwent training on stakeholder surveys.

Based on the Committee's feedback on company-related issues, and considering GRI, CDP, and DJSI questionnaire topics, we designed two surveys: one for company executives on the "Impact of Sustainability Issues on Operations," and another for employees, suppliers/contractors, customers, investors, and government/community stakeholders on the "Level of Concern for Sustainability Issues." We also plan to conduct regular assessments.

Double Materiality Assessment

Based on the double materiality principle of the European Sustainability Reporting Standards (ESRS), the Risk Management Group of the Sustainability Committee referenced the standard classifications of economic, environmental, and social (including human rights) impacts on business areas from *GRI 1: Foundation 2021*, the GRI Universal Standards for Sustainability Reporting. This was done to comprehensively assess the impact of our operations and identify the company's material topics (detailed information can be found in the Risk Management section).

The double materiality assessment was completed in conjunction with a survey of company executives on the "Impact of Sustainability Issues on Operations."

Stakeholder Online Questionnaire Survey

Zyxel Group values feedback from all stakeholders. We maintain a "Stakeholder Issue Online Survey" on our official website's stakeholder page. We regularly collect stakeholder concerns regarding the company, with dedicated personnel responsible for processing and inviting relevant departments to assess and respond. In 2024, we received a total of 236 survey responses. Through analysis of the issues raised in the survey feedback, we assessed Zyxel Group's material topics of concern to stakeholders, which remained unchanged from the previous year.

Materiality Identification and Analysis Process

Understanding the Organizational Context

1 Identification

6 stakeholders: Investors, Employees, Customers, Suppliers, Contractors, Government/Communities

- Following GRI Standards and the AA1000 Stakeholder Engagement Standard (SES), we establish a stakeholder engagement process based on five principles: Dependency, Responsibility, Tension, Influence, and Diverse Perspectives.
- Through the Zyxel Group Sustainability Committee's ESG consensus meeting, we identify stakeholders who impact or are impacted by the company's operations in economic, environmental, and social areas.

2 Collect issue

26
Preliminary Issues

- Feedback from 52 members of the Zyxel Group Sustainability Committee during ESG consensus meetings.
- Consideration of regulatory requirements from governing bodies, international laws and guidelines, various management systems, questionnaires, feedback from grievance mechanisms, and media reports, along with consultation with internal and external experts.
- A decision to evaluate 8 governance, 6 economic, 6 environmental, and 6 social sustainability issues.

3 Interest Identification

Stakeholder Engagement

- Survey recipients were selected for "representativeness" based on three key principles: "frequency of interaction," "level of impact," and "degree of concern," targeting the six key stakeholder groups identified.
- In 2024, a total of 236 "Stakeholder Concern for Sustainability Issues" questionnaires were collected.

4 Double Materiality Assessment Financial Materiality

Operational Impact

- A survey of 286 company executives was conducted to assess the "Impact of Sustainability Issues on Operations."
- The analysis focused on four operational impacts: "Business Growth," "Customer Trust," "Talent Retention," and "Risk Management," considering both positive and negative impacts, as well as the intensity of the impact.

Identifying the Magnitude of Impacts

5 Double Materiality Assessment Impact Materiality

Sustainability Impact

- The "Sustainability Committee Risk Management Group" assessed the "Impact Severity," "Short-, Medium-, and Long-Term Impacts," and "Likelihood and History of Occurrence" of operational impacts on various issues related to corporate governance, the economy, the environment, and society.

Impact Analysis

6 Identify Positive and Negative Impacts

Matrix Diagram

- Integrating the analysis of "Stakeholder Concerns Regarding Sustainability Issues," "Impact on Organizational Operations," and "Impact on Sustainable Development," we identified 26 preliminary sustainability issues. For each issue, we discussed the positive and negative impacts, both actual and potential, and mapped them on a positive/negative impact matrix.

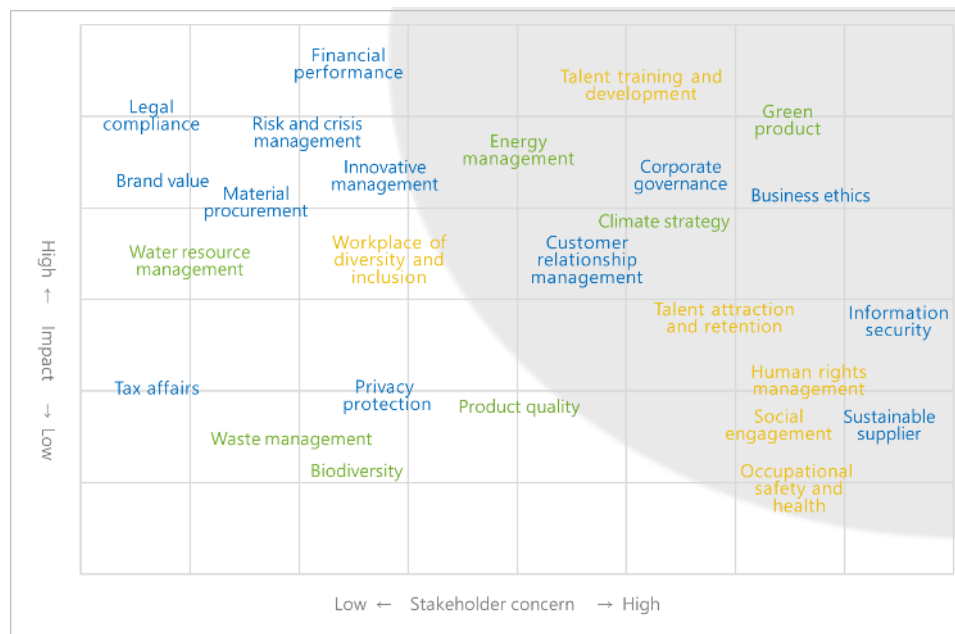
Determining Material Topics

7 Determine Major Issues

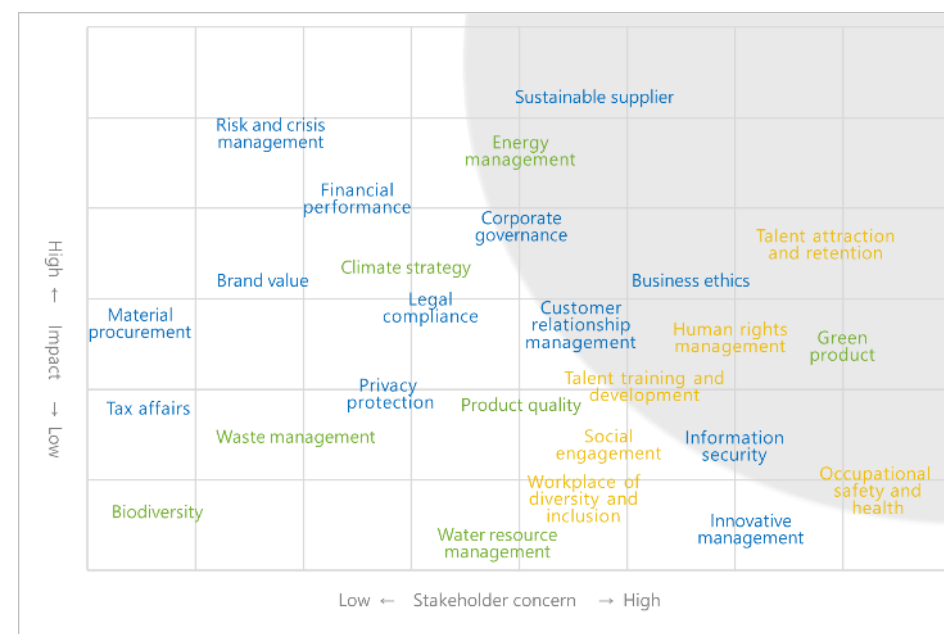
13
Major Issues

- Based on a positive/negative impact matrix, issues were prioritized, and following consultation with internal and external experts, 13 material topics were selected.
- The selected material topics were presented to the Board of Directors through the Sustainability Committee and subsequently incorporated into internal performance management procedures.
- For each material topic, the impact on operations was assessed, strategies were developed, management approaches were defined, and short-, medium-, and long-term goals were established. The progress of these goals is reviewed annually to track performance and inform future improvements.

Positive Impact Matrix Diagram



Negative Impact Matrix Diagram



13 Major Issues

5 Governance/Economic Issues

Corporate Governance
Business Ethics
Information Security
Customer Relationship Management
Sustainable Supply Chain



3 Environmental Issues

Climate Strategy
Energy Management
Green Product



5 Social Issues













Talent Attraction and Retention
Talent Training and Development
Human Rights Management
Occupational Safety and Health
Social Engagement










Material Issues for Operational & Value Chain Impact








Aspect	Major Issue	Impact Identification			Impact on Operations				Impact on the Value Chain			Significant Impact		Mitigation Measures for Positive and Negative Impacts
		Actual	Potential	Period	Business Growth	Client Trust	Talent Retention	Risk Management	Suppliers	Company Operations	Customers	Positive	Negative	
Governance	Corporate governance		●	Long-term	●	●	●	●		●		Ensure Stable Company Development and Achieve Sustainable Operations	Incurring Fines and Reputation Damage, Increasing Operational Costs	Establish an effective corporate governance framework and control mechanisms to enhance governance capabilities
	Business ethics		●	Short-term				●		●		Enhance Company Reputation and Brand Image	Violation of Professional Ethics, Reducing Stakeholder Trust	Conduct ethical risk assessments and supervision
	Information Security	●		Short-term		●		●		●	●	Meet Customer Requirements for Information Security	Data System Failures and Cyberattacks, Affecting Operations and Causing Financial Losses	Identify cybersecurity management risks to prevent security incidents
	Customer relationship management	●		Long-term	●	●		●		●	●	Customer Trust, Enhance Partnerships with Clients, and Support Business Growth	Increased Customer Relationship Management Costs, Affecting Performance	Establish smooth customer communication channels. Uphold product quality and service, providing customers with optimal solutions.
	Sustainable supplier	●		Short-term	●	●		●	●	●		Establish a Sustainable Value Chain and Strengthen Supply Chain Resilience	Raw Material Price Fluctuations, Rising Costs. Supply Shortages, Delays, and Interruptions in Key Raw Materials and Consumables, Affecting Delivery Schedules.	Establish a raw material price risk management mechanism. Actively develop new material sources to avoid monopolization by a few suppliers. Establish safety stock levels
Environment	Climate strategy		●	Long-term		●		●	●	●	●	Leverage Operational Opportunities Arising from Climate Change	Adjustments to Production Processes, Energy Usage, and Emission Controls to Meet International Net-Zero Targets and Environmental Regulations, Increasing Compliance Costs and Risks	Identify climate change risks and opportunities, implement risk mitigation measures. Set carbon reduction goals and strategies
	Energy management		●	Long-term		●		●		●		Accelerate Renewable Energy Deployment and Reduce Operational Costs	Insufficient Renewable Energy, Increasing the Difficulty of Achieving Carbon Reduction Goals	Increase the use of renewable energy
	Green product	●		Short-term	●	●		●		●	●	Expand Market for Sustainable Products	Increased Investment in Green Product R&D, Raising Research and Development Costs	Build product design capabilities that reduce environmental impact
Society	Talent attraction & retention	●		Short-term			●	●		●		Foster a Diverse and Inclusive Corporate Culture to Create Positive Impact and Enhance HR Competitiveness	Talent Attrition	Monitor market salary trends to ensure competitive compensation packages
	Talent cultivation & development	●		Short-term			●	●		●		Enhance Employee Skill Development to Improve Corporate Competitiveness and Address Market Challenges	Increased Costs for Talent Development and Management	Offer diverse talent training programs to attract and retain talent
	Human rights management	●		Short-term			●	●	●	●		Promote Smooth Operations through Bidirectional Communication in Labor Relations	Human Rights Violations Resulting in Fines. Non-compliance with Customer ESG Audit Requirements, Affecting Business Development. Impact on Corporate Image	Promote the concept of human rights protection
	Occupational Safety & Health	●		Short-term			●	●	●	●		Create a Healthy and Safe Work Environment to Enhance Employee Loyalty and Assist in Recruitment	Regulatory Violations Leading to Fines, Increasing Operational Costs, and Affecting Corporate Image. Resulting in Low Employee Retention Rates	Provide a healthy and safe working environment
	Social Participation	●		Long-term			●			●		Strengthen Community Relations and Brand Image. Engage in Community Activities to Increase Employee Cohesion	Costs for Community Sponsorship and Participation Activities	Build good community relations and actively engage in community affairs

Major Issues Boundaries

	Major Issue	GRI Standards	SASB	SDGs	Company internal boundaries					Company external boundaries			Chapter
					Zyxel Group	Zyxel Communications	Zyxel Networks	MitraStar	Overseas subsidiaries	Customer	Supplier	Governance /Community	
Governance	Corporate governance	207, 405-1			•	•	•	•	•				Financial Performance Diversity and inclusion Recruitment
	Business ethics	205, 206			•	•	•	•	•				Business Ethics
	Information Security	417, 418			•	•	•	•					Information Security Management
	Customer relationship management	418-1				•	•	•		•			Customer Relation
	Sustainable supplier	204-1, 308-2, 414-2	Supply Chain Management Sources of Raw Materials			•	•	•			•		Supplier Sustainability
Environment	Climate strategy	201-2 305-1~305-4, 305-6~305-7			•	•	•	•				•	Climate Change
	Energy management	302-1, 3~4			•	•	•	•					Energy Management
	Green product	416-2, 417				•	•	•		•	•		Sustainable Product
Society	Talent attraction & retention	401, 405-1	Labor Practices Employee Diversity and Inclusion		•	•	•	•	•				Diversity and inclusion Recruitment
	Talent cultivation & development	404			•	•	•	•	•				Human Capital Development
	Human rights management	402-1, 405, 406, 407, 408, 409			•	•	•	•	•		•		Human Rights Management
	Occupational Safety & Health	403	Working Conditions		•	•	•	•					Workplace Health & Safety
	Social Participation	203-1 203-2			•	•	•	•				• •	Community Contribution

Sustainability Strategy in Response to Material

Pillar	Strategy	Issue	Stakeholder	Operational Impact	Risk	Opportunity	Action Plan	Key Performance Indicator	Goals			SDGs	Report Section
									2025	2027	2030		
Sustainable Operations	Implementing Sustainable Operations	Corporate Governance	Investors, Government	Achieving Sustainable Business Goals	Leading to Operational Risks and Reputational Damage	Enhancing Decision-Making Efficiency and Sustainable Competitiveness	Establishing an Effective Corporate Governance Structure and Control Mechanisms to Enhance Governance Functions	Corporate Governance Evaluation Ranking	Top 6%~20%		Corporate Governance		Corporate Governance
		Business Ethics	Investors, Government, Customers, Suppliers	To create a sustainable business environment, avoid dishonest acts that harm customer trust and cause corporate losses.	Harming Customer Trust and Bringing Operational Risks	Building an Ethical Corporate Culture and Sustainable Trust	Establishing Business Ethics Policies and Regulations to Shape a Corporate Culture Based on "Integrity" and Conducting Ethics-Related Risk Assessments and Supervision	Completion Rate of Business Ethics Education and Training	>98%		Business Ethics		Corporate Governance C. Business Ethics
								Number of Major Business Ethics Violations	0 Cases				
		Information Security	Customers	Ensuring the Confidentiality of Information Assets to Comply with Regulations and Gain Customer Trust	Leading to Operational Disruptions and Reputational Losses	Protecting Data Confidentiality, Complying with Regulations, and Strengthening Customer Trust	Identifying Information Security Management Risks, Preventing Information Security Incidents, and Enhancing Employee Information Security Awareness and Knowledge	Completion Rate of Information Security Education Courses	>98%		Information Security		Corporate Governance E. Information Security Management
								Number of Major Information Security Incidents	0 Cases				
								Annual ISO 27001 Certification	Annually Certified				
	Creating Value Chain	Customer Relationship Management	Customers	Gaining Customer Satisfaction and Trust to Achieve Greater Profits	Damaging Customer Loyalty and Revenue Performance	Improving Customer Satisfaction and Business Trust	Establishing Smooth and Efficient Customer Communication and Implementing Customer Information Protection Mechanisms	Customer Satisfaction (Full Score: MitraStar 10, Zyxel Networks 5)	MitraStar >9 Zyxel Networks >4.3	Customer Relationship Management			Value Chain A. Customer Relationship
								Coverage Rate of Trade Secret Protection Courses	>95%				
		Sustainable Suppliers	Suppliers	Supplier's sustainable management will strengthen partnerships with the supply chain and practice the company's sustainable value.	Lack of Sustainability Awareness Brings Operational Disruptions and Brand Risks	Strengthening Partner Collaboration and Value Chain Resilience	Implementing a Sustainable Supply Chain Management Model and Establishing Sustainable Supply Chain Partnerships	Key Suppliers: • Completion Rate of Signing CSR Commitments • Completion of ESG Assessment Questionnaires • Completion of ESG Education and Promotion Courses	MitraStar 80% Zyxel Communications/Zyxel Networks 100%	Sustainable Suppliers	Suppliers		Value Chain B. Supplier Management
Sustainable Value	Mitigating Environmental Impact	Climate Strategy	Government, Community	Understanding the Risks and Opportunities of Climate Change Can Supervise Operational Strategies and Financial Planning, Reducing the Financial Impact of Climate Risks	Causing Production Disruptions and Financial Losses	Enhancing Operational Resilience and Carbon Management Effectiveness	• Conduct Climate Disaster Drills for Business Continuity Management Plans to Strengthen Climate Resilience • Set Carbon Reduction Targets and Promote Greenhouse Gas Emission Reduction	Number of Days of Production Disruption Caused by Climate Disasters	0 Days	Climate Strategy			Sustainable Environment A. Climate Change
								Set Targets According to SBTi	Set Targets According to SBTi	Carbon reduction of 42%			
		Energy Management	Government, Community	Assisting in Sustainable Operations, Implementing Environmental Protection and Energy Conservation Visions, Reducing Greenhouse Gas Emissions, and Reducing Energy Costs	Increasing Cost Expenditures and Environmental Risks	Improving Energy Efficiency, Reducing Emissions, and Reducing Operating Costs	Improving Energy Efficiency	Percentage Reduction in Electricity Intensity Compared to the Base Year 2021	Reduce 2%	Reduce 2%	Reduce 2.2%		Sustainable Environment B. Energy Management
							• Complete Solar Power Installation • Increase the Proportion of Renewable Energy Use	Hsinchu Plant established	Renewable energy >7% at Hsinchu Plant				

Pillar	Strategy	Issue	Stakeholder	Operational Impact	Risk	Opportunity	Action Plan	Key Performance Indicator	Goals			SDGs	Report Section
									2025	2027	2030		
Sustainable Value	Innovative Sustainable Products	Green Products	Customers, Suppliers	Enhancing the Sustainable Value of Products, Implementing Green Product Research and Development and Design to Establish Product Design Capabilities that Reduce Environmental Impact	Weakening Market Advantages and Brand Image	Reducing Environmental Impact and Enhancing Product Competitiveness	<ul style="list-style-type: none"> Establish Green Product-Related Design Guidelines and Checklists Product Carbon Footprint Inventory and Management Implement Green Product Design and Packaging 	<ul style="list-style-type: none"> Establish Product Carbon Footprint Operating Procedure Documents Achievement of Product Carbon Footprint Management Goals Green Product Design Implementation Ratio 	Green Product Design Implementation Ratio	Green Products	Customers, Suppliers		Sustainable Product
Friendly Workplace	Creating Shared Value	Talent attraction & retention	Employees	Attracting and retaining top talent can enhance operational performance.	Talent Loss Leading to Operational Challenges	Improving Operational Performance	Understanding Market Salary Trends and Ensuring the Provision of Competitive Total Compensation Packages	Indirect Employee Turnover Rate	<15%	<14%	<12%		Sustainable Product
		Talent cultivation & development	Employees	Diverse training programs will attract and retain talent	Lack of Training May Reduce Employee Skills and Loyalty	Diverse and Comprehensive Training Programs Help Attract and Retain Talent	<ul style="list-style-type: none"> Provide Diverse Talent Training Programs Ensure Employees with Professional Skills Training Needs Have the Opportunity to Receive Training 	<ul style="list-style-type: none"> Annual Training Program Completion Rate Professional Skills Training Course Satisfaction (Out of 5) 	>96%	>96%	>97%		Friendly Workplace A. Diversity and Inclusion Recruitment
									>4.7 分	>4.7 分	>4.8 分		
	Human Right Management	Government Supplier Employees	Government Supplier Employees	Maintain human rights to establish a sustainable work environment	Impact on Corporate Reputation and Compliance Risks Safety Incidents Will Bring Operational Disruptions and Legal Risks	Creating a Fair and Inclusive Work Environment Ensuring Employee Health and Continuous Operation	<ul style="list-style-type: none"> Focus on Women's Career Development Promote Human Rights Awareness 	<ul style="list-style-type: none"> Percentage of Female Managers Completion Rate of Human Rights-Related Training Courses 	>30.7%	>30.8%	>31%		Friendly Workplace A. Human Capital Development
									>98.5%	>99%	100%		
		Workplace Health & Safety	Government Supplier Employees	Maintain a safety-first work environment to ensure continuous operations and steady growth.	Damage to Corporate Image and Community Relations Impact on Corporate Reputation and Compliance Risks	Building Good Relationships and Enhancing Corporate Image Creating a Fair and Inclusive Work Environment	<ul style="list-style-type: none"> Promote a Culture of Occupational Safety Implement Preventive Management 	<ul style="list-style-type: none"> Coverage Rate of Occupational Safety and Health Education Courses Number of Major Occupational Accidents 	>98.5%	>99%	100%		Friendly Workplace C. Human Right Management
									0	0	0		
Community Contribution	Fulfilling Corporate Social Responsibility	Community Contribution	Community	Public welfare activities help build strong relationships with the local community and enhance corporate image	Safety Incidents Will Bring Operational Disruptions and Legal Risks	Ensuring Employee Health and Continuous Operation	<ul style="list-style-type: none"> Through Scholarships, Industry-Academia Collaboration, Self-Organization, and Sponsorship of Talent Development-Related Activities Organize or Sponsor Public Welfare Activities Promoting Social Care and Environmental Protection and Carbon Reduction Within the Company or in the Community Every Year 	<ul style="list-style-type: none"> Long-Term Sustainability Number of Participants in Activities 	Support talent cultivation-related projects through annual donations		5000+ participants per year		Community Contribution A. Cultivation of Talent
									2000+ participants per year				Community Contribution B. Care of the Community C. Environmental Protection

Actions & Communication Channels for Stakeholder Topics of Concern

Stakeholder	meanings	Issues	Channels	Frequen cy	Actions	2024 Results	Chapter
Investor	Provide transparent disclosure of operational status to investors, enhance investment value, and increase investor confidence	Corporate governance Business ethics	Board of Directors	Quarterly	<ul style="list-style-type: none"> Provide investors with appropriate returns on investment Provide timely and accurate financial information Release major announcements through the public information observatory 	<ul style="list-style-type: none"> Organize shareholder meetings to communicate with shareholders Collaborate with the Financial Supervisory Commission to complete corporate governance evaluation tasks 	Governance Structure
			Zyxel Group Investor Conference	Every year			Business Ethics
			Zyxel Group company annual report/ sustainability report	Every year			
			Zyxel Group company website: investor relations webpage	Quarterly			
			Market Observation Open System	Aperiodic			
			Spokesman	Aperiodic			
Customer	Maintain product quality and service excellence, provide optimal solutions for customers, and foster mutual growth between the company and its customers	Business Ethics Information Security Customer Relationship Management Sustainable Product	Regular Business Meetings	Weekly	<ul style="list-style-type: none"> Online courses on legal regulations for the protection of business secrets Customer Satisfaction Survey Customer Service Online System Provide high-quality products Committed to the research and development of environmentally friendly products and technologies Cooperate with customers' specifications for environmentally friendly products 	<ul style="list-style-type: none"> Coverage Rate of Business Confidentiality Protection Law Course: 99.7% Continuously optimize the customer service online system 2024 Customer satisfaction rating: MitraStar9.28 (out of 10) - Zyxel Networks4.36 (out of 5) Provide Business Continuity Management, certifications, sustainability reports, and other documents 	Information Security Management
			ESG Planning Meetings	Quarterly			
			Online Customer Service System	Aperiodic			Customer Relationship
			Customer Satisfaction Survey	Every year			Supplier Management
			Customer Questionnaire Responses	According to customer requirements			Sustainable Product
			Customer Audits	According to customer requirements			
Employees	Employees are vital assets for the company's growth. Building strong labor-management relationships is essential for continuous innovation and improved operational performance	Talent attraction and retention Cultivation of Talent Human Right Management Safety and Health	President's town meeting	Quarterly	<ul style="list-style-type: none"> Communication Through Diverse Employee Communication Channels Online course Diversified courses for physical, mental and career development Subsidies for diverse club activities Diverse health promotion activities A working environment that meets labor regulations and standards Factory accident and disaster prevention 	<ul style="list-style-type: none"> 55 president's town meeting, 52 labor-management meetings 1,164 questionnaires for employee opinion survey Completion rate of human rights-related training courses for new recruits 100% Sexual harassment prevention courses cover 99.7% Activity Satisfaction 4 or above out of 5, 90.1% Occupational Safety Education Course Completion Rate: 99.8% 	Diversity and inclusion Recruitment
			Labor-management meeting	Periodic			
			Internal staff website	Aperiodic			Human Capital Development
			Welfare Committee website	Aperiodic			Human Rights Management
			Company announcement	Aperiodic			Workplace Health & Safety
			Suggestion mail box	Aperiodic			Community Contribution
			Employee satisfaction survey	Every year			

Stakeholder	meanings	Issues	Channels	Frequency	Actions	2024 Results	Chapter
Supplier Contractor	Suppliers are important partners for the company, working together to create a sustainable value chain	Business Ethics Sustainable Supplier Sustainable Product Workplace Health & Safety Human Rights Management	Supplier survey	Every year	<ul style="list-style-type: none"> Implementation of Systematic Counter-signing Documentation Mandating Suppliers to Adhere to Code of Conduct Supplier signs social responsibility statement and commitment letter Supplier signs the integrity commitment letter Supplier Social Responsibility Assessment Survey Conduct supplier on-site audits Supplier Conflict Minerals Investigation Net-zero courses for suppliers "Green product system" to assist suppliers in complying with green regulations 	<ul style="list-style-type: none"> Completion of Systematized Counter-signing Documentation Supplier Code of Conduct Adherence Advocacy Completion Rate/Signing Achievement Rate: 100% Key Suppliers signed the integrity commitment letters: 100% Supplier On-Site Audit Completion Rate: 100% Supplier ESG course complete rate:100% Supplier Zero Carbon Academy Number of participants: 262; Total class hours: 1,310 hours Held Supplier Conference: 2 	Business Ethics Supplier Management Workplace Health & Safety
			Supplier on-site audit	Aperiodic			
			Supplier training materials	Every year			
			Supplier conference	Every year			
			Green Management System	Aperiodic			
Government	Coordinate with legal and policy advocacy, comply with government and regulatory standards, and engage in proactive communication to gain government support	Corporate Governance Business Ethics Climate Strategy Energy Management Human Rights Management Workplace Health & Safety	Association of Science Park Industries	Aperiodic	<ul style="list-style-type: none"> Online courses on legal regulations for the protection of business secrets Customer Satisfaction Survey Customer Service Online System Provide high-quality products Committed to the research and development of environmentally friendly products and technologies Cooperate with customers' specifications for environmentally friendly products Conflict Minerals Investigation 	<ul style="list-style-type: none"> Join Hsinchu Science Park Industrial Safety and Environmental Protection Month Series Activities No major violations of the law In coordination with the Ministry of Economic Affairs' guidance program In coordination with the Hsinchu Science Park's Occupational Safety and Environmental Protection Month series of activities 	Governance Structure Business Ethics Human Rights Management Workplace Health & Safety
			Government department communication meetings	Aperiodic			
			Government seminars and public hearings	Aperiodic			
			Government Evaluation	Every Year			
Community	Establish strong communication relationships, participate in community affairs, and maintain ongoing interactions with industry peers and associations. Through continuous communication and collaboration, contribute positively to society	Climate Strategy Energy Management Community Participant	Internal company clubs	Irregularly	<ul style="list-style-type: none"> Participate in community contribution activities Zyxel Foundation Scholarship Industry-academia collaboration programs 	<ul style="list-style-type: none"> In 2024, 349 students benefited from scholarships totaling NT\$8.94 million. Sponsored/held 8 talent development events. Sponsored/held 8 community care activities. Organized 1 environmental protection event. Adopted the "Natural Valley Environmental Trust Base" rehabilitation project. No community complaints received from surrounding areas 	Community Contribution
			Progress Education Foundation	Annually			
			Zyxel Foundation	Annually			
			Company website	Ongoing			
			Press releases	Irregularly			
			Spokesperson	Irregularly			
			Complaint channels	Available anytime			

| Corporate Governance

A. Governance Structure

B. Financial Performance

C. Business Ethics

D. Risk Management

E. Information Security Management



Corporate Governance



Corporate Governance Policy

"Integrity" is one of the core values of Zyxel Group and its subsidiaries. In terms of corporate governance, we emphasize the principle of integrity, and believe that good corporate governance allows us to have a firm foundation for growth and to offer all stakeholders with the best interest. As a responsible corporate citizen, it is our obligation to serve the community and the people relying on us.

In terms of financial operations, Zyxel Group has an auditing unit to ensure adequate reporting and internal controls. In addition to all measures towards safeguarding shareholders' interests, we disclose transparent and relevant information to stakeholders and investors in a timely manner. Zyxel Group reveals its financial status information such as annual reports and financial reports on the company Web site. Concerned parties are always assigned an official spokesperson to respond to queries and issues. For more Information about Zyxel Group's corporate governance and financial information, please visit the "Investor Relations" on Zyxel Group Global Website.



Sustainable Strategy: Implement Sustainable Management



Major Issue: Corporate Governance, Business Ethics, Information Security



Stakeholders: Investors, Customers, Suppliers, Government



SDGs:



Performance Highlights

Employee Business Ethics Training Completion Rate

99.8%

TCSA Award

Information Security Award

Sustainalytics Ranking

ESG risk ranking **Low Risk**



0 Major Business Ethics Violence

ISO 27001

Certification

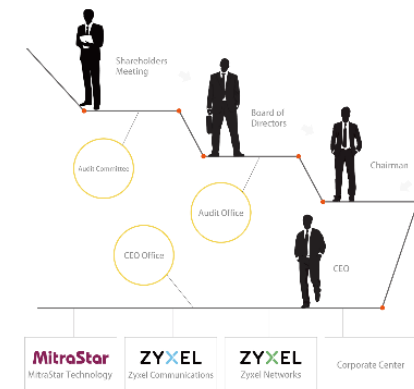
0 Major Security Incident

Corporate Governance Targets and Achievements

Strategy	Issue	Operational Impact	Actions	Performance Indicators	2024 Target	2024 Achievements		Goals					
								2025 short-term	2027 mid-term	2030 long-term	SDGs		
<div> Implement sustainable management</div>	Corporate Governance	Achieve the company's sustainability goals	<ul style="list-style-type: none">Establishing an effective corporate governance framework and control mechanisms to enhance governance functions.	Board of Directors Training Hours	≥ 6 Hours	At least six hours of training courses per director.	v	≥ 6 Hours	≥ 6 Hours				
	Business Ethics	To create a sustainable business environment, it is essential to avoid any dishonest practices that could undermine customer trust and lead to corporate losses	<ul style="list-style-type: none">Establish a business ethics policy and standardsFoster a corporate culture based on "integrity" and conduct ethical trainingConduct ethical risk assessments and supervision through internal control self-assessments and audits	Training completion rate for education programs	>98%	99.84%	x	>98%	>98%	100%			
				Number of major business ethics violations	0 Cases	0 Cases	v	Major business ethics violation: 0					
				Completion rate for information security training courses	>99%	100%	v	>98%	>98%	100%			
	Information Security	Ensure the confidentiality of information assets to comply with regulations and gain customer trust.		Number of major information security incidents	0	0	v	major information incident: 0					
				Annual acquisition of ISO 27001 certification	Annual acquisition	Acquisition	v	Annual acquisition					

A. Governance Structure

The Board of Directors of Zyxel Group, as the highest governance body, has established an Audit Committee and a Compensation Committee to enhance oversight and management functions. A Chief Governance Officer is appointed to handle Corporate Governance matters. The company has also adopted the "Corporate Governance Best Practice Principles," "Business Ethics and Code of Conduct," and "Sustainability Best Practice Principles" to strengthen Corporate Governance operations.



1. Enhance Board Functionality

Zyxel Group has set up 9 directors, including 3 independent directors, and adopts the candidate nomination system. The shareholders' meeting shall elect a person with capacity for a term of 3 years and may be re-elected. The number of directors shall include independent directors, and the number of independent directors shall not be less than 3. In order to improve the supervision responsibility and strengthen the management mechanism, the Board of Directors of the Company has established the Remuneration Committee and the Audit Committee.

The Board of Directors met 4 times in 2024, and the Annual General Meeting of Shareholders was held on June 18.

Independence of the board of directors

The three independent directors account for 33% of all board members. The independent directors have to sign the independence statement every year during their terms of offices, to confirm that they comply with the requirements of the "Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies". Among the Company's directors, only two seats are spouses or relatives within the second degree of kinship. This complies with the Securities Exchange Act.

Board Diversity

Zyxel Group's "Board Election Procedures" establish a "Board Diversity Policy" with specific management goals. The implementation policy includes diversity factors such as gender, age, nationality, race, and culture, as well as professional knowledge and skills, including background, expertise, and industry experience. No more than one-third of the board members are also company executives, with 3 board members being employees of Zyxel Group, one of whom is an executive director. The board also includes 3 independent directors. In terms of tenure, 5 directors have served for less than 3 years, 2 for 4-10 years, and 2 for over 10 years, with an average tenure of 6.11 years.

The board emphasizes gender equality, with 1 female director among the 9 board members, representing 11% of the board. In terms of age, there is one director aged 41-50, four directors aged 61-70, and four directors aged 71-80. In terms of professional knowledge and skills, Zyxel Group's Board members are specialized in engineering, mechanical engineering, management science and finance and have the industrial experience needed by Zyxel Group's business. For the time being, Zyxel Group's Board is composed based on the policy and targets set forth by Zyxel Group. More information: [Zyxel Group IR website](#), [Zyxel Group 2024 Annual Report p.12](#)

The Specific Management Targets of the Diversity Policy and Achievement:

Target	Achievement	Target achieved
At least one seat of female director	One female director, representing 11% of the total board members.	✓
At least one director has a background in finance and accounting	Two directors have a background in finance and accounting.	✓
At least one director has a background in sustainability	1 director serves on the Sustainability Committee, and 1 has a background in sustainability.	✓
Less than one-third of the board members also serve as company executives	Less than one-third of the board members also serve as company executives	✓

Name	Title	Sustainability Governance Responsibilities	Term	Gender	Education	Professional Knowledge and Experience							
						Operational Judgment	Accounting and Finance	Business Management	Industry Knowledge	International Market Perspective	Leadership	Decision-Making	Sustainable Development
Shun-I Chu	Chairman	Chair of Sustainability Guidance Committee, Chair of Zyxel Foundation	15	Male	Electronics Engineering	●	●	●	●	●	●	●	
Gordon Yang	Director	Member of Sustainability Guidance Committee	6	Male	MBA	●	●	●	●	●	●	●	
Yuh-Long Chen	Director	-	15	Male	Electronics	●	●	●	●	●	●	●	
Ping-Chin Lee	Director	-	3	Male	Electronics Engineering	●	●	●	●	●	●	●	
Wayne Huang	Director	Member of Sustainability Guidance Committee	3	Male	Electronics Engineering	●	●	●	●	●	●	●	
Ping-Jie Chu	Director	Member of Sustainability Guidance Committee Member of Zyxel Communications	3	Female	Finance	●	●	●	●	●	●	●	●
Chin-Tang Liu	Independent director		6	Male	Accounting	●	●	●		●	●	●	
Chin-Liang Wang	Independent director		3	Male	Electronics	●		●	●	●	●	●	
Yi-Bing Lin	Independent director		1	Male	Electronics	●		●	●	●	●	●	●

Board Accountability and Governance

Zyxel Group continues to strengthen its board governance mechanisms to ensure high accountability for the long-term interests of shareholders. The average actual attendance rate at board meetings in 2024 reached 82.35%. According to the Company's Articles of Incorporation, the term of office for directors is three years, and a full re-election is held upon the expiration of the term to maintain the metabolism and accountability of board members. In addition, amendments to the Company's Articles of Incorporation must also be resolved by the shareholders' meeting and completed with the competent authority for registration of changes within 15 days, protecting shareholders' rights to participate in major company decisions.

Currently, none of the Company's board members hold more than 4 other authorized positions in listed companies, and a board performance evaluation mechanism has been established, with the evaluation results also serving as an important reference for reappointment and remuneration. Regarding director responsibilities, Zyxel Group directors must comply with the "Key Points for Compliance with Matters Concerning the Establishment and Exercise of Powers of the Board of Directors of Listed Companies of the Taiwan Stock Exchange Corporation," and there are no restrictions on related responsibilities.

Note: The average actual attendance rate at board meetings does not include attendance by proxy. Note: For details on directors holding other authorized positions in listed companies, please refer to page 7 of Zyxel Group's 2024 Annual Report.

Conflict of Interest Management

Zyxel Group has established conflict of interest regulations in its Board of Directors' Rules of Procedure and the Audit Committee Charter. Directors who have a conflict of interest with a meeting agenda item, either personally or as representatives of a corporation, are required to disclose the significant details of the conflict during the meeting. If the conflict could harm the company's interests, the director must refrain from participating in the discussion and voting on that issue, and must also abstain from acting as a proxy for other directors in voting. If a director's spouse, a relative within the second degree of kinship, or a company controlled or affiliated with the director has a conflict of interest with a meeting agenda item, the director is considered to have a personal conflict of interest regarding that item. The names of relevant directors, the key details of the conflict, and the recusal actions are documented in the meeting minutes.

Zyxel Group has independent directors who, from an objective and impartial standpoint, provide recommendations based on their expertise and experience. When the board discusses any proposal, it should fully consider the opinions of the independent directors, and the reasons or opinions for their agreement or dissent should be included in the meeting minutes. This approach ensures the principle of conflict-of-interest avoidance and effectively protects the company's interests.

Board Performance Evaluation Connecting with Sustainability

We have established the "Board Performance Evaluation Guidelines" to promote self-motivation among board members and enhance the effectiveness of board operations. Each year, we conduct performance evaluations of the board, individual directors, and functional committees at least once. Every three years, an external professional independent organization or a team of expert scholars executes an assessment. The board is responsible for driving the practice of sustainable development within the company. It continuously reviews implementation progress and strives for improvement to ensure the realization of sustainable development policies. We present a sustainable development mission or vision, develop policies, systems, or relevant management guidelines, integrate sustainable development into our operational activities and strategic direction, and approve specific implementation plans for sustainable development. We also ensure that the disclosure of sustainable development-related information is timely and accurate.

The board of directors should oversee the company's implementation of sustainable development, regularly review its effectiveness, and pursue continuous improvement to ensure the enforcement of sustainability policies. This includes establishing a sustainability mission or vision, formulating relevant policies and management guidelines, integrating sustainability into the company's operations and strategic direction, approving specific initiatives for sustainable development, and ensuring the timely and accurate disclosure of sustainability-related information.

Director Self-Improvement:

Zyxel Group ensures directors maintain professional knowledge through regular courses on topics like management, finance, risk management, and sustainable development. The company provides relevant training information and regularly assesses the independence of the auditing firm. Corporate social responsibility courses are also offered to help directors understand corporate governance and sustainability trends. (See Zyxel Group's 2024 Annual Report, pages 76-77 for course details.)

2024 Board Function Execution

- The Chairman does not concurrently serve as CEO.
- At least four separate meetings are held annually between independent directors, the CPA, and the head of internal audit.
- The board composition includes diverse backgrounds, such as engineering, electrical engineering, management, and finance, and includes one female director.
- Each re-elected director participates in at least six hours of continuing education courses related to corporate governance and sustainable development annually.
- The board conducts a self-performance evaluation annually, and an independent external institution is commissioned to conduct an external evaluation at least every three years.
- In 2024, the "Taiwan Integrity and Ethics Association" was commissioned to conduct a performance evaluation of the board.

2024 Board of Directors' Sustainability-Related Agenda Items

Category	Agenda Item
ESG Report	* 2023 ESG Performance
	* 2024 ESG Annual Plan
	* 2023 Sustainability Report
Corporate Governance Policies and Procedures	* Sustainability Report Preparation and Assurance Procedures
	* Sustainable Information Management Operating Procedures
	* Sustainable Raw Materials Policy
	* Environmental Sustainability Policy
	* Occupational Health and Safety Policy
Sustainable Management	* Biodiversity and No-Deforestation Commitment
	* Human Rights Management
	* Environmental Policy and Performance
	* Greenhouse Gas Inventory Progress
Corporate Governance	* Occupational Health and Safety Policy Implementation
	* Integrity Management Implementation
	* Board and Functional Committee Performance Evaluation (Internal and External)
Risk Management	* Intellectual Property Management Plan and Implementation
	* BCM Business Continuity Management Plan
	* Information Security Risk Management

Functional Committee Operation

Audit Committee

More information: [Zyxel Group annual report 2024 P16-19](#)

- **Purpose:** To improve corporate governance and solidify the Board's supervision functions. The Audit Committee, acting professionally and independently, assist the board in decision making.
- **Membership:** The Audit Committee shall be composed of the total number of independent directors, who shall be no less than three persons, including one convener, and at least one member who shall have accounting or financial expertise. The Audit members shall hold the term of office for three years and can be reelected for a second term of office.
- **Meeting frequency:** As required, the Audit Committee shall convene the meeting at least once per quarter, and shall communicate with the internal auditing unit and independent auditors thoroughly.
- **Responsibilities:** Includes a review of Zyxel Group's internal control system, financial statements, significant acquisition or disposal of assets, derivatives trading, loaning of funds to others, making of endorsements or guarantees for others, appointment, dismissal or remuneration of independent. Number of meetings in 2023 / Average attendance rate: **4 meetings / 100% attendance.**

Compensation Committee

- **Purpose:** To improve corporate governance, solidify the compensation system for directors and managerial officers throughout Zyxel Group, make the enterprise compensation system more transparent and impartial, and protect shareholders' interest and right, Zyxel Group established the Remuneration Committee.
- **Membership:** The Remuneration Committee members shall be nominated by the Chairman and appointed upon resolution of the Board, consisting of three persons, including at least one independent director who shall serve as the convener and chairman of meetings.
- **Meeting frequency:** The Remuneration Committee shall convene a meeting at least twice per year and may convene meetings at any time whenever necessary.
- **Responsibilities:** The members of the Compensation Committee submit their recommendations to the Board of Directors for discussion. These include establishing and regularly reviewing the policies, systems, standards, and structures for the performance evaluation and compensation of directors and managers, as well as periodically assessing and determining their remuneration. **Number of meetings in 2024 / Average attendance rate: 2 meetings / 100% attendance.**

More information [Zyxel Group annual report 2024 p19-21](#)

CEO Compensation Indicators

Variable Compensation	Category	Performance Indicators
	Financial Returns	Annual growth rates of consolidated revenue, gross profit, operating income, and operating profit margin
	Relative Financial Indicators	<ul style="list-style-type: none"> • Risk Management: Identification and mitigation of high-risk projects. • Sustainability Indicators: Various sustainability development metrics and rankings from sustainability indices.

CEO to Employee Compensation Ratios

CEO Compensation to Median Employee Salary Ratio	CEO Compensation to Average Employee Salary Ratio
7.43	6.32

Note: The ratios represent the relationship between the total annual compensation of the CEO and the average or median salaries of employees, calculated by dividing the CEO's compensation by the average or median employee salary.

Executive Compensation

The company has established a "Compensation Committee" as an independent unit, which holds at least two meetings annually. This committee formulates relevant compensation policies for senior management, proposes compensation for the Chairman, CEO, and senior managers based on market standards and management considerations. These proposals are approved by the "Compensation Committee" and then submitted to the company's Board of Directors for resolution.

The compensation policy is based on the company's "General Manager Performance Bonus Regulations," which comprehensively evaluate operational performance, contribution, team stability, future constructiveness, and social responsibility.

Senior management compensation is determined not only by individual performance but also by the company's operational and financial performance. Variable compensation is linked to the company's financial indicators, including the annual growth rate of consolidated revenue, consolidated gross profit, consolidated operating profit, and operating profit margin. Furthermore, the General Manager's various sustainability performance indicators, including the integration of company operations with ESG strategies and the top-down internal integration of ESG planning, are also used as metrics.

More Information: [Zyxel Group annual report 2024 P14-15](#)

Long-term incentives

To enhance talent attraction, retention, and motivation, and to strengthen employee engagement, Zyxel Group has implemented a Restricted Employee Rights Shares program. Performance evaluation criteria are defined jointly by the Company and employees, with indicators covering business and sustainability objectives.

Indicator Weighting:

- Individual performance indicators: 0–80%
- Operational indicators (including revenue growth and operating profit growth): 0–40%
- Sustainability indicators: 0–20%

The number of vested shares is calculated based on performance outcomes. This mechanism functions as a long-term incentive, aligning employee interests with business growth and sustainable development.

2. Shareholder Rights

Protection to Rights

Designated personnel handle shareholder suggestions or disputes and engage Mega Financial Transfer Agency to assist with these matters. Stock personnel monitor the situation of major shareholders and disclose this information on the designated information disclosure website of the competent authority on a monthly basis, effectively managing the list of significant shareholders and ultimate controllers. Meanwhile, a risk control mechanism is established with related companies to formulate regulations regarding loans to others and endorsements and guarantees, preventing potential financial malfeasance and its cascading impact on related companies.

Shareholder Communication

An Investor conferences is held and the executives at the management level directly explain the business overview, strategic planning and future development to the investment corporation and the media, and report the target plan and results of sustainable development.

Open Information

Open information on corporate operations and an inquiry/answer mechanism are provided to investors on the company Web site. Zyxel Group has designated a staff to collect and reveal corporate information and a spokesperson to provide the information on the company Web site for investors to inspect.

Zyxel Group website: <http://www.zyxelgroup.com>

3. Regulatory Compliance

The company maintains high standards of regulatory compliance, establishing robust compliance and internal control systems to ensure that operations adhere to all applicable laws, regulations, and industry standards. We value integrity and a culture of compliance, continuously strengthening internal governance and risk management to ensure the company operates soundly within legal and ethical frameworks. Shareholder Communication

Policy Formulation and Updates

The legal and compliance team regularly monitors regulatory changes and updates internal policies in a timely manner to ensure consistency with current legal requirements.

Incident Reporting and Response

The company has a clear reporting mechanism for employees to raise compliance concerns or potential violations. All reports are promptly investigated and properly addressed.

Incident Reporting and Response

The company has a clear reporting mechanism for employees to raise compliance concerns or potential violations. All reports are promptly investigated and properly addressed.

In 2024, the company did not incur any penalties for violations of corporate governance, anti-corruption, anti-trust, or other laws. There were also no incidents of personal data breaches, privacy infringements, or insider trading involving directors or management. Furthermore, the company continues to monitor regulatory requirements related to employee rights, such as labor rights and labor practices. Through system design and training mechanisms, we maintain workplace justice and employee well-being, creating a safe, equitable, and diverse work environment.

4. Internal Control

Organization

Zyxel Group establishes an internal audit unit under the board of directors. In accordance with the company's scale, business conditions, management needs and other relevant laws and regulations, Zyxel Group has deployed several qualified and appropriate full-time internal auditors and deputies.

Duties of Internal Auditor

The internal audit plan is a key work item of Zyxel Group's enterprise risk management. It audits the operation of each unit and subsidiary and proposes improvement measures to ensure the performance of enterprise operations.

- Assist the Board of Directors and management in examining and reviewing deficiencies in the internal control system, evaluating operational effectiveness and efficiency, and providing recommendations for improvement to ensure the continuous and effective implementation of internal controls, serving as a basis for review and revision.
- Each internal unit and subsidiary conducts a self-assessment annually in accordance with regulations. The Internal Audit Department reviews these self-assessment reports along with the remediation of internal control deficiencies and irregularities identified during audits.
- Based on risk assessment results, the Internal Audit Department formulates the annual audit plan, which is approved by the Board of Directors. The plan reviews the appropriateness of the internal control system and the effectiveness of operational implementation.
- Ongoing and project-based audits are carried out, covering the Company and its subsidiaries. Monthly audit reports are submitted to the Audit Committee in accordance with regulations, with quarterly follow-ups and re-examinations conducted on identified deficiencies.
- The head of Internal Audit regularly attends meetings of the Board of Directors and the Audit Committee to report on the implementation of audit plans and to confirm the effectiveness of the internal control system. No significant internal control deficiencies were identified in 2024.

2024 Internal Audit Results

Number of Internal Audit Operations	Number of Deficiencies	Number of Improvements
34	3	3

B. Financial Performance

1. Financial Performance Statement

Direct Economic Value Generated: Income

According to the 2024 consolidated income statements, the Company's operating income totaled NT\$ 25.97 billion; the gross profit amounted to NT\$6.434 billion; an after-tax profit of NT\$5.92 billion was made; and the EPS was NT\$5.28

Operating Results (Unit: NT\$ thousand)

Item	2021	2022	2023	2024
Net operating income	25,681,970	30,515,803	30,379,982	25,969,435
Gross profit	6,060,518	6,987,954	6,679,139	6,434,215
Net operating profit (loss)	1,425,434	1,847,262	1,289,242	441,109
Before-tax profit (loss)	1,438,064	1,992,303	1,556,690	718,820
Consolidated net profit (loss)	1,095,459	1,626,931	1,355,592	591,534

Profitability Analysis

Item		2021	2022	2023	2024
Return on assets %		5.46	6.95	5.83	2.96
Return on equity %		12.50	16.92	12.83	5.28
Proportion to paid-in capital %	Operating profit	31.42	46.16	31.48	10.72
	Net profit before tax	31.70	49.79	38.02	17.47
Profit margin %		4.27	5.33	4.66	2.96
EPS/NT\$		2.49	3.87	3.38	5.28

Economic Value Distributed

Employee Remuneration and Welfare

Type Total Payroll expense	3,541,835
Labor and health insurance expense	381,112
Pension expense	196,220
Other employee benefit expenses	152,915

Payments to the Government: The total consolidated income tax paid in 2024 was NT\$ 428,782 thousand

Product Breakdown for 2024

	Sales Revenue (NT\$ thousand)	Sales Ratio (%)
Broadband Equipment	19,628,677	75.59%
Enterprise Networking Equipment	3,885,113	14.96%
Other	2,455,645	9.45%
Total	25,969,435	100%

2. Tax Policy and Risk management

Tax Policy and Risk management

Zyxel Group adopts a sustainable development tax management policy, being a multinational telecommunications company, it actively monitors tax regulations in various countries and periodically reviews its tax policies to ensure compliance with local laws and regulations.

The Board of Directors of Zyxel Group is the highest decision-making body for the Group's tax policy. The Accounting Department is responsible for corporate income tax filing, which is executed upon proper approval. Subsidiaries' accounting departments regularly report on the tax management and outcomes of each operating location to management, ensuring that the Group's leadership has full visibility into the tax policy and its implementation.

To address tax risks and comply with complex regulations across global operations, the Group continuously monitors and evaluates updates to relevant tax laws. In addition to conducting internal training, the Group also engages external professional tax advisors, when appropriate, to provide guidance on significant transactions and mitigate potential tax risks.

Tax Management Policy

- Committed to comply with the spirit and contents of the tax laws and regulations in the countries where the company operates.
- Committed to not transfer created value to low-tax jurisdictions.
- Committed to not use tax structures that lack commercial substance.
- Committed to apply the Arm's Length Principle in transfer pricing.
- Committed to not use secrecy jurisdictions or so-called "tax havens" for tax avoidance.
- The process for approving tax policies is overseen by the Board of Directors.

Tax information (Unit: NT\$ thousand)

Item	2023	2024
Revenue	30,379,982	25,969,435
Profit before tax	1,556,690	718,820
Current income tax payable	394,726	205,816,
Effective tax rate	25.4%	28.6%
Income tax paid	457,041	428,782
Cash effective tax rate	29.4%	59.7%

Economic Contributions by Region in 2024

Item	Asia	Europe	Other	Total
Operating Revenue	53%	37%	10%	100%
Profit before tax	144%	-5%	-39%	100%
Current income tax payable	83%	15%	2%	100%
Income tax paid	87%	10%	3%	100%

Note: Other Regions: United States, Brazil, and other countries

3. Policy Influence

Zyxel Group actively participates in various industry associations and non-profit organizations, focusing on areas such as industry development, technological innovation, and corporate sustainability. Through these associations and activities, the company gains the latest information related to the industry and technology, while maintaining strong relationships with companies and organizations in relevant fields. Zyxel Group also ensures that its policies align with government public policies and the positions adopted by its industry associations. Participation will be evaluated and adjusted if positions are significantly inconsistent with the company's sustainability or climate commitments.

The company maintains open communication with its stakeholders and upholds a politically neutral stance, refraining from engaging in political election activities or making political donations. Zyxel Group has not contributed to any political campaigns, public policy groups, or legislative organizations.

In 2024, the company paid a total of NT\$ 758,433 in membership fees to industry associations and organizations.

Government Financial Subsidies in 2024 (Unit: NTD)

Subsidiary	Project	Subsidy Amount
Taiwan	MitraStar+N Taiwan Network Communication Supply Chain and International Initiative Low-Carbon Transition Project	13,099,760
	Subsidies for Promoting Job Redesign Service Program	200,470
	Subsidies for Continuing to Employ Older Workers	45,000
China	Employment Subsidy Income from the Bureau of Labor Insurance (BLI)	4,467
	Stabilizing Employment Return Subsidy	915,164
	Special Funds for Intelligent Transformation and Digital Transformation in Xinwu District	446,810
	Stabilizing Employment Return Subsidy Distributed by Social Security Bureau (on behalf of)	654,940
Total		15,366,611

Membership in Associations and Organizations in 2024

Industrial Development

- The Allied Association for Science Park Industries
- Taiwan Association of Information and
- Communication Standards
- Taipei Computer Association

Technological Innovation

- Telecommunications Industry Association
- THE BROADBAND FORUM
- Wi-Fi Alliance
- GLOBAL CERTIFICATION FORUM (GCF)

Corporate Sustainability

- Taiwan Institute for Sustainable Energy
- CIO Taiwan
- Hsinchu City Human Resources Management Association
- Taiwan Corporate Governance Association
- TALENT, in Taiwan

Public Affairs Engagement Expenditure

Category	2021	2022	2023	2024
Industry Associations or Non-Profit Organizations Involvement	991,959	1,088,115	845,647	758,433
Interest Group Lobbying	0	0	0	0
Political Campaign Organizations or Candidate Donations	0	0	0	0
Other expenditures, such as election or referendum spending	0	0	0	0
Total	991,959	1,088,115	845,647	758,433

C. Business Ethics


Business Ethics Policy

Zyxel Group, based on the principles of integrity, transparency, and accountability, has established policies rooted in honesty and has implemented robust Corporate Governance and control mechanisms to create a sustainable business environment. The Group has developed global standards applicable to all employees, business partners, and suppliers, ensuring that the same standards are followed in work and business operations. This also guarantees fair and equitable treatment of customers, suppliers, and competitors.

Employees: For employees, the internal focus is on establishing policies and procedures that comply with the relevant laws and regulations, providing training, publicity activities and declarations, regular risk assessments, and internal control and auditing. While the external focus is on using notification channels and whistleblower protection mechanisms to protect third-party participants.

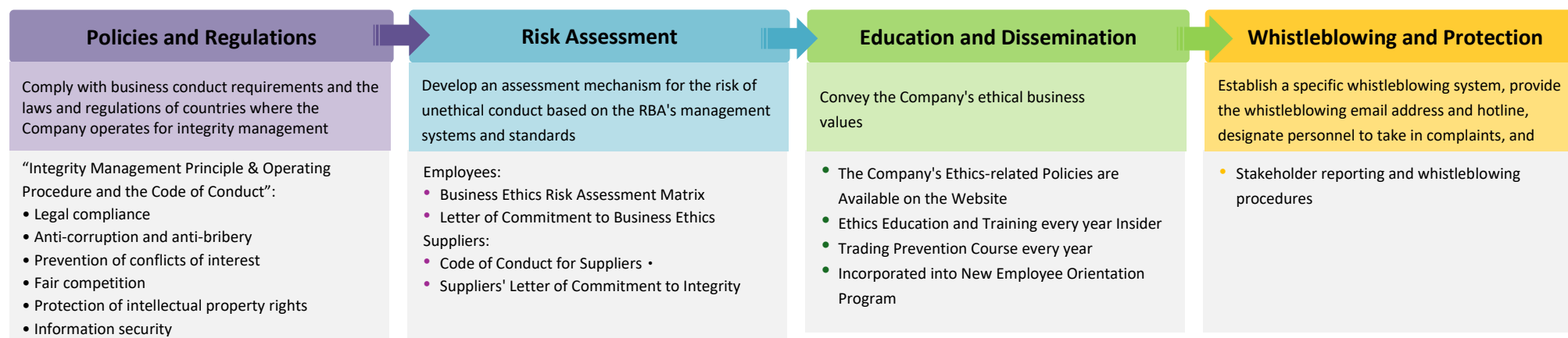
Suppliers: We also extend Zyxel Group's integrity management concept to review and assist suppliers in ethical management so they can understand the core value of Zyxel Group's integrity management and jointly establish sustainable business cooperation partnerships.

Targets & Achievements

Targets & Achievements											
Major Issues	Stakeholders	Channels	Actions	Performance Indicators	2024 target	2024 achievement		Goals			SDGs
								2024 short-term	2025 mid-term	2030 long-term	
Business Ethics	<ul style="list-style-type: none">InvestorGovernmentCustomerSupplier	<ul style="list-style-type: none">Annual reportGovernment Seminars and Public HearingsCustomer auditSupplier survey	<ul style="list-style-type: none">Coordinate with legal advocacy and related activitiesOnline course on legal regulations for trade secret protectionRequire suppliers to sign a code of integrity and ethics commitment	Completion rate of ethics training programs	>98%	99.84%	V	>98%	>98%	100%	
				Number of major ethics violations	0	0	v	Number of major ethics violations: 0			

Management Procedure

The Company's management procedure for integrity management involves **policies and regulations**, **risk assessment**, **education and dissemination**, and **whistleblowing and protection**. We observe business conduct requirements and the related laws and regulations of countries where we operate, map out policies and procedures, develop an assessment mechanism for preventing the risk of unethical conduct based on the RBA's management systems and standards, and provide relevant dissemination and training courses to convey the Company's ethical business values. A specific whistleblowing system is established accordingly and the whistleblowing email address and hotline are offered. The Company also designates personnel to take in complaints and adopts whistleblower protection measures for preventive response.



Management Organization

Zyxel Group Sustainability Committee - Ethics Team: The team is a management organization for business ethics and integrity management. It is responsible for coordinating the development, monitoring and implementation of the Company's integrity management policies and regulations, regularly reviewing the promotion of and compliance with the policies and regulations every year, and making reports to the Board of Directors.

The Group's subsidiaries draw up their own operating procedures and codes of conduct in accordance with Zyxel Group's policies, conduct internal implementation planning, organize dissemination and training courses, assess risks, and provide whistleblowing channels.

Internal Auditing Office's Internal Control, Self-evaluation, and Auditing: The office assesses moral hazards, monitors and audits the assessment process, maintains the whistleblowing channels, and frames review and corrective plans.

The Ethics Policy and Code is geared towards:

Corporate Compliance

- Every employee should comply with local laws, rules, and regulations while conducting business.
- Our business partners must follow the regulations.

Anti-bribery and Corruption

- All employees including top executives shall not engage, directly or indirectly, in any bribery or other activities which may be construed as corrupt business practices.
- In all relations with governmental agencies, customers, and suppliers, we shall not, directly or indirectly, engage in bribery, kick-backs, payoffs, or other activities which may be construed as corrupt business practices.
- Any form of bribery, corruption, extortion, fraud, embezzlement, and money laundering is strictly prohibited.

Prevention of Conflicts of Interest

- The involvement of personal interests in the Company's overall interests is prevented to avoid conflicts of interest which may lead to the failure of the Company's personnel to handle business matters in an objective and effective manner

Fair Competition

- The Company conducts transactions with customers in conformity with fair business, marketing and advertising standards and adopts reasonable measures to ensure the safety and quality of the goods or services provided.
- The employees shall not bring in business from customers by offering improper benefits and shall be dedicated to improving the products and services that meet the requirements of the customers.

Protection of Intellectual Property Rights

- To respect the intellectual property rights of others, all our employees and senior management shall ensure the confidentiality of the confidential information of the Company and our customers.

Information Security

- Information on the Company and our customers and suppliers shall be kept confidential unless the Company is authorized or required by the laws to disclose the information.
- An effective mechanism shall be used to prevent improper use of the confidential information.

1. Policies and Specifications

Zyxel Group's ethical policies and norms are based on the basic premise of complying with business conduct standards and the relevant laws and regulations where it operates, and implementing honest business operations. The content covers: anti-bribery and corruption, prevention of conflicts of interest, fair competition, intellectual property protection, and information security.

The Board of Directors of Zyxel Group has passed the "Guidelines for Integrity Management and Operational Procedures and Conduct", which is formulated in accordance with the Code of Integrity Management of Listed OTC Companies and the relevant laws and regulations where the company operates, in order to implement the integrity management policy and prevent dishonest behavior.

The Staff Code of Conduct stipulates the basic code of conduct and ethical standards that all employees must abide by when performing their duties every day and expounds and reiterates the company's existing concepts, values, and spirit of relevant laws and regulations. The Employee Appointment Measures clearly stipulate employees shall not accept bribes, commissions, etc., so as to prevent employees from sacrificing the rights and interests of the company for personal interests.

Business ethics and Integrity related norms:

- Sustainability Policy
- Sustainable Development Best Practice Principles
- Guidelines for Integrity Management and Operational Procedures and Conduct
- Procedure for Ethical Management and Guidelines for Conduct
- Internal Procedures for Handling Material Information
- Code of Business Conduct and Ethics
- Stakeholder Appeal and Prosecution Guidance
- Ethical Corporate Management Best Practice Principles
- Fair competition Management Procedures

2. Risk Assessment

To strengthen integrity management and ethical governance, a systematic integrity risk assessment mechanism has been established in accordance with the RBA management system and standards. This mechanism comprehensively identifies and manages both internal and external stakeholders. Concrete implementation measures are promoted internally for directors, senior managers, and employees, and externally for suppliers and contractors

Stakeholders: Using a risk assessment analysis table, employees who conduct business with various types of stakeholders, including direct and indirect employees, young workers, interns, migrant workers, employee representatives, contractors, customers, and potentially impacted neighbors, are assessed for ethical risks. This assessment evaluates the impact of ethical issues on the company's operations and the degree of impact on stakeholders. This process identifies and manages potential integrity and ethical risks in operations.

Directors/Managers: Required to sign a "Statement of Compliance with Integrity Management Policy."

New Employees: Educated on and required to sign relevant integrity management regulations.

Suppliers/Contractors: Suppliers and contractors are required to sign a "Supplier Code of Conduct." Suppliers are required to complete a "Supplier Social Responsibility Assessment Survey." On-site audits of suppliers are conducted, and due diligence on integrity behavior is performed using a "Supplier On-Site Audit CSR Assessment Checklist." Suppliers are required to complete a "Supplier Corporate Social Responsibility Statement and Commitment" and an "Integrity and Ethical Commitment," promising to comply with relevant commercial ethics regulations regarding anti-corruption.

3. Education and Promotion

To guide Zyxel Group's stakeholders to better understand our business ethics standards, Zyxel Group has released our ethical related policies on the company website. We also communicate our concept of business ethics through education, promotion, mandatory online training courses, and various other communication channel and methods.

Ethics Training Course: The annual online course covers five major areas: regulatory compliance, avoiding conflicts of interest, information protection, intellectual property protection, and fair trading. It communicates the company's business ethics principles. This course is mandatory for all employees, including new hires who must complete it upon joining.

Insider Trading Prevention Online Course: To enhance awareness of insider trading, the company offers an online course on insider trading prevention. Employees are required to complete the training and pass an exam with a score of 80 or above to be considered qualified. In 2023, 1,499 participants completed the training. The course content includes the causes of insider trading, the identification process, and the legal responsibilities for violations.

2024 Business Ethics Report Cases:

Material regulatory violation case	0
Incidents reported through the whistleblower system	0

4. Whistleblower Mechanisms and Protection

Zyxel Group has established internal and external whistleblower mechanisms to combat corruption. The cases handled by the personnel in charge will be transferred to the relevant internal authorities.

The company website has a link to a mailbox for reporting corruption and/or misuse of company resources. The anti-corruption review team will set up a case for each report and create a file. All reports will be kept strictly confidential. Zyxel Group will take all necessary steps to protect whistleblowers and those who are involved in the investigation from retaliation or unfair treatment.

• **Integrity Management Code and Operational Procedures and Behavior Guidelines:** Formulate specific whistle-blowing systems, including whistle-blowing mailboxes, dedicated lines, designation of whistleblowers, and measures to protect whistleblowers.

• **Stakeholders' Appeal and Prosecution Method:** Standardize all internal and external reports, which are handled by the appeal review team, establish a case for each complaint, and record or save it in writing, electronic files or system sign-off. Major violations found after investigation shall be reported to the independent directors or supervisors by the audit office, and appropriate rewards shall be given to the whistleblower upon verification. The company shall handle the whistleblower case in a confidential manner, and handle it in a prompt, fair and objective position, and make every effort to protect the absolute confidentiality of the identity of the complainant or whistleblower.

Grievance Mailbox

Internal Stakeholders	External Stakeholders
Human Resources Department	Audit Office
Whistleblower email: Care@zyxelgroup.com	Whistleblower email: audit@zyxelgroup.com

Business Ethics Courses

2024	Courses	Trainees	Participants	Times	Coverage%
Business Ethics	Regulatory Compliance, Avoiding Conflicts of Interest, Information Protection, Intellectual Property Protection, Fair Trading,	All employee	9,738	3,763	99.8%
Insider Trading Prevention	Awareness of Insider Trading		1,467	716	95.3%

D. Risk Management

Zyxel Group includes the risk management in its business strategies and corporate culture, in order to manage the exposure of various potential risks and hazards to operations and earnings. Through the top-down hierarchical organization, we establish systematic risk response policies and procedures in order to effectively identify, analyze and evaluate risk management mechanisms, control various risks, and establish corresponding mitigation policies to effectively control the enterprise's risk, and mitigate the effects posed by the risks to related stakeholders accordingly.

The “[Risk Management Policies & Procedures](#)” are adopted by the board of directors as the highest guiding principle for risk management. Meanwhile, we have set up a risk management policy group subordinated to the “Zyxel Group Sustainability Committee”, which establishes the corresponding policies and procedures in accordance with ISO31000 Risk Management Guidelines, and is responsible for implementing the risk management policies authorized by the Board of Directors.

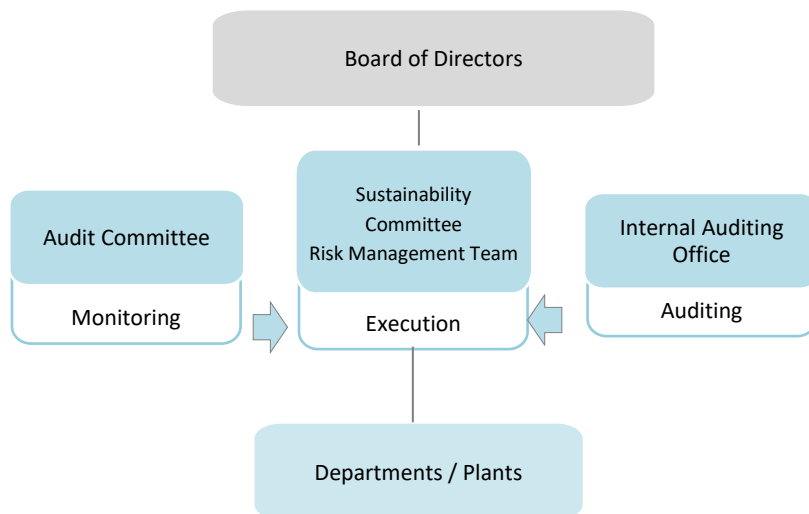
Risk Management Policy

As the top guiding principle for risk management, the policy defines all types of risks based on the Company's overall management policy to establish a risk management mechanism enabling early identification, precise measurement, effective monitoring, and strict control. In this way, we can prevent possible losses within acceptable risk levels, respond to internal and external environmental changes, and make continuous adjustments and improvements in order to boost the shareholders' interests and the Company's value.

Risk Management Goal

Awareness of risk management is required for Zyxel Group's business management and must be ingrained into the management strategies and organizational culture. Through systematic and institutionalized management and effective risk identification, analysis, and assessment mechanisms, we can control risks, formulate corresponding mitigation measures, and keep track of corporate risks in an effective manner so as to mitigate the impacts of the risks on relevant stakeholders.

1. Risk Management Team



Responsibilities of the Risk Management Organization

Board of Directors

The Board of Directors serves as the top management and decision-making unit in the risk management organization and reviews the risk management strategies as a whole based on the overall business strategies and exasperating environment.

Audit Committee

The “Audit Committee” subordinate to the Board of Directors is responsible for reviewing the internal control system, ensuring compliance with related laws and regulations, and controlling existing or potential risks to the Company.

Internal Auditing Office

The independent internal audit unit is responsible for internal auditing and control, regularly reviewing subsidiaries' financial and operational aspects, and ensuring the adequacy of internal control system design and implementation. It supervises internal control, completes the annual audit plan, reports to the Board of Directors, and follows up on subsequent improvements.

Risk Management Team

It formulates relevant response policies and procedures according to the ISO 31000 Principles of Risk Management and executes risk management policies approved by the Board of Directors. A risk management meeting shall be held at least once a year to report the implementation of risk

Departments /Plants

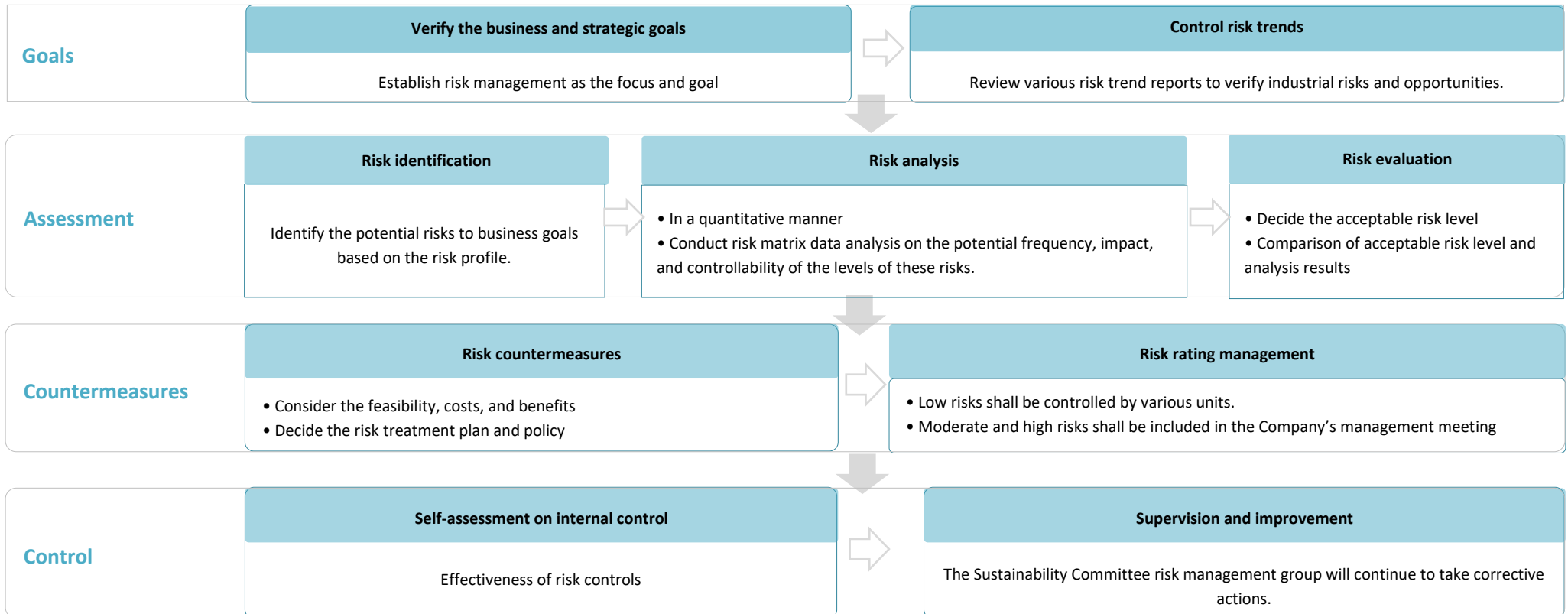
Each department, including Strategy, Finance, Legal, Information Technology, Human Resources, Environmental Safety, Research and Development, Manufacturing, and Sales, formulates policies to align with key strategic directions. Functional departments and subsidiaries establish effective two-way and horizontal communication mechanisms through regular meetings to manage potential risks.

2. Risk Management Process

The process begins by identifying operational and strategic objectives to establish the focus areas for risk management. Risk trend reports are reviewed to understand the opportunities and risks associated with industry and economic trends. This is combined with the company's historical risk records to identify and analyze potential risks that could impact operational objectives. Through a tiered risk assessment process, plans and measures for risk management are determined. Throughout the process, documentation, communication, consultation, monitoring, and reviews are conducted.

A comprehensive risk survey is conducted every three years, while each functional unit performs an annual risk review. This ensures the effectiveness of risk identification, management, and control measures, aiming to prevent operational and financial losses and to develop timely countermeasures. A comprehensive risk identification survey was conducted in 2022, and a review of risk management effectiveness was completed in 2024.

Risk Identification Matrix



Risk Assessment and Strategies

Zyxel Group and its subsidiaries conduct detailed risk identification through specialized divisions within each functional unit. This process involves stress testing and sensitivity analysis to determine the impact severity of potential risks. Cross-analysis is then performed to assess the likelihood of these risks occurring, resulting in the calculation of risk values. Major risks are identified based on factors such as previous occurrences, acceptable levels, and short-, medium-, and long-term impacts.

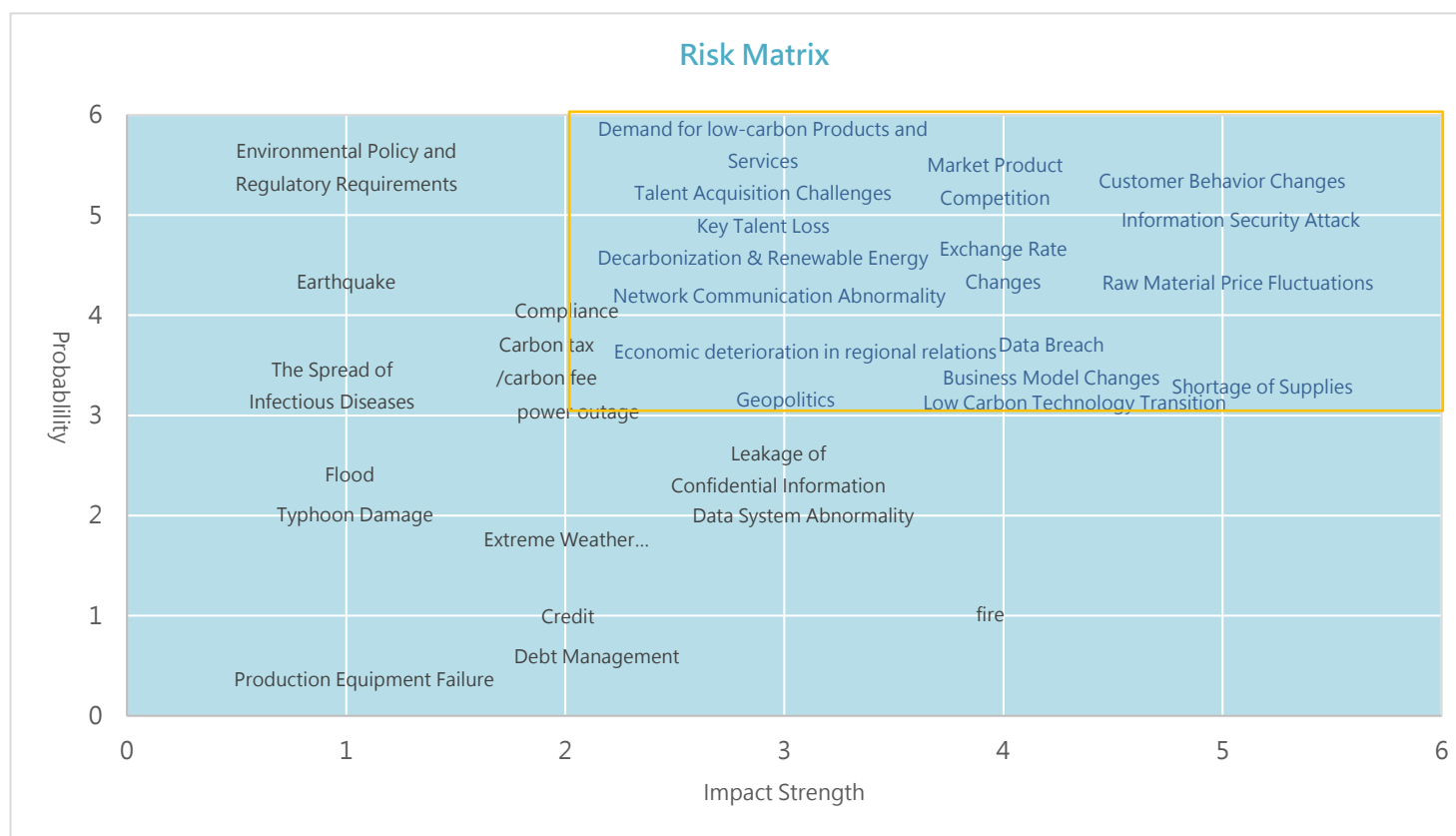
For identified risks, strategies are developed to mitigate, transfer, or avoid them. For significant risks, a Business Continuity Plan (BCP) is devised, and scenario drills are conducted. In the event of emergencies or major incidents, Zyxel Group activates a crisis management mechanism. Subsidiary General Managers serve as commanders, assembling relevant units, forming functional teams, and devising response measures. Communication is promptly issued to ensure transparency, allowing for the continuous and effective management of corporate risks and the uninterrupted operation of the business, thereby achieving sustainable development goals.

The company conducts an annual internal control self-assessment, evaluating the effectiveness of risk controls against various risk scenarios within relevant units. This assessment also considers the impact of external environmental changes and shifts in business models, ensuring ongoing supervision, improvement, and risk management.

Risk Assessment and Countermeasures

Zyxel Group proactively addresses the challenges posed by evolving risks. Based on factors such as geopolitics, economy, technology, environment, and society, the company has identified 55 types of risks, including decision-making, economic, financial, cybersecurity, market, supply chain, climate change, and human resources risks. After assessing their acceptability, 27 risk items were shortlisted. These risks were evaluated based on their impact intensity and likelihood of occurrence. Sixteen significant risks, with a risk value greater than 9, were identified as having the potential to affect the company's operations, and Risk Management measures were implemented accordingly.

Zyxel Group has long been concerned with major risks such as financial risks caused by currency fluctuations, supply chain shortages, and information security risks arising from increased digitization. The Group also refers to the Global Risks Report published by the World Economic Forum (WEF) and continuously identifies emerging risks that are expected to have long-term impacts on business operations. This proactive approach allows Zyxel to closely monitor changing risk trends and develop appropriate response strategies. According to the [2025 Global risk report](#), Zyxel Group has identified three emerging risks expected to arise in the next 3 to 5 years. These include customer concerns about geopolitical risks, rising operational costs due to inflation, and increased customer demands for carbon reduction and the use of renewable energy. This has made the company's need for renewable energy and carbon credits more urgent. Zyxel Group has analyzed the potential impacts of these risks and is actively taking mitigation measures to address them.



Impact (L)	Score
Very high	5
High	4
Medium	3
Low	2
Very Low	1

Probability (P)	Score
Almost certain (67% > 99% probability of occurring)	5
Likely (51% > 66% probability of occurring)	4
Possible (33% - 50% probability of occurring)	3
Unlikely (5% < 32% probability of occurring)	2
Almost impossible (< 5% probability of occurring)	1

Risk (R) = Impact (L) x Probability (P)	
Very high	17-25
High	9-16
Low	1~8

Major Risk Identification and Mitigation Measures

Aspect	Risk Category	Description	Potential Impact	Measures Taken	Correspondence
Emerging Risks (3-5 Years)					
Decision Risks	Geopolitical Conflict	Ongoing tensions between the US and China, worsening cross-strait relations, and the Russia-Ukraine war continue to challenge the global economy.	Ongoing tensions between the US and China, worsening cross-strait relations, and the Russia-Ukraine war continue to challenge the global economy.	Customers may require relocating production sites due to geopolitical risks, leading to increased costs. Developed a Business Continuity Plan (BCP) to address supply chain or production disruptions, regularly reviewed and optimized through drills to integrate crisis management into operations.	Corporate Governance: D. Risk Management : BCM
Economic Risks	Economic Climate Change	Global economic forecasts are trending downward.	Geopolitical conflicts may disrupt operations and supply chains.	<ul style="list-style-type: none"> Market intelligence and surveys are conducted to anticipate and respond to market conditions. Production capacity is optimized, and relationships with customers and suppliers are strengthened in response to the US-China trade war 	
Climate change Risks	Carbon Reduction and Renewable Energy	Countries continue to set net-zero emission targets and revise environmental laws. Customers demand carbon reduction and adherence to international initiatives. Green energy price fluctuations also cause uncertainty in carbon credit purchases.	<ul style="list-style-type: none"> Compliance with international net-zero goals and environmental laws may require adjustments in production processes, energy use, and emission controls, increasing compliance costs and risks. More resources are needed to invest in green product development, increasing R&D costs. Meeting customers' demands for carbon reduction and renewable energy usage may require higher expenditures. The shortage of renewable energy in Taiwan increases the difficulty of achieving carbon reduction goals. 	<ul style="list-style-type: none"> Identify climate change risks and opportunities, implement risk mitigation measures, and assess operational and financial impacts. Set carbon reduction goals and strategies, initiate carbon management, and implement solar power installations. 	Sustainable environment: A. Climate change
Major Risks					
Financial Risks	Currency and Interest Rate Fluctuations	Currency and interest rate fluctuations affect global economic development.	The company's high export ratio exposes it to foreign exchange risks due to currency fluctuations.	Monitor market information and exchange rate trends to implement timely hedging operations.	2024 annual report
Cyber-security Risks	Cyber Attacks	Covers a range of threats from human error to malicious attacks. Major risks include data breaches, cyber attacks, social engineering, internal threats, physical security, and natural disasters or accidents.	System anomalies and cyber attacks may disrupt operations, leading to financial losses.	<ul style="list-style-type: none"> Establish a cross-departmental "Information Security Management Committee" chaired by the CEO and appointed a Chief Information Security Officer to coordinate information security policies and resource allocation. Employees must complete annual mandatory cybersecurity courses and undergo irregular e-mail social engineering drills to enhance cybersecurity awareness and vigilance. Implement SBOM (Software Bill of Materials), engage in CMMC 2.0 certification, and evaluate the adoption of the NIST CSF maturity assessment framework to strengthen defenses across six dimensions: governance, identification, protection, detection, response, and recovery. 	Corporate Governance: E. Information Security Management
	Confidential Data Leaks		Confidential data leaks, ransomware, deepfake scams.	Implement data classification, define roles and responsibilities, and utilize Data Loss Prevention (DLP) solutions to prevent unsafe or improper sharing, transmission, or use of sensitive data.	Corporate Governance: E. Information Security Management

Aspect	Risk Category	Description	Potential Impact	Measures Taken	Correspondence
Market Risks	Customer Behavior Changes	Changes in customer preferences may lead to different considerations when choosing products or services.	The inability to respond to market demands in a timely manner may impact company revenue.	<ul style="list-style-type: none"> Monitor market trends, understand customer needs, and proactively develop new products and core technologies. Invest in related technology R&D, increasing capacity and investment in innovation. 	
	Market Product Competition	Changes in market competition, leading to the redistribution of customers and markets	<ul style="list-style-type: none"> Easy access to low-cost product technology affects market prices. Increased demand for technology integration in the market. 	<ul style="list-style-type: none"> Prioritize staying attuned to market trends to meet customer needs and improve satisfaction. Establish a "Project Risk Management Policy" to implement Risk Management plans during new product planning, ensuring timely risk management in product development. 	
	Demand for Low-Carbon Products and Services	<ul style="list-style-type: none"> Increased global or regional sustainability awareness has led to different considerations for customers when choosing products or services. Demand for products with low consumption rates and those made from recycled materials is rising. 	<ul style="list-style-type: none"> High-energy or high-emission products and services face obsolescence due to misalignment with market demand. Designing green products incurs additional costs, leading to higher overall product prices. 	<ul style="list-style-type: none"> Stay abreast of green product market trends, understand customer needs, and proactively develop new products and core technologies. Develop green product technologies to reduce power consumption or standby energy use. 	2024 annual report
Supply Chain Risks	Supply Shortages	Supply shortages, delays, or interruptions in the supply of critical raw materials and consumables.	Affects delivery timelines.	<ul style="list-style-type: none"> Establish sustainable supply chain partnerships. Diversify risk management based on supplier production sites. Actively develop new material sources to avoid reliance on a few suppliers. Establish safety stock levels. 	Partnerships: B. Supplier Management
	fluctuations in raw material prices	Fluctuations in raw material prices due to changes in market and international economic conditions.	cost increase	<ul style="list-style-type: none"> Establish a Raw Material Price Risk Management mechanism. Implement group-based procurement to enhance raw material supply chain management, adapting to macroeconomic changes. Conduct market intelligence gathering or surveys to understand market conditions and respond proactively. 	Value Chain: B. Supplier Management
Climate Change Risks	Low-Carbon Technology Transformation	The company has consistently designed products with energy-saving and carbon-reduction features, improving production processes.	Climate change may necessitate innovative processes, service delivery changes, or financial expenditures under current conditions.	<ul style="list-style-type: none"> Use recyclable materials in products. Automate production processes. Prioritize energy-saving targets for high energy-consuming, low-efficiency equipment. 	Sustainable Products
Human Resources Risks	Talent Acquisition Challenges	Intense competition in the labor market affects recruitment.	Inability to recruit talent promptly may impact business development and lead to a loss of competitive advantage.	<ul style="list-style-type: none"> Implement effective human resource management mechanisms and performance evaluation processes. Strengthen talent recruitment and training channels. 	Friendly Workplace A. Diversity and inclusion Recruitment B. Human Capital Development
	Key Talent Loss	Industry changes and economic conditions cause talent mobility.			

3. Business Continuity Management (BCM)

To ensure that Zyxel Group maintains operational resilience in the face of various threats that may cause disruptions, and to ensure that business, production, and management activities continue uninterrupted, thereby safeguarding the interests of the company and its stakeholders, Zyxel Group implements operational continuity management and planning to minimize the impact of disasters.

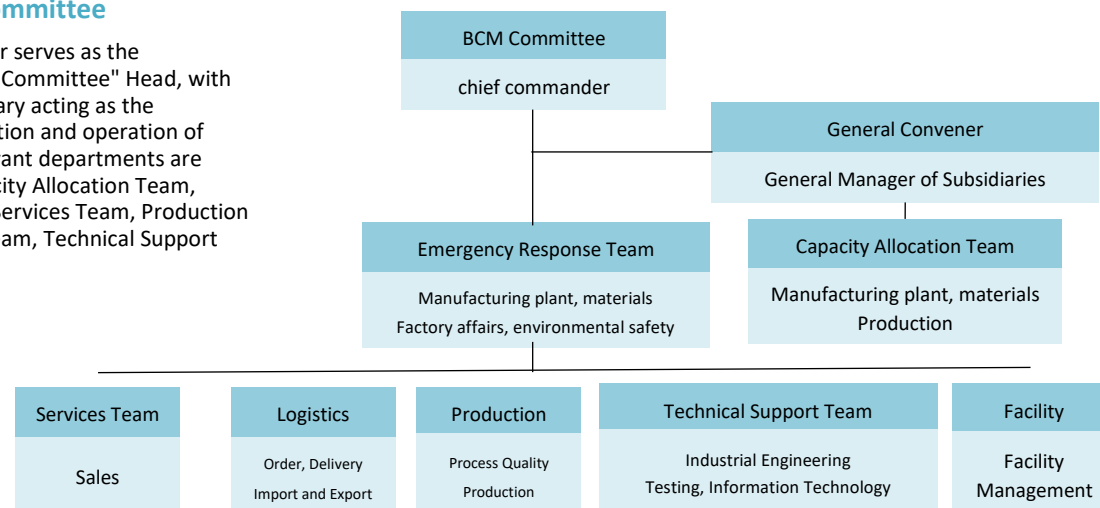
Zyxel Group has established the "Operational Continuity Management Guidelines" and formed an "Operational Continuity Management Team." Each subsidiary has set up an execution team that develops risk-based Business Continuity Plans (BCPs) according to the company's operational risk analysis. The company conducts drills for specific risk scenarios each year and makes improvements and follow-ups, embedding operational continuity into its daily operations and management processes.

BCM Policies

- Ensure operational continuity
- Reduce the impact of operational disruptions
- Protect information, assets, and personnel safety
- Minimize property loss
- Comply with regulations
- Enhance operational resilience
- Safeguard stakeholder interests

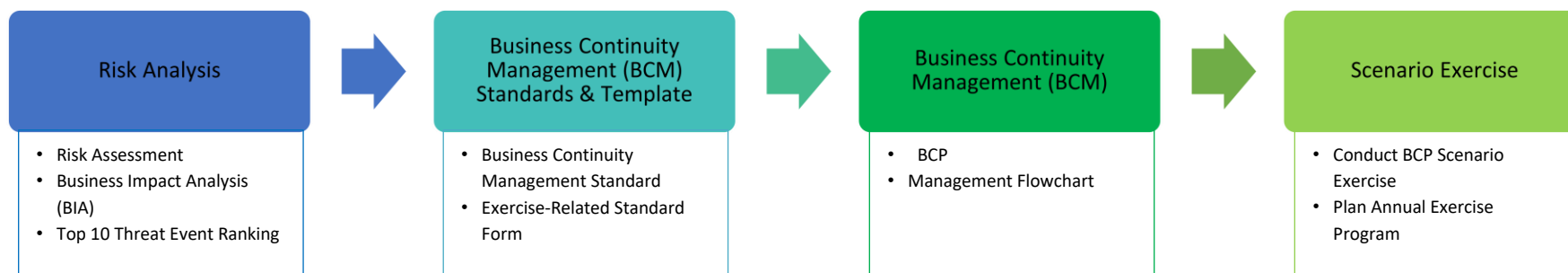
BCM Organization – BCM Committee

The Group's Chief Sustainability Officer serves as the "Operational Continuity Management Committee" Head, with the General Managers of each subsidiary acting as the Chairpersons. They oversee the execution and operation of their respective subsidiaries. The relevant departments are divided into seven main groups: Capacity Allocation Team, Emergency Response Team, External Services Team, Production Operations Team, Logistics Support Team, Technical Support Team, and Facility Recovery Team.



BCM Process

In accordance with ISO 22301 for Business Continuity Management Systems, we have established a Business Continuity Management (BCM) system. This involves conducting operational risk impact analyses, establishing standards and forms based on the implementation framework, and developing Business Continuity Plans (BCPs) for operational disruptions. We have also established procedures for incident response, crisis communication, business continuity, and recovery. Additionally, we simulate business disruption scenarios each year based on operational conditions, conduct drills, review results, and make improvements and follow-ups.



Business Continuity Plan (BCP)

Experts were invited to review the Company's existing business continuity management measures. Through training courses, discussions were held and the current processes were revised.


According to the results of the current risk analysis, supply chain disruption and production disruption have been identified as the two major risks affecting operations in recent years. Subsidiaries of Zyxel Group have each developed a Business Continuity Plan (BCP) for supply chain disruption and another for production disruption. Scenario-based drills were conducted for war and fire, which are potential causes of such disruptions.

By doing so, a business continuity management system has been established, along with a comprehensive crisis management and disaster response mechanism. Furthermore, annual drills and continuous improvements have been planned to ensure that business continuity is embedded into daily operations and management processes.



BCM plan training

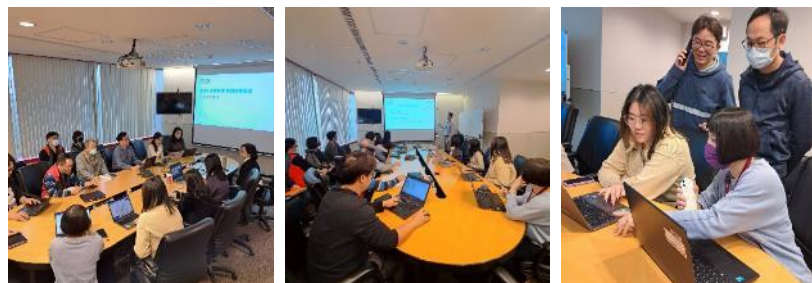
War Tabletop Exercise Record Form

Scenario	Facing the threat of war and economic blockade, Taiwan has initiated offsite contingency plans by establishing backup site.
Recovery Objectives	6 months
Process	<ol style="list-style-type: none"> 1. Due to the inability to restore production capacity within 6 months, the Business Continuity Planning (BCP) is activated by the BCM Committee 2. Material Transfer Plan 3. develop recovery plan 4. Notify customers of the transfer of orders to the backup site and provide the estimated updated delivery dates 
Improvement Results	Sales performance assessment and production scheduling are divided by customer, accelerating the generation of reports.

Information Security Backup and Disaster Recovery Drills

Zyxel Group conducts annual disaster recovery simulation drills for critical application systems as part of its information security management. The company defines the maximum tolerable data loss time (RPO) and maximum tolerable downtime for information services during a disaster, ensuring the company's capability to respond effectively in critical situations. More information [Information Security Management](#)

Fire Tabletop Exercise Record Form

Scenario	Due to an electrical fire, the packaging department's production activities at Hsinchu site were interrupted.
Recovery Objectives	3 months
Process	<ol style="list-style-type: none"> 1. The safety department reports to the relevant units, extinguishes the fire, conducts damage assessment, and informs the capacity adjustment team. 2. The capacity adjustment team evaluates the situation and determines that the production interruption will last more than two weeks, reporting to the convenor. 3. Due to the extent of the damage, which cannot be repaired within two weeks, the Business Continuity Management Committee decides to activate the BCP. 4. Plant operations, IT, and production lines conduct an inventory, report the damage, recovery methods, and estimated recovery time. 5. A temporary production line and production process system are established. 6. The sales department informs the customer and updates the delivery date. 
Improvement Results	Enhance the speed of emergency communication between reporting personnel and relevant units.

E. Information Security Management

Zyxel Group is committed to optimizing cybersecurity, driving digital transformation, and creating a trustworthy and secure online world through technological innovation and close collaboration with key partners. As a major network communications company with information security software and hardware equipment and technical capabilities, we have an extensive and diverse information security solution portfolio and have obtained ISO 27001 information security certification in the face of increasingly severe information security threats. We continue to strengthen the integration of network and information security, ensure product information security, and at the same time enhance employee information security awareness, evaluate supplier information security, and protect the intellectual property security of customers and partners.

Policy

Zyxel Group's security policy sets information security management regulations, guidelines, standards, rules, and codes of conduct to achieve our information security goals, ensuring the effectiveness of Zyxel Group's information security practices. We formulated information security management policies and codes of conduct including "Network Security Management Measures", "Software Asset Management Measures", "Personal Computer Equipment Services and Management Measures", and others in accordance with the ISO 27001 international standard.

Company employees, subsidiaries of online operations, and manufacturers providing information services get notified of the relevant security management information in writing or electronically.

Targets & Achievements

Goal	Major Issue	Operational Impact	Actions	Performance Indicators	2024 Target	2024 Achievement		Goals			
								2025 short-term	2027 mid-term	2030 long-term	SDGs
Implement Sustainable Management	Information Security	Ensure the confidentiality of information assets to comply with regulations and gain customer trust	Identify cybersecurity risks to prevent security incidents	Completion rate of information security training courses	>99%	100%	v	>98%	>98%	100%	
				Number of major security incidents	0	0	v		0		
				Annual ISO 27001 certification	Obtained every year	Obtained	v		Obtained every year		
				ISO/IEC 17025 Accredited Cybersecurity Laboratory	-	-	-	Accredited			

2024 Information Security Management Highlights

Cybersecurity

- Deployed perimeter firewalls, Intrusion Detection and Prevention Systems (IDS/IPS), and Virtual Private Networks (VPN) to protect network boundaries and ensure secure remote connections.
- Implemented Multi-Factor Authentication (MFA) and established fine-grained access control policies to strengthen user authentication and authorization.
- Adopted Data Loss Prevention (DLP) technologies to prevent unauthorized data access.
- Conducted data classification and continuously monitored data integrity.

Data Security

- Implemented data and disk encryption to ensure confidentiality.
- Applied Data Loss Prevention (DLP) technologies to prevent unauthorized access.
- Conducted data classification and monitored data integrity.

Application Security

- Conducted dynamic and static application testing to identify vulnerabilities.
- Deployed a Web Application Firewall (WAF) to protect web applications from attacks.

Device Security

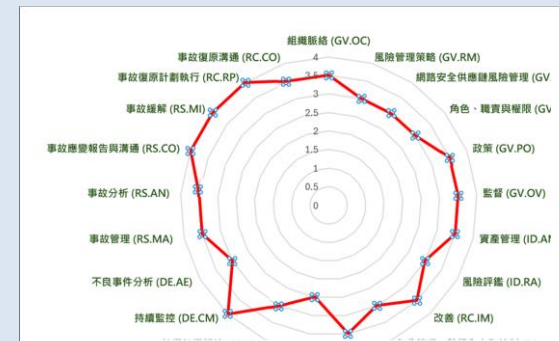
- Deployed Endpoint Detection and Response (EDR), implemented Multi-Factor Authentication (MFA), and conducted regular scans and patching of endpoint vulnerabilities.
- Performed regular vulnerability scans and penetration tests to remediate system weaknesses.
- Utilized a cybersecurity management dashboard for attack tracking and incident analysis.

AI Strategy and Guidelines

- Developed an AI strategy and established clear guidelines to ensure responsible and secure adoption of artificial intelligence technologies.

ISO 27001 Certification

- To ensure the confidentiality, integrity, and availability of information, Zyxel Group obtained ISO 27001:2013 certification through BSI in 2015 and successfully completed the ISO 27001:2022 transition audit in 2024. The Group continues to uphold the PDCA (Plan-Do-Check-Act) management cycle with a rigorous approach, continuously enhancing information security management and technologies to safeguard customer data.
- In compliance with ISO 27001:2022 requirements, Zyxel Group has established comprehensive management documentation and conducts annual information asset inventory and updates. Regular activities include risk assessments, business impact analyses, disaster recovery drills, account and access reviews, vulnerability scanning, penetration testing, and social engineering exercises.



TCSA Information Security Award

- Received the TCSA Information Security Leadership Award for two consecutive years (2023–2024), recognizing Zyxel Group's commitment to sustainable innovation and building cybersecurity resilience.



Information Security Organization

Dedicated Information Security Organization: Zyxel Group has a dedicated Chief Information Security Officer (CISO) responsible for coordinating information security strategy planning. In 2014, the company established an information security organizational framework based on ISO 27001 and formed a specialized Information Security Team under the leadership of the CISO. This team is responsible for formulating information security strategies and objectives, monitoring security incidents and activities, executing various information security tasks and projects, and conducting information security awareness and training programs.

Direct Subordination to the Chairman's Office: In response to the escalating threats in information security, the "Zyxel Group PSIRT Committee" (Product Security Incident Response Team, PSIRT) operates under the "Information and Product Security Management Division." This division comprises the Information Security and Product Security Management Departments, both of which are directly under the oversight of the Chairman's Office. They are responsible for continuous monitoring of potential external threats and providing immediate responses to security issues.

Monitoring by the Board of Directors: The implementation of information security is reviewed regularly on an annual basis. Management review meetings are also held in an effort to unceasingly promote and improve the information security management system. With the aim of ensuring the continuous and effective operation of the internal information security management mechanism, a report on information security work plans and their implementation is made to the Board of Directors at least once a year.

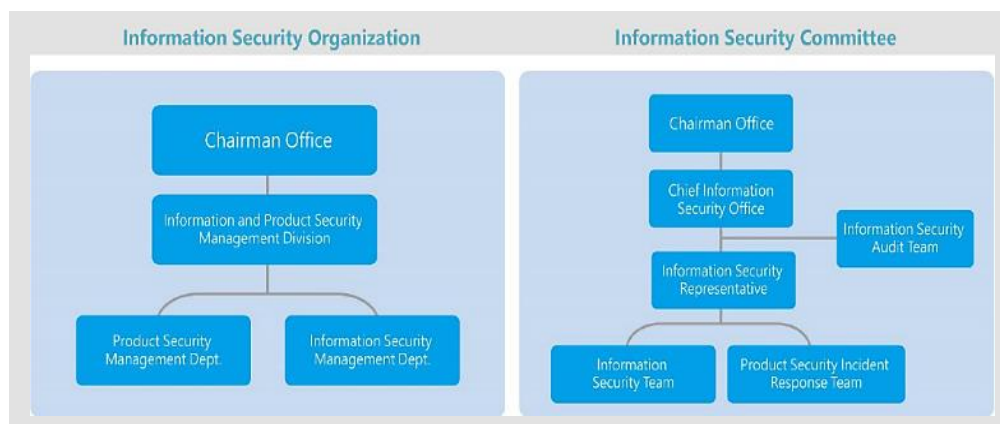
Information Security Workforce and Investment

Zyxel Group established a dedicated Information Security and Product Security Department in 2017, staffed with 20 full-time professionals, of which 40% are senior staff and 60% are junior staff. Among them, eight employees hold professional cybersecurity certifications, including CCISO (Certified Chief Information Security Officer), ISO 27001 Lead Auditor, ECIH (EC-Council Certified Incident Handler), ECSA (EC-Council Certified Security Analyst – SOC), CTIA (Certified Threat Intelligence Analyst), CEH (Certified Ethical Hacker), TCSE (Trend Certified Security Expert), and CCNA (Cisco Certified Network Associate).

To further strengthen the Company's capabilities in detecting and responding to cyberattacks, **Zyxel signed a Memorandum of Cooperation on National Cybersecurity Joint Defense, Trade Secret Protection, and Threat Intelligence Sharing with the Ministry of Justice Investigation Bureau on December 11, 2024.** This partnership enhances threat intelligence sharing, joint defense collaboration, incident response readiness, and legal support capabilities. Through cybersecurity drills, Zyxel also improves its ability to respond effectively to incidents, thereby contributing to national cybersecurity defense.

In addition, Zyxel continues to support its products in obtaining **Germany's BSI cybersecurity certifications**, thereby enhancing information security protection and building a robust defense framework. The Company also **participated in the 2024 Taiwan Cybersecurity Summit**, showcasing tailored cybersecurity solutions for diverse sectors, fostering academic-industry collaboration, and raising public awareness on cybersecurity issues.

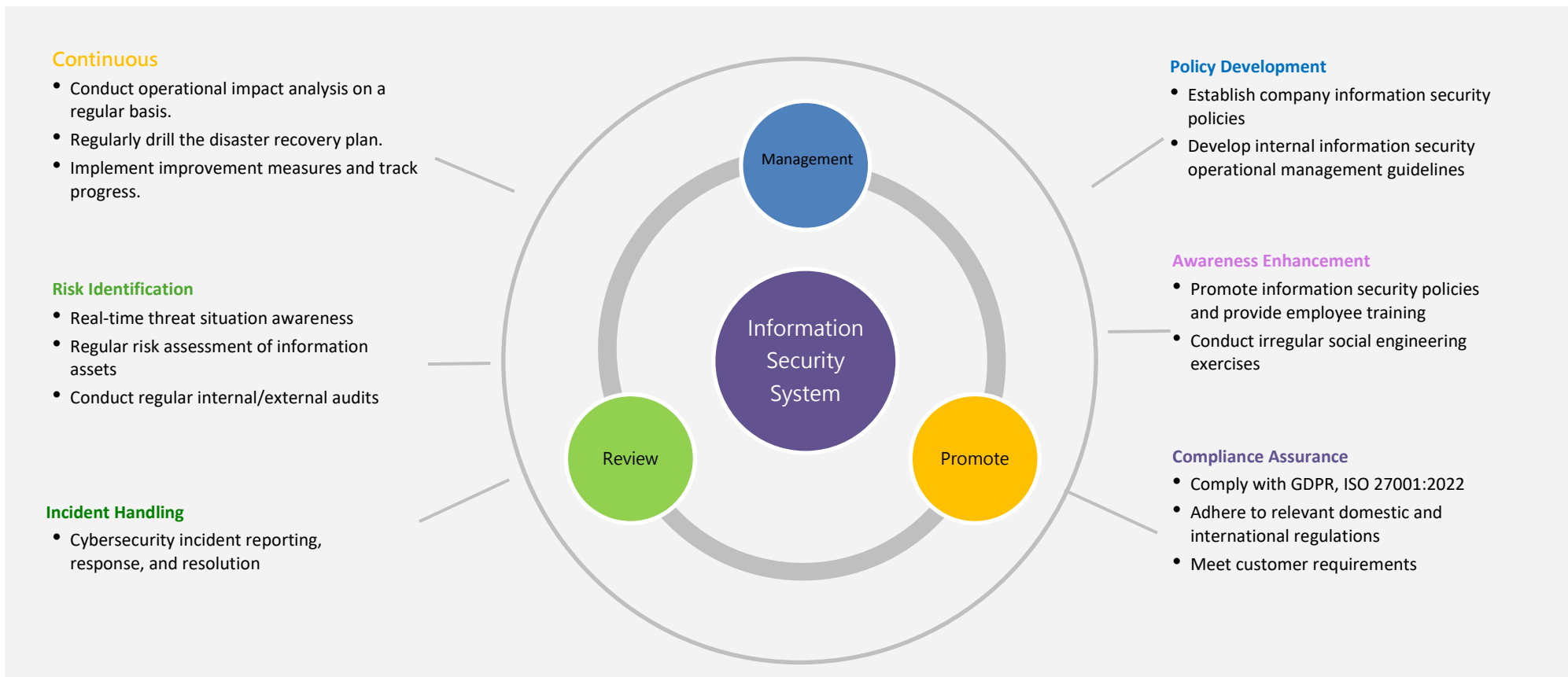
Furthermore, **Zyxel participated in and sponsored the 2024 CGGC Cyber Guardians Challenge**, promoting cybersecurity talent development by offering hands-on experience and supporting professional growth in the cybersecurity field. These initiatives reflect Zyxel's continued investment in cybersecurity defense, talent cultivation, and technological innovation, providing strong protection for enterprises and society in the era of digital transformation.



Information Security Management Framework

In order to strengthen information security management, Zyxel Group has set up a safe and reliable digital operation platform to ensure the sustainable operation of data, systems, equipment, and networks. We have implemented security control mechanisms for data processing, transmission, and storage while taking information security and work efficiency into account. We have set up a complete information security management framework, with governance, promotion, and inspection as the three management directions.

As part of our information security policy, we raise awareness about information security and undergo and pass ISO 27001 information security certification audits regularly to ensure our compliance measures and track improvements.



Scope of Information Security Management

The company's information security management encompasses four major control measures to prevent data misuse, leakage, alteration, and destruction due to human error, deliberate acts, or natural disasters. These measures address various risks and hazards that could impact the organization:

- Organizational Control Measures
- Personnel Control Measures
- Physical Control Measures
- Technical Control Measures

Data Security Management System

Zyxel Group has established an Information Security Management System (ISMS) in compliance with international standards, certified under ISO/IEC 27001:2022 (including Taiwan's national standard CNS 27001:2014). Since the implementation and certification of the ISMS in 2015, the Group has successfully passed information security certifications and periodic audits for nine consecutive years. Through triennial recertifications and interim audits, Zyxel Group continuously enhances and optimizes its management practices and technical measures to strengthen information security.

Information Security Risk Management

Zyxel Group conducts regular information security risk assessments to adjust business continuity policies, review compliance with applicable regulations, and evaluate and update internal information security rules to ensure both compliance and effectiveness. The Group also promotes cybersecurity awareness through employee training and social engineering exercises to strengthen staff vigilance.

In addition, regular information asset risk assessments, internal and external audits, and backup failover drills for core business systems are conducted. Periodic Business Impact Analyses (BIA) and Disaster Recovery Plan (DRP) drills are also carried out to ensure operational resilience.

Cybersecurity Alerts and Incident Management

- Standardized processes for reporting, classifying, handling, and tracking incidents.
- Rapid response and recovery to ensure business continuity.
- Implemented APT monitoring and SOC operations with external expert support to enhance detection and response.

• Backup and Disaster Recovery Drills

Zyxel Group conducts regular disaster recovery drills every year to ensure the company's ability to respond effectively during critical moments. The recovery mechanisms we employ in the event of a disaster swiftly restore business operations to a normal or an acceptable level, enabling essential application systems to continue functioning and ensuring uninterrupted business operations.

Backup administrators perform data recovery tests at least once a year. In 2023, 15 backup storage devices were selected for recovery testing across 6 key application systems, resulting in the successful recovery of the backed-up data.

The results of the 2024 disaster recovery drill revealed that the maximum tolerable data loss time in the event of a disaster (Recovery Point Objective, RPO) is 5 hours. Additionally, the maximum acceptable information service recovery time following a disaster (Recovery Time Objective, RTO) is 20 hours.

The results of drills in the past three years have all achieved the company's set objectives. Detailed statistical data is provided in the following table.

	Target	2022	2023	2024
A critical annual practice involves conducting disaster recovery simulations for key application systems to ensure uninterrupted business operations.	RPO <= 10 hrs	7 hrs.	5 hrs.	5 hrs.
	RTO <= 24 hrs	19 hrs.	20 hrs.	20 hrs.

Note1 : RPO: Recovery Point Objective

Note2 : RTO: Recovery Time Objective

• Social Engineering Drill

2 social engineering drills are implemented for information security education and awareness-raising to intensify our employees' awareness of information security and avoid email scams.

• Information Security Education and Dissemination

To improve the employees' cognitive ability for information security, enhance their information security awareness, facilitate all personnel's understanding of the importance of information security, provide them with knowledge of all potential security risks and response approaches, and thereby maintain overall information security, an internal information security website, "Information Security Website", is built to offer real-time information security news to the employees.

• Information Security Education and Training

Zyxel Group has established an internal Information Security Portal to provide employees with real-time cybersecurity updates, enhancing their awareness of potential risks and strengthening the company's overall security culture. To further embed security practices, all employees are required to complete annual mandatory online training, with courses tailored to different job levels and covering policies, usage guidelines, and risk awareness. In 2024, the training program included *Personal Information Security*, *Mobile Device Security*, and *Introduction to Information Security*, with 1,919 participants completing the courses and achieving a 99.5% completion rate.

2. Product Information Security

To continuously monitor potential external threats and respond swiftly to security issues, Zyxel Group established a Product Security Management Department under the Group PSIRT (Product Security Incident Response Team) Committee. The department is responsible for planning and implementing product security controls, working with product security representatives from each business units to identify areas for improvement, and applying agile and continuous corrective actions. Security-by-design practices have been embedded by developing security architecture design principles, conducting source code security reviews, and implementing product security verification to address risks at the root cause and integrate cybersecurity into product design.

Since 2021, Zyxel Group has served as a CVE Numbering Authority (CNA) under the NIST CNA program, a member of the MITRE Common Vulnerabilities and Exposures initiative, responsible for evaluating vulnerability risks and impacts. In June 2023, the Group achieved the highest *NVD Acceptance Level "Provider"* certification, further strengthening vulnerability management and product security mechanisms while enhancing brand reputation. By obtaining international membership and adhering to external requirements, Zyxel aims to accelerate the internalization of product security practices and fully implement Security by Design. These efforts ensure that every R&D process follows security design principles, safeguarding the confidentiality, integrity, and availability (CIA) of Zyxel Group's information assets against internal and external risks.



3. Intellectual Property Protection

With the evolution of network technology and the growth of market demand, Zyxel Group actively develops various network technology and other products. In order to maintain Zyxel Group's competitive advantage in innovative technology capabilities and protect the interests of all stakeholders, we prioritize the protection and control of intellectual property and confidential information.

Intellectual Property System

Zyxel Group has developed intellectual property management strategies and established a mechanism to improve the advantages and value created from intellectual property. Zyxel Group's "Procedural Management Guidelines for Intellectual Property" were formulated to set up the management objectives, application policies, and management maintenance of intellectual property rights. Zyxel Group has also adopted the Taiwan Intellectual Property System (TIPS) to strengthen Zyxel Group's intellectual property management system and enhance Zyxel Group's competitiveness.

Patent Protection

Zyxel Group attaches great importance to the development of various types of patents, and enhances Zyxel Group's competitiveness in intellectual property through the strategies of education, a rewards system, and a talent training management system.

- **Reward:** Zyxel Group formulated the "Employee Creative Invention Proposal Reward Guidelines" and related patent invention bonuses to encourage R&D colleagues to actively engage in innovative R&D, provide creative proposals, apply for patents, and continue to accumulate patent rights, copyrights, trademark rights, trade secrets, and professional technique intellectual assets.
- **Training:** The "Valuable Patent" course is held, with business and product managers and R&D colleagues as the main teaching target, to introduce the definition of valuable patents and Zyxel Group's patent proposal application process and improve the quality of patents.

Protection of Intellectual Property for Suppliers

We also request our suppliers to protect intellectual property and specify in the procurement contract with them that the subject matter delivered by the suppliers shall not infringe the patent right, trademark rights, copyright, or the rights of others.

Dissemination and Training Courses

To accumulate our R&D capacities, new employees are required to take courses on intellectual property rights. These courses cover an introduction to patent systems and the prevention of rights violations and focus on intellectual property management training. The Company promotes the responsibility and obligation to protect intellectual property with the employees and adopts non-disclosure agreements for the protection of the intellectual property.

All our employees must also complete our CSR courses involving the protection of intellectual property rights every year. They are required to maintain the confidentiality of the confidential information of the Company and customers, are obligated to protect the information, and shall not communicate or obtain such information for internal and external individuals, companies or organizations unauthorized to access it.

In 2024, the completion rate for courses on business secret protection regulations reached 99.7%, with no patent infringement cases reported.

| Value Chain

A. Customer Relation

B. Supplier Sustainability



A. Customer Relation


Customer Service Policy

Zyxel Group is devoted to listening to the voice of customers, creating values with service quality, and satisfying the customers' needs. The customers' complaints are always prioritized. We take the customers' critiques and suggestions on the chin with a proactive and ethical attitude and strive to improve our product and service quality.

Customer Service Commitment

We offer innovative design, manufacturing and services and deliver competitive and high-quality products and services in time to ensure customer satisfaction.

Targets and Achievements

Major Issues	Operational Impact	Actions	Performance Indicators	2024 Target	2023 Achievements		Goals			SDGs
							2025 short-term	2027mid-term	2030long-term	
Customer Relationship Management	Customer satisfaction and trust can be built for higher profits	Maintain smooth and effective communication with customers	Customer satisfaction: (MitraStar perfect 10/10 、Zyxel Networks 5/5)	MitraStar>9.0 Zyxel Networks>4.3	MitraStar9.28 Zyxel Networks4.36	V	MitraStar>9.0 Zyxel Networks>4.3	MitraStar>9.0 Zyxel Networks>4.3	MitraStar>9.5 Zyxel Networks>4.5	
		Implement the customer information protection mechanism	Business Confidentiality Training Coverage Rate	>95%	99.7%	V	>95%	>97%	>99%	

1. Protection of Confidential Information

With the aim of protecting the interests of all stakeholders, Zyxel Group highly values the protection and control of confidential business information. Hence, the Company has developed the "Management Guidelines for the Classification of Confidential Documents" to specify appropriate methods to keep confidential documents secure and related protection measures and thereby facilitate the management of the Company's business secrets and internal confidential documents.

When entering into a contract with a third party, we request it to observe the information confidentiality rules and explicitly state that both parties shall be responsible for keeping the confidential information of the opposing party known or held thereby for performing the contract confidential and shall not divulge the confidential information of the opposing party to others, provide them with the information, or assist them in obtaining it, in any form. Both parties shall perform necessary measures to prevent the confidential information from being stolen or divulged, including reasonable measures for ensuring that employees having access to the confidential information of the opposing party do not disclose it.

2024 Trade Secret Protection Training Completion Rate

Subsidiaries	Completion Rate
MitraStar	98.3%
MitraStar Wuxi	99.8%
Zyxel Communications	100.0%
Zyxel Networks	100.0%
Total	99.7%

2. Customer Communication Platform

Zyxel Group's subsidiaries have built their own customer relationship management systems to offer timely, effective, high-quality and interactive information exchange and problem-solving services to customers. The distribution partners of Zyxel Communications across the world serve as the best platform for us to communicate with global customers. We not only organize activities with the distribution partners to share product planning and after-sales services, but also provide online training courses and training completion certificates to allow the distribution partners to offer customers timely local services with higher quality.

eITS Customer Service System: Zyxel Group's professional customer service team uses an eITS system to provide product consulting services, problem-solving solutions, software updating information and product documents, product education and training courses, and education and training platforms for large brand customers to help boost their technical service capabilities for new products. Our eITS system enables the tracking and management of the progress of all customer support tasks.

Customer Complaint Platform: The customer service system provides a real-time and transparent complaint-handling platform, serving as the primary channel for customer communication and feedback. In 2024, no major customer complaints were reported, reflecting the Company's stable performance in customer relationship management. For the few isolated cases received during the year, Zyxel responded promptly and handled them appropriately, completing process and service improvements to further enhance overall service quality and customer satisfaction.

Customer Service Knowledge Platform: To equip our customer service personnel with more comprehensive professional skills, a customer service knowledge platform has been built to gather technical product information, problem-solving records and other information for the personnel's reference and for the inquiry of our front-line employees or partners. °

Social Media Platform: Enables users to interact and share knowledge and experiences. Offers features including a knowledge base, frequently asked questions (FAQs), and discussion forums. It provides users with an individual learning and communication platform while also offering us a swift means to receive feedback and enhance our products.



3. Customer Satisfaction Survey

We focus on the R&D and OEM of network communication technology and products and spare no effort to have a grasp of the needs and expectations of large brand customers. Our Customer Service Department is responsible for looking into, gathering data on, and analyzing customers' satisfaction with its after-sales services according to the ISO9001 procedures every year, notifying relevant departments of customer feedback for improvement and review, and informing the customers of the improvement.

Customer satisfaction surveys are conducted mainly by sending questionnaires to customers by email. The department has interviews with the contact persons of the customers, if necessary, after the initial analysis to ensure the correct interpretation of customer feedback.

Our subsidiary, Zyxel Networks provides high-quality products and services to small and medium-sized enterprises, along with real-time technical support. In 2023 Zyxel Networks achieved a 98.9% customer online system issue response rate and delivered satisfactory solutions to customers within the specified timeframe.

MitraStar Customer Satisfaction Score (Perfect score:10)

Year	2021	2022	2023	2024	2024 Target
Score	9.77	9.49	9.64	9.28	9.0
Percentage of Customers Surveyed	70.0%	76.7%	89.3%	93.8%	90%

Zyxel Communications Customer Satisfaction Score (Perfect score: 100)

Year	2021	2022	2023	2024	2024 Target
Score	100	98.96	98.1	94.19	90
Percentage of Customers Surveyed	100%	100%	100%	100%	98%

Zyxel Networks Customer Satisfaction Score (Perfect score: 5)

Year	2021	2022	2023	2024	2024 Target
Score	4.64	4.28	4.84	4.36	4.3
Percentage of Customers Surveyed	55%	94%	83%	79%	75%

B. Supplier Sustainability

A. Supply Chain Overview

B. Supplier Management System

C. Supplier Sustainability Management Approach

D. Sustainable Procurement

E. Supply Chain Sustainability Capacity Building



Sustainable Supply Chain Highlights

JAC Supplier Management Best Practice Awards

Supplier sign the code of conduct

Completion rate: **100%**

Audited **77** Suppliers

Supplier audit improvements

Completion rate: **100%**

2 Supplier Conferences

Supplier ESG courses

Completion rate: **100%**

Supplier Zero Carbon Academy

Participants **2,987**

Courses hours **4,218**

ESG training course for purchasing staff

Completion rate: **100%**

1. Supply Chain Overview

To build a resilient and responsible supply chain, Zyxel Group supports and adheres to the UN Global Compact (UNGC), the United Nations Sustainable Development Goals (SDGs), the OECD Guidelines for Multinational Enterprises, and the International Labour Organization (ILO) Core Labour Standards. We also follow the international standard *ISO 20400 Sustainable Procurement Guidelines* and the Responsible Business Alliance (RBA) Code of Conduct. In addition, the Board of Directors has reviewed and approved the **Sustainable Supply Chain Management Policy**, which explicitly covers key areas including human rights protection, labor practices, and environmental stewardship, requiring all suppliers to comply with relevant international standards and codes of conduct. Beyond internal capacity building for our supplier management teams, Zyxel Group has also established an **ESG Supplier Management Taskforce** to strengthen sustainable supply chain management. Through the adoption of a digital management system, we standardize processes, conduct risk assessments and audits, and implement diverse capacity-building programs for suppliers. These initiatives include training and engagement on carbon reduction, energy efficiency, green procurement, and human rights management, enabling suppliers to collectively create long-term sustainable value with Zyxel Group.


Supplier Sustainability Policy and Commitment

- Emphasize the sustainable value of the supply chain and enhance suppliers' capabilities in building a sustainable supply chain.
- Collaborate with suppliers as long-term partners in sustainable development to jointly establish a responsible supply chain industry.

Supplier Chain Management Strategy

- Integrate group resources and pursue strategic collaboration to achieve cost competitiveness.
- Value supplier relationships and foster collaborative partnerships.
- Implement a sustainable supply chain management model.
- Uphold regulatory commitments and comply with international initiatives and standards.
- Conduct regular evaluations of suppliers in terms of quality, cost, delivery, and service.
- Work with suppliers to jointly build a green supply chain.

Targets and Achievements

Major Issues	Operational Impact	Actions	Performance Indicators	2024 Targets	2024 Achievements	Goals			SDGs
						2025 short-term	2027 mid-term	2030 long-term	
Sustainable Supplier	Sustainable supplier management can deepen the partnership with the supply chain and put into practice the Company's sustainability values	<ul style="list-style-type: none"> • Realize a supply chain sustainability management model • Build sustainable supply chain partnerships 	Completion Rate of Key Suppliers' CSR Commitment Signing	MitraStar 80% Zyxel Communications /Zyxel Networks 100%	MitraStar 84.8% Zyxel Communications /Zyxel Networks 100%	v	MitraStar 85% Zyxel Communications /Zyxel Networks 100%	MitraStar 90% Zyxel Communications /Zyxel Networks 100%	
			Key suppliers' acquisition of ESG-related questionnaire	MitraStar 80% Zyxel Communications /Zyxel Networks 100%	MitraStar 100% Zyxel Communications /Zyxel Networks 100%	V	MitraStar 100% Zyxel Communications /Zyxel Networks 100%	MitraStar 100% Zyxel Communications /Zyxel Networks 100%	
			Key Supplier ESG awareness course completion rate	MitraStar 80% Zyxel Communications /Zyxel Networks 100%	MitraStar 100% Zyxel Communications /Zyxel Networks 100%	v	MitraStar 80% Zyxel Communications /Zyxel Networks 100%	MitraStar 90% Zyxel Communications /Zyxel Networks 100%	

Main Types of Procurements from Suppliers

MitraStar: The procured raw materials and parts/components mainly include integrated circuits, circuit boards, displays, electromechanical components, mechanical parts, and packaging materials. The consumable production materials are solder paste, solder wire and other consumable materials used for the processes. In 2024, 454 suppliers located in Taiwan, China, Hong Kong, Malaysia, South Korea, Singapore, and the United States, from which MitraStar Technology's locations sourced raw materials, parts/components, and consumable production materials, accounted for 80% of the locations' purchases.

Zyxel Communications : The main procurement categories for finished goods suppliers include customer premises equipment, central office equipment, wired and wireless access network equipment, and mobile broadband solutions. In 2024, there were nine finished goods suppliers in total. The top three suppliers accounted for 98% of the purchase amount and were mainly located in Taiwan, China, and Thailand, including three key suppliers.

Zyxel Networks: In collaboration with original design manufacturers (ODMs), Zyxel Group co-develops communication products and procures finished goods from suppliers, delivering value-added products, services, and solutions to customers through Zyxel Networks' sales channels. In 2024, there were 14 finished goods suppliers, with the top four accounting for 90% of total procurement value. These suppliers are located in Taiwan and China, with primary production bases in China, while also providing flexibility to manufacture information security products in Taiwan. Among them, four are identified as key suppliers.

Supplier Overview

	Definition	MitraStar	Zyxel Communications	Zyxel Networks	Total
Number of Tier 1 Suppliers	. MitraStar Technology: Top 80% of Procurement Transactions . Zyxel Communications / Zyxel Networks: Qualified Suppliers	454	9	14	477
Number of Tier 1 Critical Suppliers	. MitraStar Technology: PVL suppliers in the annual evaluation categories and the top 20 suppliers by annual procurement value. . Zyxel Communications / Zyxel Networks: Suppliers accounting for over 80% of annual procurement value	75	3	4	64
Proportion of Procurement Spend on Tier 1 Critical Suppliers (%)		71.5%	98%	94%	-

New Supplier Evaluation

To ensure the supply chain aligns with the company's sustainability goals and responsible sourcing principles, all new suppliers are subject to an evaluation process, which includes:

- **Signing the Supplier Code of Conduct:** New suppliers are required to commit to standards on environmental protection, labor and human rights, business ethics, and regulatory compliance.
- **Completing the Supplier ESG Assessment Questionnaire:** This collects information on suppliers' policies, actions, and performance in environmental management, social responsibility, and governance (ESG), serving as a basis for partnership evaluation.
- **Scoring and Review:** Evaluations are conducted based on the questionnaire and relevant documentation. On-site audits may be arranged, when necessary, to verify that suppliers possess qualified sustainability capabilities.

Procurement locally

Each plant prioritizes sourcing materials from local suppliers, which not only shortens material lead times and reduces the environmental footprint of the raw materials required for manufacturing but also indirectly increases employment opportunities and promotes socio-economic development. This approach enables suppliers to provide services more efficiently and strengthens long-term partnerships with them.

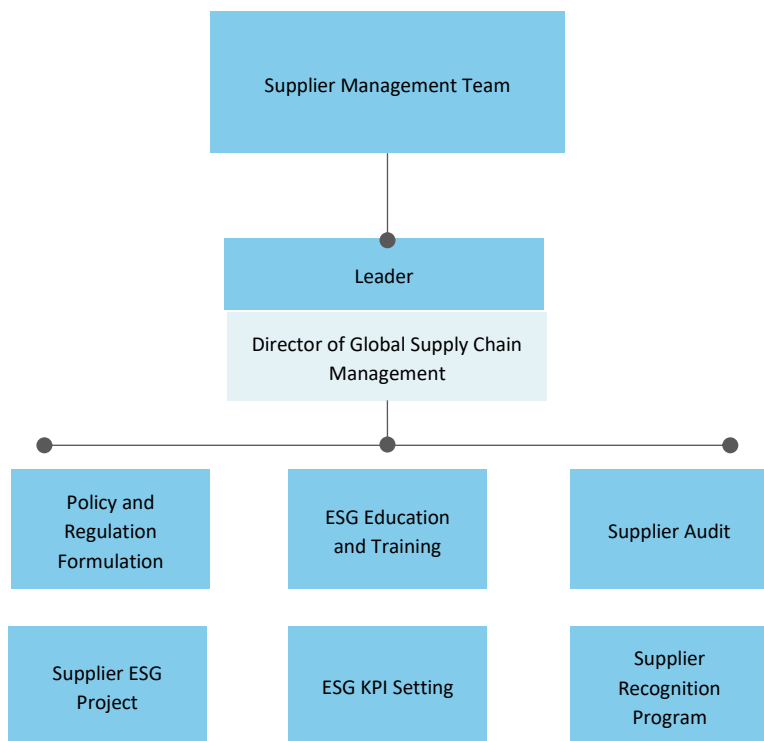
Proportion of Local Procurement by Each Subsidiary

Subsidiary	MitraStar	MitraStar Wuxi	Zyxel Communications	Zyxel Networks
Local Procurement Ratio	77%	75%	95%	100%

2. Supplier Management System

Supplier Management System

To effectively promote sustainable supply chain management, Zyxel Group's Global Supply Chain Management Division has established the **Sustainability Committee – Supplier Management Team**. This team is responsible for integrating the supply chain systems across all subsidiaries and advancing sustainability initiatives and action plans through coordinated planning and execution, ensuring alignment between supply chain management and the Group's overall sustainability strategy.



Supplier Sustainability Digital Management Platform

To enhance supply chain management efficiency, the Company has implemented the "Supplier Sustainability Digital Management Platform," covering supplier risk identification, data management, tiered governance, response mechanisms, and capacity building. The platform integrates supplier ESG self-assessment data, declarations and commitment letters, audit records, and early warning indicators to establish an evidence-based, systematic, and data-driven risk management mechanism that strengthens supply chain resilience. It not only improves multi-tier supply chain visibility and information transparency but also enhances risk identification and early warning capabilities, ensuring consistency in audit processes and traceability of documentation. By leveraging digital governance, the Company mitigates operational and compliance risks, supports the collection of carbon and ESG-related data, and fosters supplier participation in green transformation, thereby building a more resilient and responsible supply chain ecosystem.

Training of Suppliers' Management Staff

The Company is committed to enhancing supplier management capabilities by actively promoting sustainability knowledge and concepts through training programs. Specific courses are designed to strengthen employees' skills in supplier management. In particular, for supplier on-site audit teams, the Company places emphasis on training in audit planning, techniques and methodologies, process management, and supplier improvement facilitation, ensuring professionalism and effectiveness in audit execution. Furthermore, the performance of supplier management personnel in advancing sustainable procurement goals and strategies is incorporated into performance evaluations, demonstrating the Company's strong commitment to supply chain sustainability management and execution.

- **ESG Education and Training:** All management staff of the suppliers complete ESG training courses that all our employees are required to take on the online education and training platform every year.
- **Sustainable Procurement Training:** Courses are launched for the management staff of the suppliers. The courses are classified into two categories, "ESG Education and Training Materials for the Group/Suppliers - Basic" and "ESG Education and Training Materials for the Group/Suppliers - Advanced". Relevant concepts are promoted through online education and courses in the hope of incorporating the concept of sustainable procurement into supplier selection and management.
- **Training for the Supplier Audit Team:** For the training of the "Supplier Audit Team" for supplier audit capabilities, training programs have been implemented. Training meetings are convened for the Supplier Audit Team before on-site supplier audits to not only discuss SOPs for the on-site audits and appoint members who will be in charge, but also to conduct audit R&R drills and training.

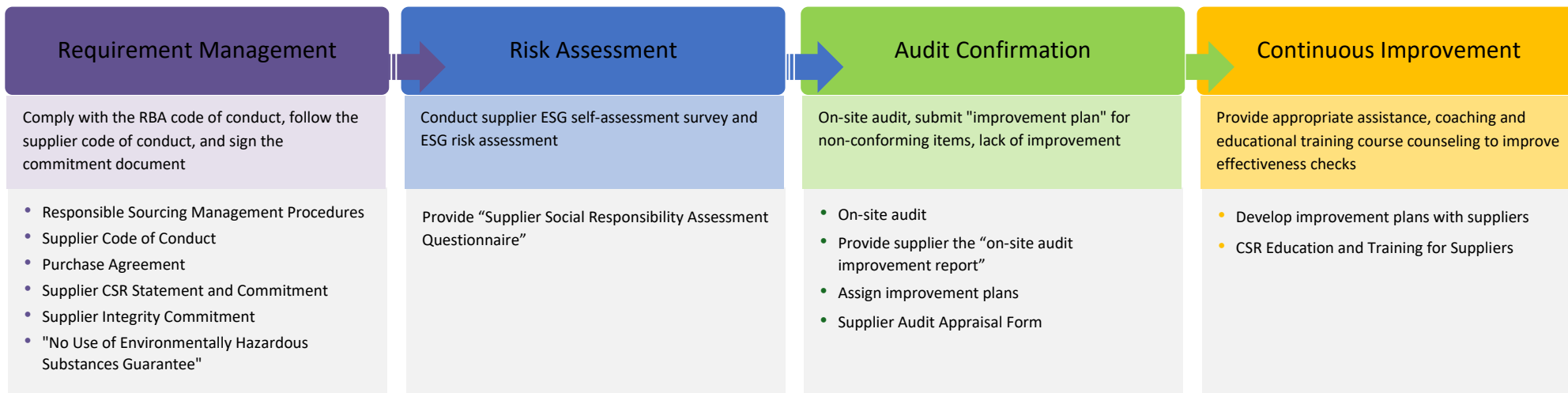
Supplier Whistleblowing Channels

An anonymous whistleblowing channel for suppliers is available on the Company website, directly overseen by the audit and senior management to manage ethical risks.

Whistleblowing channel for breaches of ethical conduct: audit@zyxelgroup.com

3. Supplier Sustainability Management Approach

As part of the Zyxel Group procurement and supply chain development policy and commitment, we established a four-stage sustainability supply chain management process with requirements management, risk assessment, audit confirmation, and continuous improvement. We evaluate the performance of the supply chain with regards to the three aspects of economy, society, and environment. This helps ensure that suppliers meet standards and improve their sustainable performance.



Step 1: Requirement Management

To establish a supply chain aligned with **RBA standards**, the Company assesses suppliers' capacity to implement social responsibility practices, and has formulated the *Responsible Procurement Management Procedure* and the *Supplier CSR Audit Regulation* to ensure suppliers meet sustainability requirements. Suppliers are also required to sign a *Continuity/Product Procurement Agreement* to guarantee compliance with environmental laws and product safety regulations, as well as to declare the prohibition of conflict minerals, thereby achieving the goals of preventing pollution, reducing environmental impact, and protecting human safety.

With reference to the **International Labour Organization (ILO) standards**, the **Responsible Business Alliance (RBA) Code of Conduct**, and best practices adopted by leading companies in the electronics industry, the Company has developed a concrete *Supplier Code of Conduct* covering labor, health and safety, environment, business ethics, and management systems. Procurement practices are regularly reviewed to ensure suppliers comply with the *Supplier Code of Conduct* and to actively respond to and implement relevant RBA requirements.

At the same time, suppliers are required to sign a *Supplier Corporate Social Responsibility Statement and Commitment Letter*. In terms of business ethics, they must sign an *Integrity and Anti-Corruption Commitment*, and with regard to environmental protection, a *Non-use of Hazardous Substances Guarantee*. These measures ensure adherence to the Code of Conduct and reinforce suppliers' responsibility for social and environmental protection.

Suppliers Sign the Supplier Code of Conduct

	Number of signed suppliers in 2024	Number of Supplier	2024 signed supplier target	Achievement rate
MitraStar	454	454	454	100%
Zyxel Communications	9	9	9	100%
Zyxel Networks	14	14	14	100%
Total	477	477	477	100%

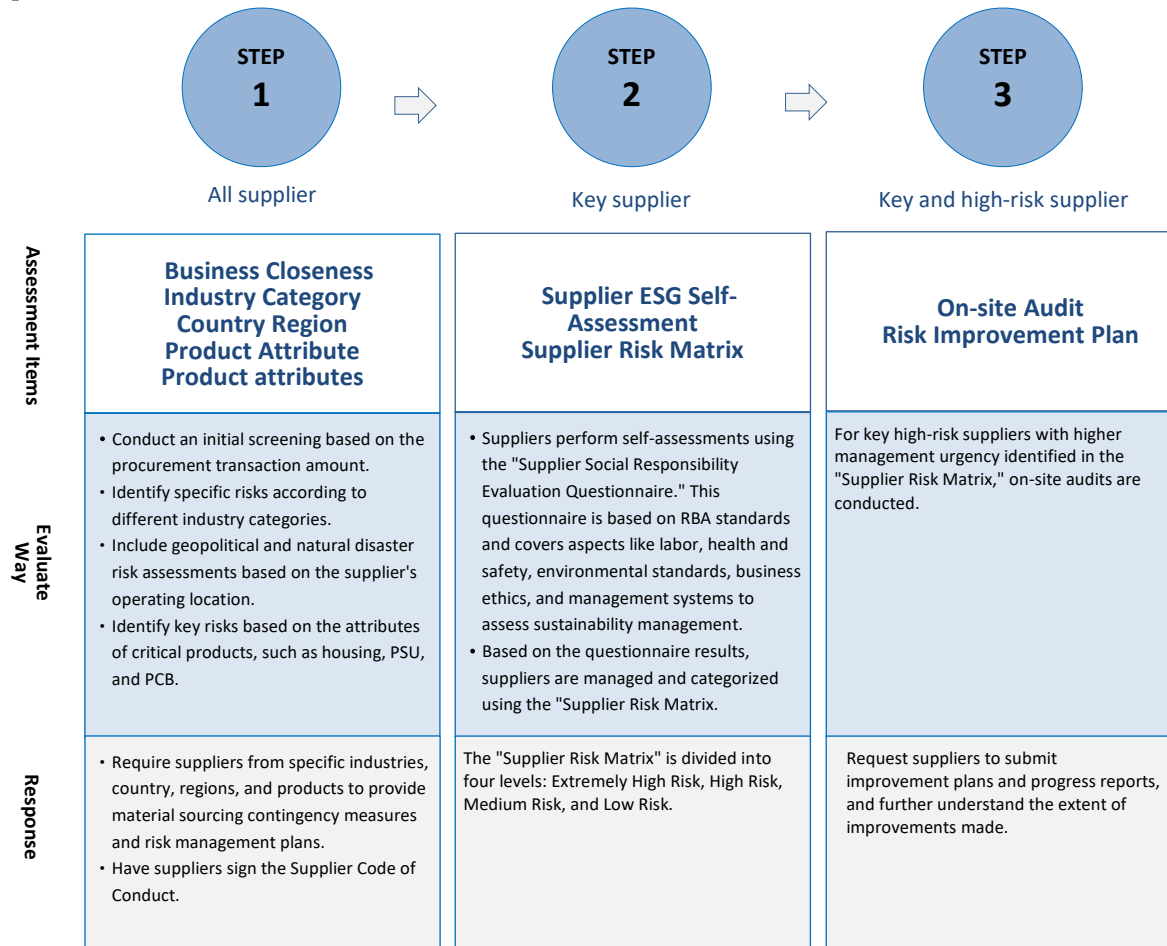
Signing of Supplier Social Responsibility Statement & Commitment / Integrity & Anti-Corruption Commitment

	Number of signed suppliers in 2024	Number of Supplier	2024 signed supplier target	Achievement rate
MitraStar	385/392	454	84.8% /86.3%	80%
Zyxel Communications	9/9	9	100%/100%	100%
Zyxel Networks	14/14	14	100%/100%	100%
Total	408/414	477	85.5%/86.8%	85%

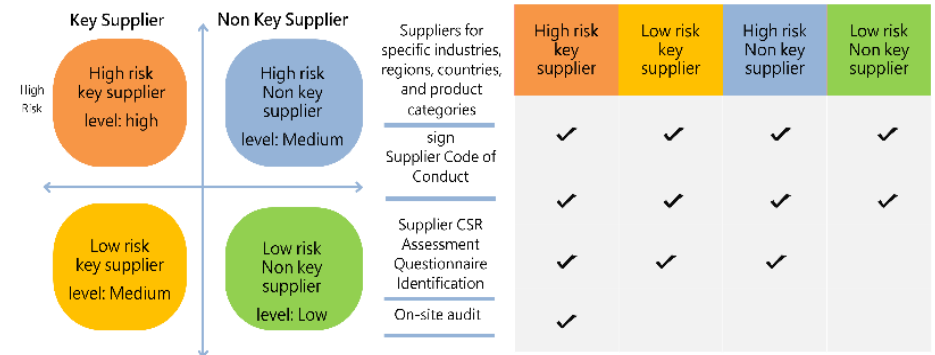
Step 2: Risk Assessment

To gain a deeper understanding of supply chain development and identify potential risks, a three-stage supplier risk assessment mechanism is implemented. Based on business relationships with suppliers, this mechanism evaluates potential risks in governance, environmental, and social aspects according to the supplier's industry category and operating region. Suppliers are periodically required to provide corporate social responsibility evaluation data. Using the "Supplier ESG Evaluation Questionnaire," risk management measures are employed for monitoring. Subsequently, "on-site audits" are conducted to produce formal audit reports to identify supply chain sustainability risks. These findings are incorporated into supplier selection and evaluation criteria. Audits and guidance are conducted for suppliers that may pose higher risks to ensure effective control and mitigation of these risks.

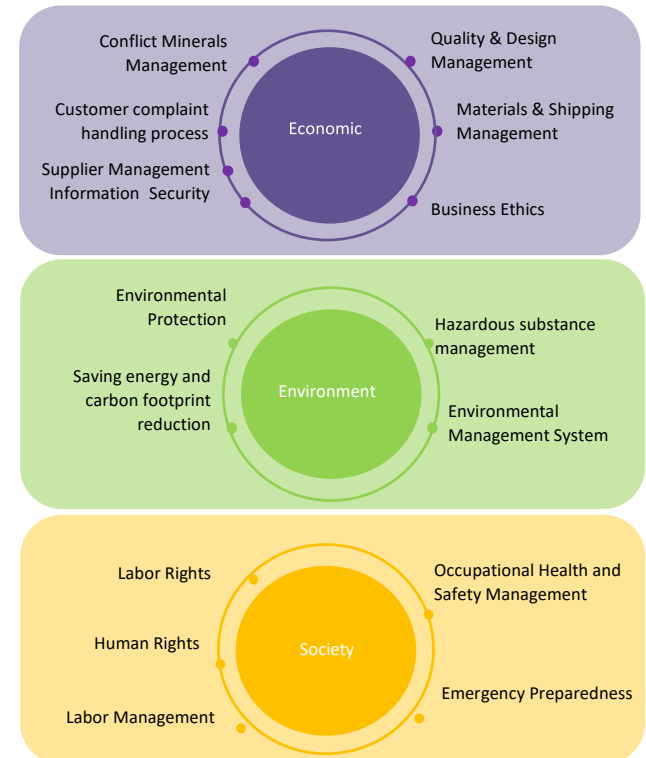
Supplier risk assessment mechanism



Supplier Risk Matrix



Supplier risk factor identification and



Step 3: On-site Audits

Supplier ESG Audit Team

Consisting of the Supplier Quality Management, Human Resource, Environmental Safety and Health, and Procurement Departments, the "Supplier ESG Audit Team" is responsible for the evaluation, assessment and management of the suppliers' social responsibility capabilities. The audit team shall receive training on the RBA standards and the Company's system manual, as well as training courses for internal auditors.

Conduct a written audit of the "Supplier ESG Evaluation Questionnaire"

Conduct a written audit of the "Supplier ESG Evaluation Questionnaire" for all suppliers. The questionnaire, based on RBA standards, covers labor, health and safety, environmental standards, business ethics, and management systems. This audit aims to understand suppliers' awareness of sustainability management and identify supplier risks.

On-site Audits

The Company performs on-site audits for our key suppliers for their compliance with the RBA Code of Conduct and laws and regulations in terms of labor, ethics, health, safety, and environment according to the RBA Validated Assessment Program (VAP) so as to identify and validate supply chain sustainability risks through the issued audit report. We also use "supplier social responsibility audit reports" as an indicator for supplier selection and evaluation.

Results

Based on the severity of non-compliance issues identified in suppliers, different deadlines for improvement are provided. If suppliers fail to meet the requirements within the given timeframe, the business relationship will be terminated. In 2024, 30 on-site audits of key suppliers were conducted, and no supplier relationships were terminated due to audit results or failure to meet improvement requirements.

2024 Status of Supplier Management

	Number of Audits	Target Number of Audits	Audit Completion Rate	Number of Key Suppliers Audited	Total Number of Key Suppliers	Audit Coverage of Key Suppliers (%)
MitraStar	315	496	63.5%	53	75	71%
Zyxel Communications	5	5	100%	3	3	100%
Zyxel Networks	4	4	100%	4	4	100%

Third-Party Audit by Independent Institutions

To ensure compliance with international responsible supply chain standards, customers commission reputable third-party audit firms, such as SGS, to conduct RBA (Responsible Business Alliance) and JAC (Joint Audit Cooperation) assessments on suppliers. These audits cover labor rights, environmental protection, health and safety, and ethical practices. Through independent professional evaluations, the transparency and compliance of the supply chain are strengthened, while advancing sustainable business practices. Auditors conduct on-site visits to assess suppliers' ESG policies, systems, and performance, including document and record reviews, facility inspections, and interviews with company representatives, employees, and other stakeholders.

2024 Supplier Document Audit

	Number of Suppliers Evaluated	Target	Completion Rate
MitraStar	315	496	63.5%
Zyxel Communications	5	5	100%
Zyxel Networks	4	4	100%
Total	324	505	64.2%

2024 On-site Supplier Audits

	Number of Audits	Target Suppliers to Audit	Completion Rate
MitraStar	24	24	100%
Zyxel Communications	2	2	100%
Zyxel Networks	4	4	100%
Total	30	30	100%

Step 4: Continuous Improvement

Zyxel Group's supply sustainability plan aims to improve the sustainable supply chain capabilities of our suppliers. Learning materials for the “Supplier CSR Education and Training” are designed according to the “Responsible Business Alliance (RBA) Code of Conduct” that we adhere to. In this way, we can disseminate labor rights, ethical, health, environmental, and management system standards and assist the suppliers in ongoing improvements. In addition, a supplier whistleblowing channel is in place with the chief auditor and top management as the recipients to avoid malpractice.

Specific suppliers proposed origin material contingency measures and risk management

For high-risk countries, industries, material supply origins, and products, require key suppliers to provide detailed reports, disclose information on public websites, or communicate via email outlining their risk management practices and contingency measures. This helps in assessing and identifying risks associated with the suppliers to effectively reduce those risks.

Supplier Audit Findings and Corrective Actions

In 2024, Zyxel Group subsidiaries conducted ESG audits of key suppliers in accordance with RBA standards. The audits covered 13 suppliers of MitraStar, with 40 findings; 32 suppliers of Zyxel Communications, with a total of 4,750 findings; and 4 suppliers of Zyxel Networks, with a total of 6,051 findings. Each supplier was required to implement corrective actions addressing the audit findings, and the improvement results were subsequently monitored and tracked.

2024	Implementation of Supplier Corrective Action Plans		Assessment of Suppliers with Significant Actual/Potential Adverse Impacts		
	Actual Suppliers Implemented	Targeted Suppliers	Number of Suppliers	Suppliers Supported with Corrective Action Plans	Number of Terminated Suppliers
MitraStar	24	24	0	0	0
Zyxel Communications	3	3	0	0	0
Zyxel Networks	4	4	0	0	0

Category	RBA Item	Key Issues Identified	Corrective Actions	Numbers	Completion Rate
Labor & Human Rights	Working Hours	Total weekly working hours exceeded 60 hours.	Implemented continued overtime pre-alert system to prevent excessive working hours; coordinated manpower allocation with production lines. Since 2024, weekly working hours exceeding 60 hours have significantly decreased.	1	100%
Health & Safety	Emergency Preparedness	No clear inspection records for emergency lights and exit signs.	Emergency lights and exit signs have been added to the inspection checklist. The checklist has been renamed to: Detail Checklist for Fire Extinguishers, Emergency Lights, and Exit Signs.	44	100%
	Occupational Health & Safety Management	No documented occupational safety and health regulations or management plan found.	Obtained occupational safety and health regulations and management program guidelines; documentation currently under development.		
	Occupational Health & Safety Management	X-ray machine lacked training certificates, “Pregnant Women Keep Away” warning labels, and operators did not wear radiation dosimeter badges.	1. Workplace rules or relevant guidelines now define operational qualifications, prohibited items, and compliance requirements. 2. Radiation areas are segregated and marked with warnings; awareness training has been conducted to prohibit unauthorized personnel from entering restricted areas.		
Environment	Solid Waste Management	Waste wiping cloth storage area had two bins (one for waste cloths, one for general waste), but the general waste bin was not properly labeled, leading to risk of misplacement.	“General Waste” labels have been added to bins to prevent misplacement of waste materials.	3	100%
Management Systems	Environmental Policy	No documented environmental protection policy statement found.	An environmental protection policy statement has been established; the company has adopted green procurement practices and is actively addressing environmental sustainability issues.	4	100%
		Grievance channels are not sufficiently promoted; anonymity is not ensured (monitored by CCTV).	The suggestion box has been relocated to the employee break room, which is free of CCTV monitoring, to ensure confidentiality.		

4. Sustainable Procurement

When selecting business partners, Zyxel Group requires that all auxiliary materials used in supplier components and throughout the product manufacturing process strictly comply with applicable international environmental regulations. Environmental issues stipulated by the Responsible Business Alliance (RBA) are incorporated into the evaluation criteria for new suppliers. Regarding conflict minerals management, Zyxel Group has integrated the prohibition of conflict minerals into its Green Product Policy, committing to avoid the use of such materials. Through these requirements and standards, the company implements its strategy for establishing a sustainable supply chain management model.

Sustainable Procurement Management

- The Green Product Management - New Supplier Evaluation Operation process developed to select manufacturing suppliers that meet international hazardous substance management requirements to ensure all products comply with relevant regulations.
- The Supplier Green Product Purchasing Contract and Supplier Corporate Social Responsibility Statement formulated to standardize suppliers' compliance with environmental protection directives including "the Restriction of the use of certain hazardous substances in electrical and electronic equipment", the "Waste Electrical and Electronic Equipment Directive", the "Directive of Packaging and Packaging Waste", "Registration, Evaluation, Authorization and Restriction of Chemicals", the "Batteries and Accumulators and Waste Batteries and Accumulators Directive", the "Directive of Eco-design Requirements of Energy-using Products (ErP)", "US Conflict Minerals", the "Stockholm Convention on Persistent Organic Pollutants (POPs)", and "TSCA, the Toxic Substances Control Act", and address environmental issues of corporate social responsibility and other requirements.
- Suppliers are required to submit product-related component testing and verification reports during the product design stage, and the product development progress and implementation results are monitored through the review report.
- Green Management Platform: Aiming to implement "green management operational processes" among suppliers, the company established its green management requirements to be communicated and enacted through an online platform (B to B mode). This platform facilitates the collection of relevant data, including surveys and test reports, to enable investigation into whether the components provided information by suppliers contains hazardous substances. It provides crucial information for supplier management and component approval processes. Simultaneously, it generates essential databases of green components and qualified supplier information.

Responsible Minerals Management

To ensure compliance with conflict minerals regulations, Zyxel Group has established a Conflict Minerals Procurement Policy and management procedures. The prohibition of conflict minerals has been incorporated into the Supplier Green Product Policy, with a clear commitment not to use conflict minerals. The company does not accept non-compliant smelters sourcing from the Democratic Republic of Congo (DRC) and its surrounding regions for responsible minerals such as tantalum (Ta), tin (Sn), gold (Au), tungsten (W), cobalt (Co), mica, and palladium (Pd) in its product manufacturing. Zyxel has also publicly announced its "Responsible Minerals Management Policy and Commitment."

An internal Conflict Minerals Process Flow has been developed to ensure proper management of suppliers' conflict minerals processes. In alignment with the Responsible Business Alliance (RBA) Code of Conduct, Zyxel requires the use of the Conflict Minerals Reporting Template (CMRT) to conduct Reasonable Country of Origin Inquiry (RCOI). This process enables the company to investigate suppliers whose components may contain metal minerals, identify the sources of 3TG in products, and confirm whether they originate from conflict-affected regions.

In line with the "Conflict Minerals Policy," Zyxel has incorporated conflict minerals requirements into its procurement procedures. When suppliers sign procurement contracts, they are simultaneously required to agree to the policy prohibiting the use of conflict minerals. All new suppliers must sign the "Supplier Code of Conduct" to commit to not using conflict minerals, with a signing rate of 100%.

Product and Supplier Survey Coverage

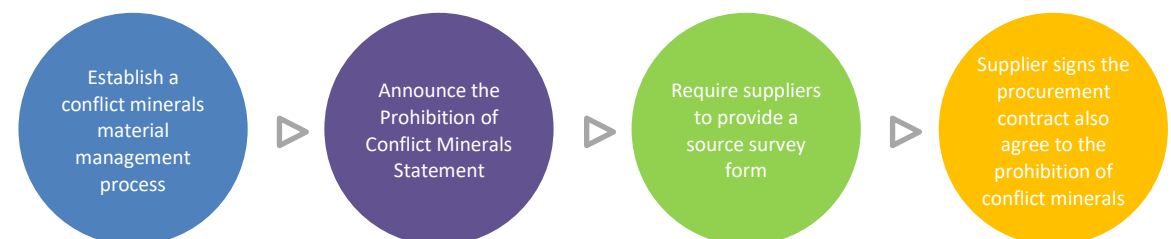
In 2024, Zyxel Communications: Product survey coverage reached 99.96% ; Zyxel Networks: Product survey coverage reached 99.7% ; MitraStar Technology: Out of 411 suppliers surveyed, 338 responded (82% completion rate). Among these, 53 key suppliers were surveyed, achieving a 100% completion rate.

Note: For Zyxel Communications and Zyxel Networks, the calculation of product survey coverage excludes material suppliers and other group-affiliated brand companies.

Responsible Minerals Management Policy and Commitment

Zyxel Group and its subsidiaries declare and commit to upholding the principles of responsible and sustainable sourcing by establishing a "Responsible Minerals Management Policy" and responsible procurement processes. We strictly prohibit the use of metals sourced from conflict-affected areas or non-compliant smelters, and we conduct due diligence on our suppliers. All suppliers are required to comply with Zyxel Group's Responsible Minerals Procurement Policy.

Conflict Minerals Management Process



5. Supply Chain Sustainability Capacity Building

We actively collaborate with suppliers to advance the concept of a Sustainable Environment. In addition to providing ESG-related training to suppliers, we assist them in continuous improvement efforts. This includes collaboration on climate change initiatives and requiring suppliers to implement the ISO 14064-1 greenhouse gas inventory plan as a foundation for future carbon reduction in products and to set future low-carbon management goals. We also offer incentive programs to encourage suppliers.

Supplier ESG Training

Based on RBA Code of Conduct, QNAP designs an online "Supplier Corporate Social Responsibility Training" to promote standards in labor rights, ethics, health, environment, and management systems. The training consists of two stages: understanding the importance of ESG and QNAP's ESG policies, and the process for supplier CSR audits. Suppliers are trained annually, with a 100% completion rate for key suppliers. In 2024, Key Supplier ESG Training Completion Rate 100%.

Honor Supplier Award Program – Supplier Sustainability Award

Each year, suppliers are assessed based on their sustainability achievements. Suppliers showing significant progress or performance improvements are recognized with awards at the end of the year, based on successful on-site evaluations. In 2024, six outstanding supplier awards were presented at supplier conferences held in Wuxi, China, and Taiwan.

Supplier Conference – Best Practice Sharing

To promote Zyxel Group's sustainability policies and goals, strengthen ESG communication and information exchange, and reinforce collaborative partnerships, Zyxel organized supplier conferences in 2024 at both its Taiwan and Wuxi facilities. A total of **200 suppliers** participated.

During the conferences, Zyxel outlined its supplier empowerment mechanisms to ensure effective implementation of support programs and initiatives. In addition, Zyxel and selected high-performing ESG suppliers shared their best practices and experiences, providing case studies and performance insights in specific areas. These exchanges enabled suppliers to learn from leading peers, foster mutual knowledge sharing, and create a motivating effect across the supply chain.



Supplier Carbon Management Capability

In response to Zyxel Group's greenhouse gas (GHG) reduction targets, the Company has initiated assessments to understand suppliers' approaches and levels of implementation regarding GHG inventories, thereby establishing a foundation for future product decarbonization. Key suppliers were surveyed on their adoption of **ISO 14064 (GHG inventory)** and **ISO 14067 (product carbon footprint)** standards.

Zyxel plans to integrate these requirements into the **ESG criteria** for its **Preferred Vendor List (PVL)** selection process, mandating that key suppliers obtain relevant ESG certifications and sustainability awards. This approach not only drives suppliers to strengthen their low-carbon management practices but also enables Zyxel to leverage the successful experiences of certified suppliers to support those yet to achieve certification, thereby advancing a sustainable supply chain ecosystem.



Key Supplier ISO 14064 / ISO 14067 Implementation

	Number of Suppliers	2024 Target	2024 Achievement Rate
Conduct Greenhouse Gas Inventory	MitraStar: 53 Zyxel Communications: 9 Zyxel Networks: 100%: 4	Required to be conducted by the end of 2024	MitraStar: 24% Zyxel Communications Zyxel Networks: 100%
Complete Greenhouse Gas Inventory Verification	MitraStar: 38 Zyxel Communications: 5 Zyxel Networks: 100%: 4	MitraStar: Required to be conducted by the end of 2024 Zyxel Communications 95% Zyxel Networks 100%	MitraStar: 70% Zyxel Communications Zyxel Networks: 100%
Implementation of Product Carbon Footprint Assessment	MitraStar: 17 Zyxel Communications: 1 Zyxel Networks: 100%: 2	MitraStar: Required to be conducted by the end of 2024 Zyxel Communications: Two major customer product series have completed Zyxel Networks: 50%	MitraStar: 32% Zyxel Communications: 50% Zyxel Networks: 50%

Highlights

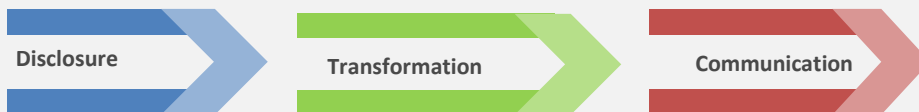
Large companies leading smaller enterprises to a low carbon and smart supply chain transformation" project

In 2023, Zyxel Group received a subsidy from the Ministry of Economic Affairs' Industrial Development Bureau for the " Large Companies Leading Smaller Enterprises to a Low Carbon and Smart Supply Chain Transformation" project. They have partnered with suppliers to launch a carbon reduction transformation initiative, working together to accelerate progress towards the 2050 net-zero goal.

Supplier Zero Carbon Academy :

Through training and guidance programs, the initiative aims to help the supply chain build foundational knowledge in carbon disclosure and digital capabilities, facilitating joint carbon reduction actions with Zyxel Group. Additionally, the courses are open to Zyxel Group employees, enhancing professional knowledge for relevant employees and fostering energy-saving and carbon-reduction awareness across the entire workforce.

The training period runs from 2023 to 2024, totaling 111 hours of coursework. The course includes Low-Carbon Transformation Pathways, Greenhouse Gas Inventory, Carbon Neutrality Standards, Sustainability Reporting, Carbon Trading, etc. By August 2024, a total of 2,987 participants have engaged in the program, accumulating 4,218 hours of training.

**Zero Carbon Academy**

Corporate ESG Low-Carbon Transition Path Overview	Introduction to ISO14068 Carbon Neutrality Standard
Introduction to Scope 3 Greenhouse Gas Inventory	ISO14067 Internal Auditor Training 1, 2
Key Communication Points - Introduction to ESG Sustainability Report	Product NetZeroPro Low-Carbon Digital Transformation Platform Introduction
Disclosure Requirements - GRI Standards & SASB Sustainability Accounting Standards Introduction	ISO14067 Supplier Training 1, 2, 3
ISO14064-1 Internal Auditor Training	Carbon Trading Basics and Practical Trading
Organizational NetZeroPro Low-Carbon Digital Transformation Platform Introduction	EU CBAM Corporate Response Strategy
ISO14064-1 Supplier Practical Training 1, 2, 3	Introduction to Internal Carbon Pricing (ICP)
Introduction to ISO50001 Energy Management	Practical Path to Net Zero Transition 1, 2
Factory Energy Saving Case Studies & Energy-Saving Technology Sharing	

Development of Low-Energy Consumption Product Materials

Zyxel Group integrates sustainability into its core product design by focusing on environmentally friendly designs using low-toxicity, energy-efficient materials that are easy to disassemble, recycle, and refurbish, extending product life for optimal ecological benefits. Collaborations with the supply chain include:

- Developing, verifying, and introducing PCR plastic materials with raw material suppliers
- Designing eco-friendly packaging and applying sustainable ink
- Optimizing structural and aesthetic designs to reduce secondary processing
- Minimizing mold openings to reduce waste and pollution
- Streamlining product casing designs and standardizing pallet specifications
- Implementing energy-saving software and hardware designs to lower energy consumption
- Ensuring products are easy to disassemble and recycle.

Guidance for Key Suppliers to Implement ISO 14064

11 key suppliers are chosen for need of assistance in assessing their carbon emissions. These suppliers include those in packaging materials, passive components, equipment supply chains, and power supplies. A consultant will be engaged to conduct on-site visits, guide them in carbon reduction, and utilize digital low-carbon transformation service platforms. The support also includes aiding them in obtaining external verification of their organizational greenhouse gas emissions.

Digital Low-Carbon Transformation Service Platform

This system includes: - Organizational Carbon Disclosure and Management Module: Helps to manage and disclose organizational carbon emissions.

- Product Carbon Footprint Calculation Module**: Assists in calculating the carbon footprint of products.

The platform transforms the carbon assessment process into a digital system, improving data quality and verification efficiency. It also supports carbon reduction pathway planning to achieve low-carbon management goals across the supply chain.

Highlights

Supplier Human Rights Due Diligence& Employee Engagement Survey

Zyxel Group is committed to responsible supply chain management. In addition to internal human rights due diligence (HRDD) and employee engagement surveys, the Company has launched supplier HRDD to assess labor conditions, safety, and compliance, along with engagement surveys to understand employees' views on their work environment and culture. This dual approach ensures supply chain partners follow international human rights standards and sustainability principles while improving labor conditions. By integrating internal and external governance, Zyxel promotes employee well-being and supply chain responsibility, building a resilient, sustainable value chain.

Supplier Human Rights Due Diligence

The survey covered nine human rights topics—reasonable working hours and compensation, human trafficking, child labor, forced labor, occupational health and safety, workplace harassment, employment discrimination, freedom of association, and grievance mechanisms—with 25 questions in total. Results were analyzed based on frequency and impact, and issues were classified into low, medium, and high risk.

Supplier Due Diligence Risk Mitigation Measures

The human rights due diligence (HRDD) risk analysis identified “grievance mechanisms” and “freedom of association” as higher-risk issues. The Company will require suppliers to establish and disclose relevant policies to strengthen human rights management in the supply chain and mitigate potential risks.

Responses	Response Rate
532	96%

Supplier Engagement Survey

The survey assessed six aspects of supplier employees' experience—satisfaction with work environment and corporate culture, sense of purpose, well-being, stress level, support, and engagement—covering 17 work-related questions in total. Employee engagement was measured on a 5-point scale, with a target score of 3.8 defined as high engagement.

Supplier Engagement Survey – Follow-up Measures

- **Enhanced Communication:** Share survey results with suppliers and establish two-way communication mechanisms.
- **Partnership Collaboration:** Organize meetings/workshops to strengthen strategic alignment.
- **Capacity Support:** Provide training and resources to enhance sustainability and compliance capabilities.
- **Incentive Mechanisms:** Recognize outstanding suppliers and include results in performance evaluations.

Item	Average Score
Satisfaction	4.74
Sense of Purpose	4.71
Well-being	4.67
Stress Level	4.71
Support	4.65
Engagement	4.69
Total Average Score	4.70

| Sustainable Environment

- A. Climate Change
- B. Energy Conservation
- C. Water Management
- D. Waste Management
- E. Air Pollution Prevention
- F. Biodiversity



Sustainable Environment



Sustainable Environment Commitment

Climate change has become one of the most pressing global environmental issues. With the rise of low-carbon and circular economy trends, Zyxel Group recognizes that only by pursuing environmental sustainability can we secure opportunities for sustainable operation in the global trend and competitive market. Zyxel Group is committed to addressing the impacts of climate change, prioritizing environmental sustainability as a major issue in our sustainable operations. We aim to meet stakeholders' concerns and expectations regarding environmental issues.



sustainable Strategy: Mitigating environmental



Major Issues: Climate Strategy 、 Energy Management



Stakeholders: Customer Supplier Government Community



SDGs



Performance Highlights

Achieved SBTi validated targets	Received subsidy from the Ministry of Economic Affairs' Low-Carbon and Smart Upgrading and Transformation Plan	Business Weekly Carbon Competitiveness Top 100	Digital Carbon Management Platform	Days of Production Halted by Climate- related Disasters 0
Greenhouse gas reduction compared to the 2021 base year 22.7%	Electricity intensity decreased compared with the 2021 base year 2.3%	Water withdrawal intensity is reduced compared to the 2021 base year 5.98%	Waste recycling rate 95.85%	Incidents of Non-Compliance with Environmental Regulations 0

Sustainable Environment Strategy

The Company complies with international conventions and environmental regulations, and integrates its Environmental, Health and Safety (EHS) policy with its Green Product policy. Management goals, strategies, and performance indicators are set for key topics such as climate change, energy, water, waste, biodiversity, environmental protection, and occupational health and safety. Zyxel actively engages employees, investors, customers, suppliers, contractors, and other partners across the value chain to raise awareness and promote eco-friendly actions.

- Compliance with international and domestic environmental regulations.
- Establishing objectives and continuously improving environmental performance.
- Reducing environmental impacts across the product life cycle.
- Addressing climate risks, enhancing energy efficiency, and protecting biodiversity.
- Providing training to strengthen environmental awareness.
- Environmental due diligence before M&As, investments, or new suppliers.

Governance & Strategy

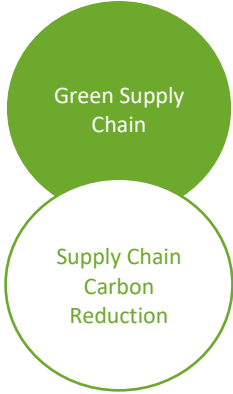

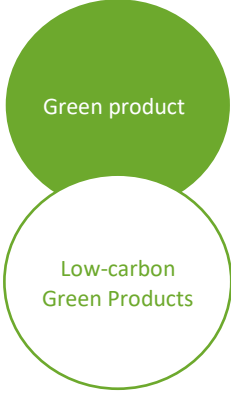
The Zyxel Group Sustainability Committee has three dedicated groups—Carbon Management, Environmental Safety, and Green Product—to drive environmental initiatives under the Board-approved Sustainability Environment Policy.

Environmental Sustainability Strategy

Zyxel Group's strategy focuses on Green Supply Chain, Green Operations, and Green Products, supported by three pillars: Supply Chain Decarbonization, Climate Mitigation & Adaptation, and Low-Carbon Products. The Group sets targets for GHG reduction, energy efficiency, water conservation, and waste reduction, while disclosing product carbon footprints and requiring supplier carbon inventories.

Through collaboration with employees, customers, and suppliers across the value chain, Zyxel Group aims to minimize life-cycle impacts, continuously enhance environmental performance, and align with global sustainability initiatives.

Three Environmental Strategy Pillars

Upstream Supply Chains	Company's Operations	Downstream Customers
		
Strategy		
<ul style="list-style-type: none"> • Setting of low-carbon management goals for suppliers • Require suppliers to conduct carbon inventory • Suppliers to establish carbon reduction plans 	<ul style="list-style-type: none"> • Net-zero carbon emissions • Energy management • Energy transformation • Life transformation • Support for international initiatives 	<ul style="list-style-type: none"> • Introduction of a green product management system to reduce the environmental impacts throughout the life cycle of the products • Disclosure of product carbon footprints in response to customers' demand for information on the carbon emissions of the products










Note: Actions for the three environmental strategy pillars: For Green Supply Chain, refer to Chapter [Value Chain: Supplier Management](#), for Green Products, refer to Chapter [Sustainable Product](#), for Green Operations, please refer to this chapter Sustainable Environment

Environmental Strategy Actions and Targets

Pillars	Strategy	Response Actions	2025 Short-term Goal	Medium-to-long-term Goal 2030
Green Operations	Net-zero carbon emissions	<ul style="list-style-type: none"> Greenhouse Gas Reduction 	<ul style="list-style-type: none"> SBTi absolute reduction target 	<ul style="list-style-type: none"> Purchase Carbon Credits Deliver the commitment to net zero in 2050
	Energy Management	<ul style="list-style-type: none"> Improve energy usage efficiency Intelligent energy management Replace energy-consuming equipment 	<ul style="list-style-type: none"> Replace energy-consuming equipment Establish an energy visualization management system 	<ul style="list-style-type: none"> Reduce electricity intensity by 27% compared to the 2021 baseline Achieve a renewable energy share of over 7%
	Energy transformation	<ul style="list-style-type: none"> Promote Renewable Energy 	<ul style="list-style-type: none"> Install solar photovoltaic systems 	<ul style="list-style-type: none"> Completed the Solar Power Installation Project Purchase green electricity Evaluate RE100 participation
	Life transformation	<ul style="list-style-type: none"> Carbon Management Education and Promotion 	<ul style="list-style-type: none"> Organize energy-saving and carbon reduction events 	<ul style="list-style-type: none"> 2030 Purchase electric company cars
	Support for international initiatives	<ul style="list-style-type: none"> Support international initiatives and commitments and participate in the initiatives 	<ul style="list-style-type: none"> CDP Carbon Disclosure Commit to the Science Based Targets initiative (SBTi) Support TCFD for the financial impact of climate change Taskforce on Nature-related Financial Disclosures (TNFD) 	<ul style="list-style-type: none"> Assess joining EV100
Green Supply Chain	Supply chain carbon reduction	<ul style="list-style-type: none"> Conduct supplier energy consumption diagnosis Require suppliers to conduct carbon inventory Suppliers to establish carbon reduction plans 	<ul style="list-style-type: none"> Complete energy consumption diagnosis for major energy-consuming suppliers Key Supplier Carbon Inventory Completion Rate: MitraStar75% Zyxel Communications100% Zyxel Networks75% 	<ul style="list-style-type: none"> 100% Key Supplier Carbon Inventory Completion Rate 50% key Supplier carbon reduction by 2030
Green product	Low-carbon products	<ul style="list-style-type: none"> Reduce the environmental impact throughout the product lifecycle Disclose product carbon footprints 	<ul style="list-style-type: none"> Establish design guidelines to ensure eco-friendly packaging, product energy efficiency, easy disassembly and recyclability, and the use of sustainable materials and parts/components Use non-plastic bags, energy-efficient software and hardware that can be disassembled easily, PCR plastics, and 100% recyclable paper packaging materials for green products to be shipped Create a standardized product carbon footprint format 	<ul style="list-style-type: none"> Apply the green product design to all products to be shipped

Note: The scope of the environmental strategy objectives is set to include Zyxel Group and its subsidiary MitraStar's Hsinchu plant, as well as its subsidiary Zyxel's Hsinchu plant.

Targets & Goals

Topic	Operational Impact	Actions	Performance Indicators	2024 Targets	2024 Results		Goals			SDGs
							2025 short-term	2027 mid-term	2030 long-term	
Enhancing Climate Resilience	Identify climate change risks and opportunities to monitor operational strategies and financial planning, thereby reducing the financial impact of climate risks.	Conduct annual climate disaster drills as part of the Business Continuity Management Plan.	Number of days of production interruption due to climate disasters.	0 days of production interruption.	0 days of production interruption.	√	0 days of production interruption.	0 days of production interruption.	0 days of production interruption.	
Greenhouse Gas Reduction		Adopt SBTi Science-Based targets.	Set targets based on SBTi.	Set targets based on SBTi.	Reduce carbon emissions by 22.7% from the 2021 baseline year.	√	Based on SBTi Absolute Contraction Approach.	Based on SBTi Absolute Contraction Approach.	Reduce carbon emissions by 50%.	
Energy Management	Implement energy-saving initiatives, reduce greenhouse gas emissions, and lower energy costs.	Improve energy efficiency.	Percentage reduction in electricity intensity compared to the 2021 baseline year.	2% reduction	2.3% reduction	√	20% reduction	21% reduction	27% reduction	
		Increase the use of renewable energy.	Complete solar energy installations.	Planning the Construction at the Hsinchu Plant	Planning in Progress for the Hsinchu Plant Construction	-	Initiate Hsinchu plant installation.	Complete Hsinchu plant installation.	Hsinchu plant renewable energy >7%	
Resource Management		<ul style="list-style-type: none"> Actively implement water-saving measures Conduct water-saving education and awareness campaigns 	Percentage of reduction in water intensity compared to the 2021 baseline year.	5% reduction	5.98% reduction	√	23% reduction	24% reduction	26% reduction	
Waste Management		<ul style="list-style-type: none"> Promote waste sorting and reduction Strengthen waste recycling and reuse 	Percentage of reduction in waste intensity compared to the 2021 baseline year.	10% reduction	10.72% reduction	√	15% reduction	16% reduction	18% reduction	
			Waste recycling rate	>90%	>95.85%	√	>70%	>80%	>82%	
Environmental Regulatory Compliance		Compliance with Regulations	Incidents of Non-Compliance with Environmental Regulations	0	0	√	0	0	0	
Environmental Management Systems		Ensure environmental compliance through external management system verification.	External management system certification.	100% certified of various environmental management systems.	Achieved ISO14001 external certification. MitraStar 、 Zyxel Communications 、 Zyxel Networks	√	100% certified	100% certified	100% certified	

Note: Carbon Emission Intensity = Carbon Emissions / Zyxel Communications Consolidated Revenue

Note: Zyxel Communications has no manufacturing facilities, thus no waste management information is disclosed

Note: The three main carbon reduction strategy goals, annual targets, and performance: For the green supply chain, refer to the "Partnerships: Supplier Management" section; for Sustainable Products, refer to the "Sustainable Product" section.

A. Climate Change

The impact of climate change requires businesses to establish adaptation and mitigation capabilities to reduce climate risks to their operations. This is a crucial issue that businesses must address and plan for early on in their sustainability efforts. Through collaboration and dialogue with government agencies and environmental organizations, companies can strengthen the resources and actions needed to face climate change and achieve the net-zero transformation goals and vision.

1. Participate in international climate initiatives

Response to SDGs Climate Action Goals



To respond to one of the UN's Sustainable Development Goals, **Goal 13: Climate Action**, emergency measures are adopted to cope with climate change and its impacts.

We aim for GHG reduction, energy saving, water resource management, the incorporation of product R&D into the life cycle of our products, and the disclosure of product carbon footprints.

CDP (Carbon Disclosure Project) Platform



Zyxel Group participates in the CDP disclosure annually, reporting its climate-related strategies, targets, and actions on the CDP platform. Based on CDP's evaluation criteria and results, the Group establishes improvement goals and plans. In addition, Zyxel Group benchmarks its performance against CDP requirements set by customers, conducts self-assessments, and implements enhancements to meet both customer expectations and international standards.

Participation in the SBTi (Science Based Targets initiative)



Zyxel Group is committed to international climate initiatives and actively participates in global actions. In May 2025, the Group's greenhouse gas reduction targets were validated by the Science Based Targets initiative (SBTi), with approval for both near-term and net-zero targets, all aligned with the Paris Agreement's 1.5°C pathway. Zyxel Group is also assessing participation in EV100 and RE100, reinforcing its commitment to global initiatives and its determination to drive decarbonization.

TCFD for Climate Scenario Analysis and Financial Impact Assessment



Zyxel Group has partnered with the "Tunghai University Center for Corporate Sustainability Development" to conduct climate scenario analysis and financial impact assessment. This analysis helps to identify current and future risk factors and their potential financial impacts on the company, allowing for the implementation of risk prevention and response measures.

Zyxel Group also discloses information on climate governance, strategy, risk management, and metrics and targets, including the results of TCFD climate scenario analysis and financial impact assessment. These disclosures cover the identification of climate-related risks and opportunities, as well as the corresponding strategies and actions to address them.

2. Climate-related Financial Disclosures (TCFD)

As an official supporter of the TCFD (Task Force on Climate-related Financial Disclosures), Zyxel Group integrates climate change into one of our assessment projects for significant risks to corporate sustainability. We follow the framework of the "Task Force on Climate-related Financial Disclosures" (TCFD) released by the Financial Stability Board to disclose information on climate governance, strategies, risk management, indicators, and targets, with annual updates. This information is disclosed in our sustainability report and financial annual report.

By adopting this approach, Zyxel Group identifies the risks and opportunities of climate change impact on the company. We oversee operational strategies and financial planning at the corporate governance level, minimizing the financial impact of climate risks on our operations. Furthermore, we analyze opportunities resulting from climate change and intensify our research and development efforts to continuously develop energy-saving products and solutions. In addition, we have conducted climate scenario analyses to assess potential financial impacts and have published the findings in the "2023 Zyxel Holding Climate Action Report."

Climate Change Strategy

- Identify the risks and opportunities arising from climate change, and promote climate change mitigation and adaptation plans.
- Mitigate potential climate change risks and build resilience to adapt to climate risks.
- Analyze opportunities related to climate change, enhance research and development capabilities, and continuously develop green and energy-efficient products and solutions.
- Set greenhouse gas reduction, water conservation, and waste reduction targets within energy management.
- Raise employees' awareness and encourage environmentally friendly actions.
- Integrate climate change-related risks into the corporate risk management system, conducting regular identification, evaluation, and management through standardized processes.

Governance Organization

Board of Directors

Zyxel Group actively strengthens environmental sustainability in its sustainable operations by establishing the "Zyxel Group Sustainability Committee," chaired by the Chairman of Zyxel Group, who also serves as the Chairman of the Board. The Sustainability Committee reports quarterly to the Board of Directors on sustainability plans and achievements, including environmental aspects. The Board oversees the performance of environmental management policies and commitments.

Zyxel Group Sustainability Committee

The "Zyxel Group Sustainability Committee" is the highest-level organization for managing sustainable development. It is supported by a dedicated Chief Sustainability Officer, who has established the Sustainability Office. Under the Sustainability Office, various sub-committees are formed, including the Environmental and Safety Group, the Green Products Group, and the Supplier Management Group, which are composed of relevant departments from each subsidiary. These groups coordinate and collaborate on climate change-related issues such as greenhouse gas reduction, energy conservation, water resource utilization, low-carbon green products, and supply chain carbon reduction. The environmental management policies and measures are communicated to both internal and external stakeholders to raise awareness of environmental impacts.

Climate change Team

The "Zyxel Group Sustainability Committee" has established a "Climate Change Task Force" responsible for addressing climate change-related issues. This task force coordinates with relevant departments to assess the potential operational risks and financial impacts, evaluate related risks and opportunities, and oversee the company's climate actions and outcomes.

Climate-related Financial Disclosures (TCFD)

	Disclosure matters	Response to management strategies and actions
Governance	The board's oversight of climate-related risks and opportunities.	<ul style="list-style-type: none"> The chairman of the Sustainability Committee of the parent company Zyxel Group is concurrently the chairman of the board of directors and supervises the promotion and implementation of the sustainable development of the team, and makes decisions and reports directly to the board of directors.
	Describe the role of management in assessing and managing climate-related risks and opportunities.	<ul style="list-style-type: none"> The "Environment, Safety, and Health Team" under the MitraStar Sustainability Committee is the main member unit of the Climate Change Team. It is responsible for issues related to climate change, assessing its impact in terms of operational crises and financial impacts, evaluating related risks and opportunities, and the company's climate-related actions and results.
Strategy	Identify short, medium, and long-term climate-related risks and opportunities	<ul style="list-style-type: none"> Based on strategic goals, risks and opportunities are identified. The short-term (3 years) focus is on resource use efficiency, raw material cost increases, environmental regulations, and immediate risks such as extreme weather events including floods and typhoons. The mid-term (3-5 years) primarily addresses the costs of low-carbon and high-efficiency technology improvements, as well as shifts in consumer preferences. The long-term (beyond 5 years) includes carbon pricing and carbon taxes, changes in supply and demand structures, and long-term risks such as chronic climate changes like rising temperatures.
	Climate-related risks and opportunities impact operations, strategy, and financial planning	<ul style="list-style-type: none"> Operationally, climate impacts can lead to shifts in consumer behavior, affecting market share. Strategically, product development requires investment in low-carbon and high-efficiency technologies. Financially, these factors result in increased investment expenses and operational costs.
	Consider the resilience of organizational strategies in different climate scenarios	<ul style="list-style-type: none"> Conducted climate scenario analyses to assess potential financial impacts program
Risk Management	Process for identifying and assessing climate-related risks	<ul style="list-style-type: none"> Use the TCFD framework to establish a climate risk identification process, and actively identify risks through the climate risk matrix.
	Process for managing climate-related risks	<ul style="list-style-type: none"> According to the risk identification process, the identification results are collected and discussed in the "Sustainability Committee" meeting held every year to formulate management practices.
	Integrate the process of identifying, assessing, and managing climate-related risks into the overall risk management of the organization	<ul style="list-style-type: none"> Integrate the process of identifying, assessing, and managing climate change risks and various operational risks into the enterprise risk management (ERM) system.
Metrics and Targets	Evaluation of climate-related risks and opportunities followed by strategies and risk management process indicators	<ul style="list-style-type: none"> Greenhouse gas reduction, energy conservation, and water resource management are used as key indicators to measure the extent of risk impacts. Product development incorporates the product life cycle, disclosing carbon emissions and setting low-carbon product targets.
	Greenhouse gas emissions and related risks in all areas	<ul style="list-style-type: none"> Targets for greenhouse gas reduction, energy conservation, and water resource management are established, along with corresponding action plans. Regular audits of greenhouse gas emissions are conducted to assess the operational impacts faced by the company.
	Targets for managing climate-related risks and opportunities, and the performance of corresponding targets	<ul style="list-style-type: none"> Expose climate action to meet SDG goals Participate in the SBTi scientific carbon reduction target initiative Implement a monitoring mechanism and set targets for climate risks with a high degree of impact Develop low-carbon indicators for product parts, analyze data on high-carbon parts, and provide relevant information on carbon reduction directions Link the internal system and the data stream of the carbon footprint platform

Financial Impact Analysis of Climate Change Scenarios

In addition to recognizing the financial impacts of risks and opportunities related to climate change, in 2022, we initiated a significant risk and opportunity scenario analysis project. This project involves a self-assessment of the impact of climate change risks under different climate scenarios, enabling us to adopt adaptive strategies and response measures. Qiantech Corporation not only conducts risk analysis for itself but also includes suppliers within the analysis boundaries of our value chain. Different scenarios are established based on physical risks and transition risks:

Physical Risks

Scenario Setting: We conducted climate change risk assessment for 41 analysis subjects located within Taiwan for Zyxel Group. This includes 2 owned assets and 39 suppliers. Utilizing severity, vulnerability, and exposure as the calculation template for risk assessment, we analyzed extreme rainfall with severity, flooding potential causing vulnerability, potential for landslides and debris flow causing vulnerability, as well as exposure of the assets located in Taiwan, by conducting scenario simulations. The analysis method involves four scenarios described in the IPCC Fifth Assessment Report: RCP2.6, RCP4.5, RCP6, and RCP8.5, which outline future greenhouse gas emissions. Additionally, it encompasses Taiwan temperature and rainfall predictions for four periods based on government reports: short-term (2021-2040), mid-term (2041-2060), medium-long term (2061-2080), and long-term (2080-2100). This comprehensive approach involves climate simulation research up to the year 2100.

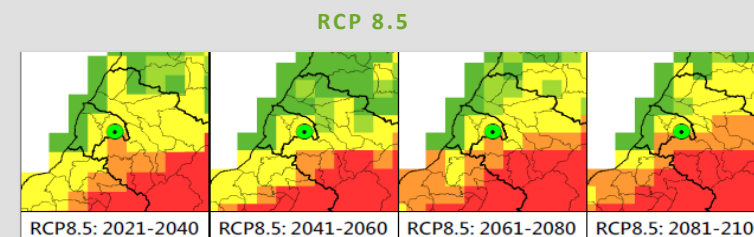
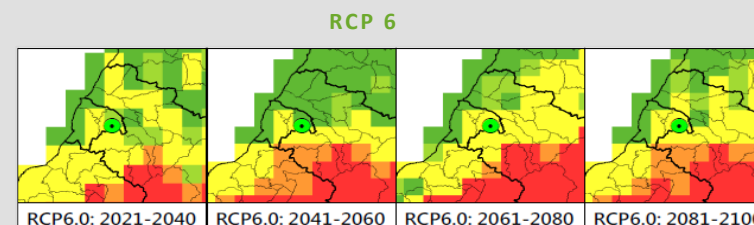
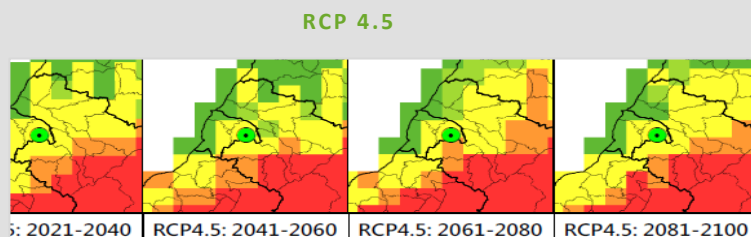
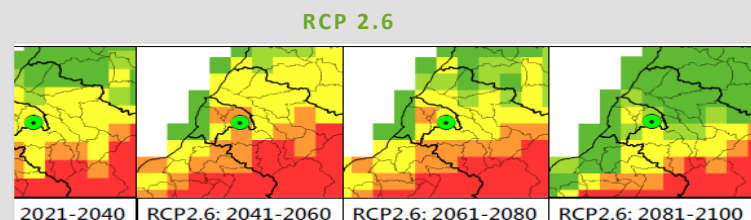
Physical Risk Analysis Findings: Zyxel Group's owned assets located in Taiwan do not have any significant physical risks. However, some of the suppliers operating in Taiwan, while not at risk of landslides or rockfalls, may face potential flooding risks in the future.

Transition Risks

Scenario Setting: Three scenarios were analyzed based on the Taiwan government's net-zero pathway, IPCC AR6's SSP1-1.9 scenario, and the SBT-NZ scenario, which requires achieving net-zero emissions before 2050 as stipulated by SBT. Three risk factors—regulatory, market, and reputation—were assumed as conditions for analysis. The financial impact estimation was projected until 2050. Regulatory risks primarily affect operational costs and capital expenditures, while market risks mainly influence potential revenue losses for the company.

Transition Risk Analysis Findings: Under the scenario of achieving the government's net-zero target, Zyxel Group would require substantial investment in procuring renewable energy. The resulting financial impacts would mainly involve carbon taxes, with market and carbon penalty risks reduced to zero. In the case of achieving the SBT-NZ goal, compliance with SBT-NZ would commence around 2040. The primary cost driver would be the procurement of renewable energy. Additionally, the transition risk concerning customers would involve a decrease in market share for products.

Climate Risk Levels of Owned Asset Locations under RCP Scenarios - Scenario Simulation Chart Data



Transition Risks: Considerations and Assumptions for Scenario Analysis

	Risk	Consideration Factors and Assumptions	Cost Categories
Regulations	Carbon Tax	Based on different scenarios, the company's unit carbon tax payment varies significantly due to substantial differences in taxation systems, leading to a high degree of uncertainty. The assessment primarily considers three levels of carbon tax: 1. Government Net-Zero Pathway: SSP2-4.5 (Approximately 2-10 USD/tCO ₂ e from 2021 to 2050) 2. SSP1-1.9 and SBT-NZ: Carbon price under SSP1-1.9 (Reaching around 650 USD/tCO ₂ e by 2050)	Operating Costs
	Emissions Cap and Carbon Penalty	Currently, international regulations and trends lean towards imposing carbon taxes rather than utilizing carbon penalties or emissions caps. Therefore, only under the Government Net-Zero Pathway would additional consideration be given to carbon penalties (within regulations not exceeding 1500 NTD/tCO ₂ e).	Operating Costs
Technology	Renewable Energy Infrastructure Costs	The installation cost of setting up renewable energy generation facilities in-house is recognized as capital expenditure for the current year. The cost of renewable energy installations is obtained from the IRENA Renewable Energy Report 2022.	Capital Expenditures
	Renewable Energy Operational Costs	The operational costs of renewable energy are obtained from the IRENA Renewable Energy Report 2022.	Operating Costs
	Renewable Energy Procurement Costs	The procurement cost of renewable energy in Taiwan is calculated by adding the Taiwan Power Company's (Tai power) current average selling price of renewable energy to the public electricity fee (sourced from Tai power).	Operating Costs
	Cost of Purchasing Electricity from Taiwan Power Company	Procurement Cost and Benefits from Tai power are calculated at a rate of 2.55 NTD/kWh for industrial high-voltage electricity consumption.	Operating Costs
	Carbon Removal Costs	According to IEA data, the cost of Carbon Capture, Utilization, and Storage (CCUS) can vary depending on the specific circumstances. As this study considers carbon removal as the ultimate approach to achieving net-zero emissions, the most expensive direct air capture technology is used, which costs around 85-345 USD/tCO ₂ e. Therefore, based on three scenarios, the assumptions are as follows: 1. Immature Technology: 340 USD/tCO ₂ e ; 2. Average Price: 235 USD/tCO ₂ e ; 3. Mature Technology: 130 USD/tCO ₂ e	
Market	Risk of Decreased Market Share for Products	The estimation of market risk is based on the potential loss of customers who prioritize carbon reduction targets when a company does not achieve its transition goals. This could lead to an expected decrease in market share. 1. Government Net-Zero: 1% of revenue loss; 2. SSP1-1.9 and SBT-NZ: 25% of revenue loss	Projected Revenue

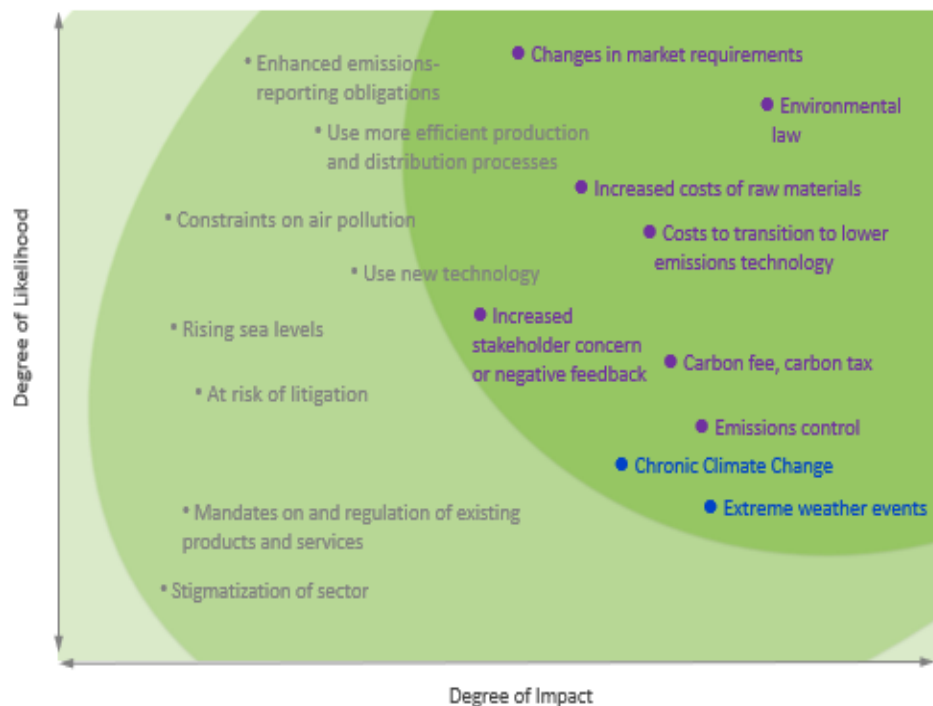
Financial Impact Analysis of Climate Change Scenarios

External Scenarios	Government Net-Zero Pathway	SSP1-1.9	SBT-NZ
Explanation	Based on the net-zero target currently proposed by Taiwan	Based on the SSP1-1.9 pathway outlined in the IPCC AR6 report	Estimated scenarios based on achieving the SBT Net Zero criteria
Assessment of Risks	Regulatory risk, market risk		
BAU situation: Financial Impact (No Implementation of Transformation Strategy)	Regulatory risk: Increasing cost of carbon penalties Regulatory risk: Relatively stable carbon tax fluctuation	Regulatory Risk: Short-Term Growth in Carbon Tax, Followed by Carbon Emission Reduction, Decreases by 2050 Market Risk: Potential Order Loss, Increased Financial Risk	Regulatory Risk: Short-term High Growth in Carbon Tax, Decreases After Carbon Emission Reduction, Lower by 2050 Market Risk: Potential Order Loss, Increased Financial Risk
Transition Scenario: Management Costs (Implementing Transformation Strategy)	Primary cost: Procurement of renewable energy	Primary Costs: Procurement of Renewable Energy, Carbon Tax	Primary costs: Procurement of renewable energy, carbon removal costs
Mitigation Measures	Procurement of renewable energy	Procurement of renewable energy	Procurement of renewable energy, Adoption of carbon removal technology

Climate Change Risk & Opportunity Classification

Based on the categories of climate-related risks and opportunities of TCFD, Zyxel Group's relevant departments collect and analyze information on international climate-related trends, industry concerns, and Zyxel Group's reply to the contents of the CDP (Carbon Disclosure Project) questionnaire and meet to evaluate and discuss them. The impacts of specific risk topics and scenarios on Zyxel Group's organization and operations are identified and climate-related risks and opportunities are ranked according to the degree of impact to find out the potential crises and possible opportunities in response to climate change. Plans to follow TCFD recommendations are included in the annual financial report where Zyxel Group exposes the most important climate-related risks and opportunities.

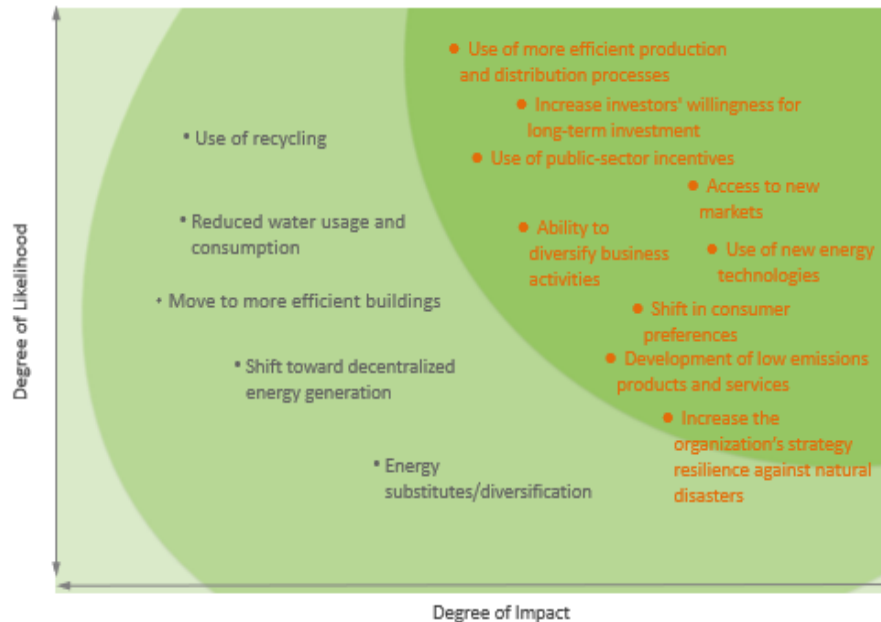
TCFD Climate-Related Opportunity



Analysis of Potential Financial Impacts of TCFD Climate Change Risks

Type	Aspects	Major Risks	Analysis of Potential Financial Impacts
Transition Risks	Policy and Legal	Carbon fee, carbon tax	Increased Tax, Management, and Investment Costs
		Environmental law	Increased Costs to Comply with Environmental Regulations
		Emissions control	Increased Costs for Low-Carbon Equipment
	Technology	Costs to transition to lower emissions and effective technology	Increased Costs for Technology Development
	Market	Changes in market requirements	Consumer Behavior Impacting Market Share
Physical Risks	Market	Increased costs of raw materials	Increased Raw Material Procurement Costs
		Increased stakeholder concern or negative feedback	Damaged Corporate Brand Image
	Reputation	Increased stakeholder concern or negative feedback	Damaged Corporate Brand Image
Physical Risks	Acute	Extreme weather events (ex: typhoons, floods)	Resulting in Power Outages, Factory Equipment Loss, and Supply Chain Disruption
	Chronic	Chronic Climate Change (average temperature rise)	Increased Electricity Usage, Rising Carbon Emissions, Leading to Cost Increases

TCFD Climate-Related Opportunity



TCFD Climate-Related Opportunity Identification Matrix

Type	Major Opportunity	Analysis of Potential Financial Impacts
Resource Usage Efficiency	Use of more efficient production and distribution processes	Production Line Automation, Enhancing Production Efficiency
Energy Source	Use of new energy technologies	Reducing Energy Usage Costs
Products and Services	Development of low emissions products and services	Meeting Customer Demand for Energy-Efficient Products, Increasing Revenue
Products and Services	Ability to diversify business activities	Exploring New Business Opportunities to Increase Revenue
Products and Services	Shift in consumer preferences	Prioritize Capturing Market Trends, Meeting Customer Needs, and Enhancing Satisfaction
Markets	Access to new markets	Increase Revenue
Markets	Use of public-sector incentives	Reduce Operational Production Costs
Resilience	Increase investors' willingness for long-term investment	Stabilize Shareholder Structure, Reduce Probability of Stock Value Volatility
Resilience	Increase the organization's strategy resilience against natural disasters	Reduce Probability and Impact of Operational Disruptions and Losses

Climate Change Risks and Opportunities Responses

Type	Aspects	Risks	Opportunity	Response plans and actions
Transition Risks	Regulations / Energy	<ul style="list-style-type: none"> • Carbon fee, carbon tax • Environmental law • Emissions control 	<ul style="list-style-type: none"> • Use of more efficient production and distribution processes • Use of new technologies 	<ul style="list-style-type: none"> • Set SBT carbon reduction targets • Greenhouse gas reduction, water saving, waste reduction targets • Continuous implementation of gas reduction measures • Assess the use of renewable energy
	Technology / Product	<ul style="list-style-type: none"> • Costs to transition to lower emissions technology • Changes in market requirements • Increased costs of raw materials 	<ul style="list-style-type: none"> • Development of low emissions products and services • Ability to diversify business activities • Shift in consumer preferences 	<ul style="list-style-type: none"> • Introduce green product management system to reduce the impact of product life cycle on the environment • Expose product carbon footprint and respond to customers' demand for product carbon emissions information • Continue to invest in energy-saving product research and development
	Market		<ul style="list-style-type: none"> • Access to new markets • Use of public-sector incentives 	Develop low-carbon design products, improve product efficiency, and respond to market demand
Physical Risks	Reputation	Increased stakeholder concern or negative feedback	Increase investors' willingness for long-term investment	<ul style="list-style-type: none"> • Continue sustainable environmental goals and actions to establish a sustainable corporate image • Responding to international initiatives
	Acute	Extreme weather events (ex: typhoons, floods)	Increase the organization's strategy resilience against natural disasters	<ul style="list-style-type: none"> • Conduct risk assessment and risk mitigation measures for typhoon and flood disasters in the manufacturing plant area • Regular natural disaster emergency drills
	Chronic	Chronic Climate Change (average temperature rise)		

3. Carbon Management

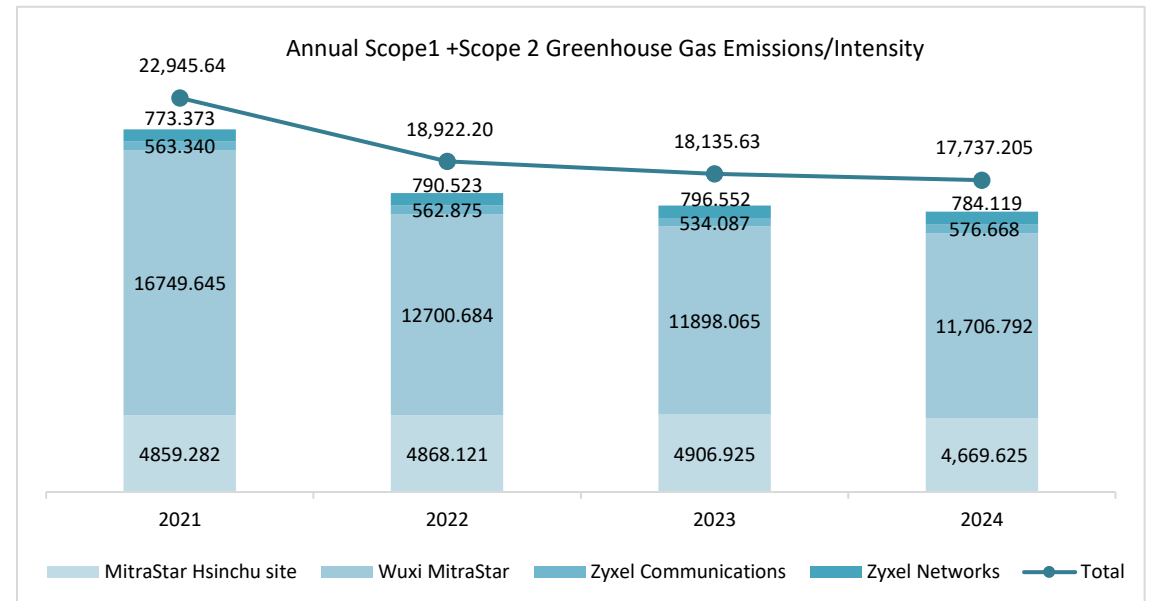
Climate change has become a critical threat to the global environment. To advance sustainable development, Zyxel Group has committed to the Science Based Targets initiative (SBTi) and set a long-term goal of achieving net-zero emissions by 2050. The Group has launched decarbonization plans and defined implementation timelines and strategies in response to the Paris Agreement, striving to limit global temperature rise to within 1.5°C.

Carbon Reduction Pathway and Strategy

Zyxel Group is committed to achieving net-zero emissions by 2050, with a 50% reduction target by 2030. Aligned with international initiatives, we focus on green operations, energy management, and lifestyle transformation. To this end, Zyxel conducts GHG inventories (including Scope 3) with third-party verification, and has introduced a carbon management platform to identify reduction opportunities and track progress. Actions include internal carbon pricing, solar projects, and green electricity planning. Through clear targets, strategies, and continuous reporting, Zyxel drives its pathway to net zero.

Greenhouse Gas Inventory

Zyxel Group's GHG Inventory Report is based on ISO 14064-1:2018 and the GHG Protocol, adopting the operational control approach with 2021 as the base year. External experts support the inventory, and a systematic framework ensures accuracy and reliability. The scope covers Zyxel Group and subsidiaries (MitraStar Technology, Wuxi MitraStar, Zyxel Communications, and Zyxel Networks) with reporting boundaries in Taiwan and China. Scope 3 coverage has expanded annually to meet SBTi targets. In 2024, total emissions reached 17,737.20 metric tons CO₂-e (Scope 1: 1,255.63; Scope 2: 16,481.58), all verified by third parties under ISO 14064-1.



Scope 1 + Scope 2 Greenhouse Gas Emissions (Unit: metric tons CO₂-e)

	2021			2022			2023			2024		
	Scope 1	Scope 2	Total emissions	Scope 1	Scope 2	Total emissions	Scope 1	Scope 2	Total emissions	Scope 1	Scope 2	Total emissions
MitraStar	427.3398	4,431.9420	4,859.2818	175.47667	4,692.64465	4,868.1212	491.6951	4,415.2300	4,906.9251	333.6776	4,335.94778	4,669.6253
Wuxi MitraStar	597.5834	16,152.0612	16,749.6446	611.87293	12,088.8111	12,700.68394	633.95495	1,264.1100	11,898.06495	696.6394	11,010.15293	11,706.7923
Zyxel communications	76.8434	486.4968	563.3402	79.2234	483.6520	562.8754	78.3040	455.7831	534.0871	124.97687	451.6911	576.6679
Zyxel Networks	86.8765	686.4961	773.3726	97.3324	693.19081	790.5232	103.52374	693.02879	796.5524	100.33596	683.7833	784.1192
Total	1,188.6431	21,756.9961	22,945.6392	963.9053	17,958.2985	18,922.2037	1,307.4777	16,828.1518	18,135.6295	1,255.6297	16,481.5750	17,737.2047
Emission Intensity	0.89			0.62			0.60			0.68		

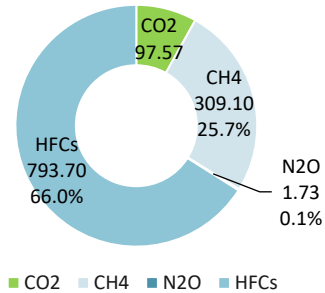
Note: As Zyxel Group and MitraStar Technology operate at the same site, their Scope 1 and 2 emissions are calculated on a combined basis.

Scope 3 Greenhouse Gas Emissions

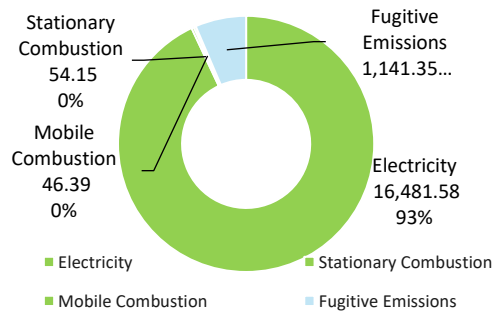
Zyxel Holdings and its subsidiaries conduct emission source identification based on organizational boundaries to confirm direct and indirect greenhouse gas (GHG) emission items for inventory purposes. However, indirect GHG emission sources are often difficult to classify and quantify, and their accuracy is not easily verified. Therefore, the “Materiality Assessment Criteria Table” is applied to identify emission sources that pose significant risks and opportunities to the company. After discussions held by management representatives, considering organizational practicality, technical feasibility, and economic aspects, the company determined the following items as the material indirect emission sources for the year. The corresponding inventory data are presented in the table below. Zyxel Holdings and its subsidiaries have completed third-party verification and obtained ISO 14064-1 certification.

The major sources of Scope 3 GHG emissions are raw material and product procurement and the use of sold products, which together account for 98.59% of total Scope 3 emissions. To reduce Scope 3 GHG emissions, the company will continue to promote low-carbon transformation within the supply chain to reduce emissions from purchased goods, and adopt smart power management and energy-efficient equipment design to minimize carbon emissions during product usage.

Scope 1 Greenhouse Gas Emission Proportion (tCO₂e)



Scope 1 、 Scope2 Emission Proportion (tCO₂e)



Categories	Sources of emissions	Emissions (tCO ₂ e)				Overall Total
		MitraStar	Wuxi MitraStar	Zyxel Communications	Zyxel Networks	
Category 3: indirect GHG emissions from transportation	Upstream Transportation /Distribution	84.7563	1,244.4046	0.3871	17.9865	1,347.5345
	Downstream Transportation /Distribution	1,991.9270	6,232.4993	3,518.1998	876.2127	12,618.8388
	Waste Generated in Operations	29.1030	3.4352	2.0646	3.3494	37.9522
	Business Travel	127.6744	52.6149	128.7303	38.5872	347.6068
	Employee Commuting	450.3019	234.3716	251.3407	208.7336	1,144.7478
Category 4: indirect GHG emissions from products used by organization	Purchased Goods and Services	74,700.9538	301,498.7170	1,013.8210	3,864.8520	381,078.3438
	Purchased Goods and Services	-	-	298.4036	268.6174	567.0210
	Capital Goods	408.6061	146.0559	222.3180	68.6411	845.6211
	Fuel- and Energy-Related Activities	894.7757	-	105.7657	141.8308	1,142.3722
	Water Use	9.1977	-	1.1633	1.8666	12.2276
	Waste Generated in Operations	458.0326	0.1961	31.8954	51.7446	541.8687
	Upstream Leased Assets	-	-	-	-	-
Category 5: indirect GHG emissions associated with the use of products from the organization.	Processing of Sold Products	-	-	-	-	-
	Use of Sold Products	-	-	811,149.0321	99,701.1678	910,850.1999
	End-of-Life Treatment of Sold Products	-	-	337.5408	77.1594	414.7002
	Downstream Leased Assets	-	-	-	-	-
	Franchises	-	-	-	-	-
	Investments	-	-	246.3774	-	246.3774
	Investments	-	-	-	-	-
Total		79,155.3285	309,412.2946	817,307.0399	105,320.7491	1,311,195.4121

Since Zyxel Holdings and MitraStar Technology operate at the same site, their Scope 3 data are calculated on a consolidated basis.

Carbon Reduction Pathway Planning and Strategy

SBTi Science-Based Targets Initiative

Zyxel Group has committed to the Science Based Targets initiative (SBTi) in support of the IPCC Special Report on Global Warming of 1.5°C.

The Group's near-term and net-zero targets have been validated by SBTi, confirming alignment with the Paris Agreement's 1.5°C pathway.

Using 2021 as the base year, Zyxel Group developed annual reduction pathways through the SBTi platform and launched Scope 3 inventories to strengthen climate action.

By joining SBTi, the Group has set clear decarbonization timelines and action plans, reinforcing its execution and advancing toward the 2050 net-zero goal, demonstrating its commitment to global sustainability.

Zyxel Group pledges a 42% reduction in Scope 1 and 2 emissions by 2030 (base year 2021), a 58.8% reduction in Scope 3 emissions by 2034 (base year 2023), and net-zero across all scopes by 2050.

Carbon Management Mechanism Climate Management Performance Incentives

In 2023, Zyxel Group launched ESG KPI planning for senior management, department heads, and teams, incorporating climate transition initiatives into performance indicators to drive long-term sustainable development through incentives. At the same time, to encourage employees to achieve greenhouse gas reduction targets and enhance carbon reduction efficiency, the Group organized a series of energy-saving and carbon-reduction activities.

Internal Carbon Pricing (ICP)

To integrate climate risks into internal financial and operational decision-making, and to guide the development of decarbonization strategies while fostering a carbon reduction culture within the organization, Zyxel Group has initiated the formulation of an internal carbon pricing mechanism. This approach aims to incentivize proactive emission reductions and internalize the external costs of carbon emissions.

The internal carbon pricing program will be aligned with the company's climate targets, taking into account carbon market prices and regulatory frameworks to establish a suitable model for implementation within Zyxel Group.

Carbon Reduction Actions

	Scope1	Scope2	Scope3
MitraStar	<ul style="list-style-type: none"> Evaluate using electronic company vehicles. Purchase temperature and humidity control equipment with low refrigerant content. Improve septic tank systems to reduce anaerobic emissions. 	<ul style="list-style-type: none"> Development of Solar PV Power Generation System Replacement of High-Efficiency Chillers Phase-Out of Energy-Intensive Process Equipment Implementation of Energy-Saving Responsibility Zones 	<ul style="list-style-type: none"> Indirect greenhouse gas emissions from purchased electricity. Reduce greenhouse gas emissions from product use. Reduce waste generated from operational activities.
Wuxi MitraStar	<ul style="list-style-type: none"> Replace diesel forklifts with electric forklifts. Reduce generator testing time. 	<ul style="list-style-type: none"> Replacement of Low-Efficiency, High-Power Equipment (e.g., Chillers) Planning for Additional Photovoltaic (PV) Installations to Reduce Power Consumption Ongoing Enhancement of Electricity Management and Control 	<ul style="list-style-type: none"> Expansion of Photovoltaic (PV) Installations to Reduce Power Consumption Adoption of LED Tubes to Replace T8 Fluorescent Lamps Continuous Enhancement of Electricity Management and Control
Zyxel Communications/ Zyxel Networks	<ul style="list-style-type: none"> Reduce frequency of company vehicle usage (prefer online communication). Reduce frequency of lawn mower usage to reduce gasoline consumption. When maintenance and testing are in good condition, appropriately reduce diesel generator testing time to reduce diesel usage. Purchase refrigeration equipment that uses environmentally friendly refrigerants. 	<ul style="list-style-type: none"> Encourage employees to use stairs more to reduce elevator usage. Implement night-time lighting control; turn off unused lights and air conditioning during security patrols. Maintain energy-consuming equipment properly to prevent increased energy consumption due to poor operational efficiency. Use smaller chillers during non-summer months to reduce energy consumption. 	<ul style="list-style-type: none"> Reduce business travels, increase the usage of online meetings. Reduce energy consumption in product usage. Reduce product weight (e.g., packaging, materials) to lower transportation carbon emissions. Increase the recycling rate at the product disposal stage to reduce incineration and landfill activities.

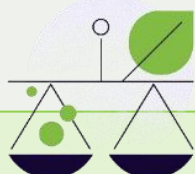
Carbon Management Digital Platform

Zyxel Group has established a carbon management system to manage its own carbon data—including greenhouse gas (GHG) emissions and carbon footprint analyses—and to serve as a collaboration tool for collecting supply chain carbon data and guiding suppliers through inventories and calculations. The system supports regular GHG inventories and product carbon footprint calculations, provides data visualization to track reduction performance and target attainment, applies analytical indicators to inform decisions, and drives emissions-reduction actions.

The system comprises two modules: an Organizational Carbon Disclosure & Management Module and a Product Carbon Footprint Calculation Module, supporting ISO 14064-1 organizational GHG inventories and ISO 14067 product carbon footprint.

The **Organizational Carbon Disclosure & Management Module** provides concrete implementation steps to help Zyxel Group—and lead its supply chain—efficiently manage decarbonization targets and both organizational and product inventory data. Through the platform’s communication, collaboration, support, oversight, and reinforcement features, the module builds supply-chain carbon literacy and enables suppliers to complete inventories using a unified digital system.

The **Product Carbon Footprint Calculation Module** connects with Zyxel Group's Green Product Management System to display life-cycle carbon footprint results. It supports internal teams in examining emissions across the product life cycle—design, supplier collaboration, raw material sourcing, manufacturing, packaging, logistics, recycling, and end-of-life treatment—to inform decision-making and accelerate the development of low-carbon products.



B. Energy Management

Zyxel Group is committed to continuously improve energy and resource efficiency. Beyond optimizing the use of resources in product design and development, the Corporate Sustainability Committee closely monitors international trends and regulatory requirements, conducting risk impact assessments and formulating responses. The committee integrates energy-saving and carbon-reduction strategies and initiatives across relevant departments, establishes energy management plans, and continuously tracks performance and progress.

Zyxel Group implements measures such as energy-saving initiatives, enhancing manufacturing process efficiency, replacing energy-consuming equipment, introducing energy management systems, and planning for the use of renewable energy. These strategies are designed to address climate change risks and reduce the environmental impact of greenhouse gas emissions. Additionally, the company promotes energy-saving activities among employees and conducts educational programs to raise awareness about energy conservation and environmental protection.

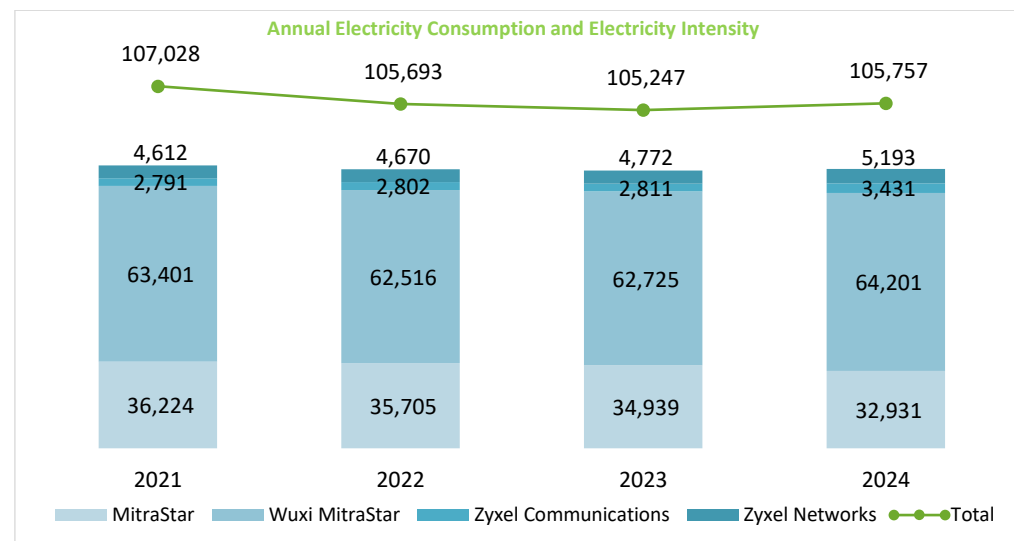
Energy Goals and Achievements

Topic	Strategy action	Performance Indicators	2024 Goal	2024 Achievements		Goals			SDGs
						2024short-term	2027mid-term	2030long-term	
Energy Management	Improve Energy Efficiency	Electricity intensity reduction compared to the base year 2021.	2% reduction	2.3% reduction	V	2% reduction	2% reduction	2.2% reduction	
	Smart Energy Management	Smart energy management system implementation.	Plan introduction	Completed Implementation	V	-	-	-	
	Replace Energy-consuming Equipment	Replacement of energy-consuming equipment.	Plan introduction	Replacement Completed	V	-	-	-	
	Increase Renewable Energy Usage	Completion of solar energy installation.	Planning for Hsinchu Plant Construction	Hsinchu Plant Construction Planning in Progress	-	Hsinchu Plant Construction Completed	Hsinchu Plant Renewable Energy > 7%	Hsinchu Plant Renewable Energy > 7%	

Energy Usage

Unit: Gigajoules (GJ)	2021	2022	2302	2024
Purchased Electricity	107,028	105,693	97,664	105,757
Diesel	149	78	53	709
Gasoline	487	319	691	542
Total Electricity Consumption	107,028	105,693	97,664	105,757
Total Energy Consumption	107,664	106,090	98,409	107,008

Note: Energy Conversion: According to the energy product heat value table, diesel has a heat value of 8,400 kcal/L, and gasoline has a heat value of 7,800 kcal/L. 1 kcal = 4.184 kJ. Conversion factor for gasoline/diesel: [Usage (L/year) * Calorific Value (kcal/L) * 4.184 kJ/kcal] / 1,000,000\text{[Usage (L/year) * Calorific Value (kcal/L) * 4.184 kJ/kcal] / ,000,000}



Electricity Consumption: Gigajoules (GJ)

Electricity Intensity: Electricity Intensity = Electricity Consumption (GJ) / Zyxel Group Consolidated Revenue (NTD million)

Energy Management Platform

Zyxel Group has established an "Energy Management Digital Platform" that utilizes AI-based energy-saving technologies to effectively manage energy efficiency. This platform analyzes energy efficiency, usage, and consumption processes to identify high-energy hotspots and determine opportunities to improve energy performance. The system includes modules for monitoring, data management, analysis, optimization, control, surveillance, and reporting, all aimed at enhancing energy usage and efficiency. This ensures the minimization of energy costs while maintaining reliable and sustainable energy supply. The smart energy management system features digital management functions for air conditioning and electrical energy.



Renewable Energy Development and Planning

The planning and utilization of renewable energy is the most critical strategic objective within Zyxel Group's energy management program.

Zyxel's U.S. subsidiary began adopting solar energy in 2019. Building on this, Zyxel Group has re-initiated solar installation planning, with initial deployment scheduled for the MSTC Hsinchu Plant in Taiwan and the Wuxi Plant in China. The installations are planned for phased completion starting in 2025, with an estimated total annual generation of approximately 1.76 million kWh. This will account for 6.47% of the Group's total electricity consumption from renewable sources. Furthermore, newly planned facilities have already incorporated solar PV systems into their designs, ensuring a gradual expansion of solar deployment and an increase in renewable energy usage.

In alignment with Zyxel Group's commitment to the SBTi 2050 net-zero target, the company is not only focusing on self-generated solar power but also planning for the use of other renewable energy sources and the procurement of renewable energy certificates to enhance the overall renewable energy usage ratio. Zyxel Group supports the RE100 renewable energy initiative and has evaluated joining RE100 to demonstrate its commitment to clean energy and proactive low-carbon transformation.

Replace Old Equipment

To implement low-carbon manufacturing and achieve energy conservation and carbon reduction goals, the Company conducts comprehensive assessments of major energy use across its facilities. This process identifies production stages with potential for yield improvement and energy efficiency enhancement, and prioritizes equipment in need of replacement.

Through efficiency analyses of the SMT process humidity and temperature control system as well as wave soldering equipment, the Company identified outdated, energy-intensive equipment—including chillers, soldering furnaces, and reflow ovens—for replacement. By upgrading these systems, the Company advances carbon reduction in manufacturing processes while optimizing production flows and technologies.

Energy Saving Solutions

Energy Conservation Initiatives	Energy Savings / Carbon Reduction	2021	2022	2023	2024
Production System					
• Equipment Operation Integration • Replacement with Energy-Efficient Equipment	Energy Savings	518.13	-	-	2,649.02
	Carbon Reduction	79.74	-	-	384.79
Lighting System Improvements					
• LED Lighting Retrofit • Installation of Motion-Sensor Fixtures in Basement	Energy Savings	-	605.89	1,260.44	219.32
	Carbon Reduction	-	85.67	189.44	32.20
Air Conditioning System Improvements					
• Shorten Nighttime Chiller Operating Hours • Replace Cooling Tower Heat Dissipation Panels to Reduce Fan Motor Load • Replace Chiller Units	Energy savings	92.97	87.69	709.30	4,050.63
	Carbon reduction	14.31	12.40	111.97	548.55
Management System					
• Shorten Exhaust Fan Operating Hours	Energy savings	-	-	50.77	51.20
	Carbon reduction	-	-	6.97	6.74
Total	Energy savings	611.10	693.59	2,020.51	6,970.17
	Carbon reduction	94.04	98.06	308.37	936.29


unit: Energy savings (kWh) , Carbon reduction (kg CO₂-e)

C. Water Management

The production sites of Zyxel Group, including its subsidiary MitraStar Technology's Hsinchu and Wuxi plants, are primarily assembly-based and do not require process water. Therefore, they do not consume significant amounts of water resources. Water usage mainly comes from basic facility operations and domestic purposes, with tap water as the sole source.

Given the limited water resources in Taiwan, Zyxel Group has conducted water risk assessments, actively monitored water usage, and implemented water-saving facilities along with various educational campaigns to promote water conservation and reduce water consumption. Through these efforts, Zyxel Group has continuously improved its water efficiency, with water withdrawal intensity reaching 5.85 in 2024, representing a 5.98% decrease compared to the 2021 baseline year.

Goals and Achievements

Issue	Strategy actions	Performance indicators	2024 goal	2024 achievement			Goals			SDGs
							2024 short-term	2027 mid-term	2030 long-term	
Water Management	<ul style="list-style-type: none">Continue to implement daily water saving measuresWater Conservation Education and Advocacy	Percentage Reduction in Water Intensity Compared to Baseline Year 2021	Reduced by 5%.	Reduced by 5.98%	V		Reduced by 5%	Reduced by 6%	Reduced by 8%	

1. Water Resources Management Policy

The water resources management policy aims to achieve the results of saving water resources through water-saving facilities, water-saving measures and education promotion.

Water risk assessment

To understand water resource risks, we refer to the World Resources Institute (WRI) [Water Risk Assessment Tool](#), specifically the "Aqueduct Water Risk Atlas," to identify potential impacts and risks at each production site. The analysis indicates that our production and operational locations in Taiwan are situated in low water stress risk areas, while the Wuxi site in China, located in a high-risk area, has proactively implemented water conservation measures in response.



Water Usage

Company	Region	Primary Water Sources	Water Stress Risk Index	Wastewater Treatment Plant	Discharge Basin
MitraStar	Taiwan – Hsinchu Science Park	Baoshan Reservoir Baoshan Second Reservoir Hsinchu Water Treatment Plant (Touqian River)	Low – Medium (1–2)	Hsinchu Science Park Wastewater Treatment Plant	Keya Creek
MitraStar Wuxi	China – Suzhou	Yangtze River and Lake Tai	High (3–4)	Lucun Wastewater Treatment Plant	Lake Tai
Zyxel Communications	Taiwan – Hsinchu Science Park	Baoshan Reservoir Baoshan Second Reservoir Hsinchu Water Treatment Plant (Touqian River)	Low – Medium (1–2)	Hsinchu Science Park Wastewater Treatment Plant	Keya Creek
Zyxel Networks	Taiwan – Hsinchu Science Park	Baoshan Reservoir Baoshan Second Reservoir Hsinchu Water Treatment Plant (Touqian River)	Low – Medium (1–2)	Hsinchu Science Park Wastewater Treatment Plant	Keya Creek

2. Water Management

Water saving measures

- Cherish water resources, specific measures include:
- Employee hand washing facilities are fully equipped with water-saving faucets
- Install water-saving toilets
- Control of external wall cleaning and water use for irrigation
- Adjust the ratio of the make-up of the discharge water from the cooling tower
- Promoting the concept of water conservation

Wastewater Management

Sewage from MitraStar and Zyxel sites are included in the waste water plant of the Hsinchu Science Administration Bureau for treatment. The sewage treatment fee is paid quarterly according to the water quality and volume, so it has not caused damage or impact to the surrounding ecology of the operating base.

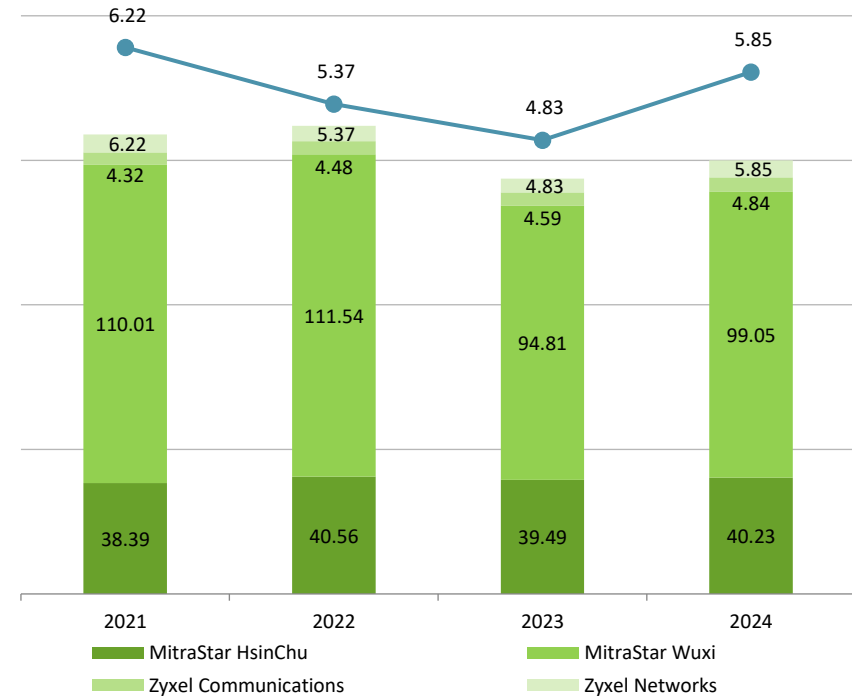
Simultaneously, regular outsourced wastewater testing is conducted on the sewage discharged into the drainage system of the Hsinchu Science Park to ensure compliance with standards. The industrial wastewater discharge from the Hsinchu Science Park is coordinated and managed by the Park Administration's wastewater treatment plant, eliminating the need to apply for pollution facility installation permits or pollution emission permits in accordance with regulations.

In 2024, there were zero wastewater discharge pollution incidents.

Historical Water Usage

(M Liters/year)	2021	2022	2023	2024
Surface water	-	-	-	-
Underground water	-	-	-	-
Third-party water	159.85	164.06	146.69	151.98
Total water usage	159.85	164.06	146.69	151.98
Total water discharge	119.17	121.38	107.76	111.09
Total water consumption	40.69	42.68	38.93	40.88


Water Withdrawal Intensity



D. Waste Management

We continue to improve our production equipment to meet international environmental protection requirements and help protect our environment. MitraStar's Hsinchu site includes a manufacturing plant. In terms of environmental considerations, the main environmental pollution sources that may arise are reflow ovens and wave soldering ovens for soldering operations. The exhaust gas contains trace metal fumes and volatile organic compounds.

Goals and achievements

Topic	Strategy Actions	Performance Indicators	2024 Goal	2024 Achievement			Goals			SDGs
							2025short-term	2027mid-term	2030long-term	
Waste management	• Promote Waste Classification and Reduction • Strengthen Waste Recycling and Reuse	Percentage reduction in waste intensity compared to the baseline year of 2021.	Reduce by 10%	Reduce by 10.72%	V	Reduce by 10%	Reduce by 11%	Reduce by 12%		
		Waste Recycling Rate	>70%	95.85 %	V	>90%	>92%	>96%		

Most wastes produced on the MitraStar Hsinchu site fall into three categories:

- General commercial wastes: These are mostly daily-life garbage.
- Hazardous commercial wastes: Waste organic solvents, tin and lead pieces as well as electronic components.
- Recyclable materials: Paper, plastic and iron/tin cans.

1. Reduced use of raw materials

The amount of raw materials used in the manufacturing processes is deliberately decreased to save on costs and to cut the waste. The reduction has been realized with the following methods

- Packaging materials are recycled.
- Low-volatility solvents are used to reduce the amount needed.
- Closed spraying system for less organic solvent usage.
- Improved flowing path in tin ovens for less tin bar usage.
- Fans are replaced by smart heat dissipation mechanisms.
- The packaging material for heat sinks has been changed from wooden boxes to cardboard boxes.
- The discarded wooden boxes are provided to farmers for use as chicken breeding boxes.

Note: Zyxel site only generate "general household waste" and "recyclable materials," which are collectively managed and transported for disposal by the Hsinchu Science Park Administration. Therefore, there are no records of the weight of waste collection and disposal.

Process Waste and Carbon Reduction Project – Solder Dross Waste Management

To advance resource circularity and minimize environmental impacts, MitraStar Technology launched the "Process Waste and Carbon Reduction Project" addressing solder dross from high-temperature equipment. By upgrading equipment, optimizing process control, and strengthening chemical management, the project improves resource efficiency and lowers environmental risks.

Improvement Measures

- Equipment Upgrade**
Replaced outdated equipment with new high-efficiency models featuring precise temperature control and heat recovery technology, improving process stability and reducing energy consumption.
- Solder Dross Management Optimization**
Strengthened recycling and reuse mechanisms through process parameter control and oxidation suppression technology, increasing solder dross reuse rates.
- Precise Chemical Management**
Implemented precise control of flux flow and atomization angles to minimize excessive spraying, thereby reducing volatile organic compounds (VOCs) emissions and additional solder dross.

Project Results

- Solder Dross Reduction:** Annual reduction of 45%
- Waste Reduction:** Decreased 80 metric tons of solder dross waste annually
- Resource Circularity:** Improved solder dross recycling and reuse rate to 70%
- Environmental Benefits:** Reduced VOC emissions, improving workplace environment and employee health
- Carbon Reduction:** Reduced 157.8 metric tons CO₂e annually, equivalent to the carbon absorption of 13,149 trees

2. Management and recycling of wastes

In pursuit of sustainable operations, the Company minimizes pollution and reduces costs through process optimization and resource recycling, achieving both environmental protection and efficient resource use. All recoverable resources are classified by waste type, reported online in compliance with EPA regulations, and managed through licensed disposal contractors.

Waste management practices include solvent distillation and recovery, mixed metal recycling, and final disposal methods such as incineration for general industrial waste and reprocessing hazardous waste into raw materials.

In 2024, MitraStar Technology generated 41.16 metric tons of general industrial waste and 0.37 metric tons of hazardous industrial waste, achieving a recycling rate of 95.85%, fully compliant with environmental regulations.

To effectively manage generated waste, the following measures were implemented:

- Invited the Environmental Protection Bureau to conduct on-site waste classification awareness campaigns
- Reused trimmed wastepaper and bindings to make notepads
- Recycled PVC packaging materials as raw materials
- Recovered tin-lead dross and processed it into ingots
- Recycled mixed metals for reuse as raw materials or art products

All other waste is managed in compliance with environmental regulations by certified contractors through physical or alternative treatment methods. At Zyxel and Zyxel Networks facilities, only general household and recyclable waste are generated, which are collected by the Hsinchu Science Park Administration; hence, no direct records of disposal weight are available.

Waste Generation and Recycling Rate (Unit: Metric Tons)

	2021	2022	2023	2024
General Business Waste	43.01	39.85	30.80	41.16
Hazardous Business Waste	2.45	1.88	1.97	0.37
Total Recycling / Reuse Amount	1192.79	1276.08	1221.81	958.64
Total Waste Generation	1238.25	1317.81	1254.58	1000.16
Waste Recycling Rate (%)	96.33%	96.83%	97.39%	95.85%
Waste Intensity	0.048	0.043	0.041	0.039
Annual Intensity Reduction Rate (Base Year: 2021)	-	10.53%	14.35%	10.72%

Waste Recycling Situation (Unit: Metric Tons)

Category	Handling Method	2021	2022	2023	2024
General Business Waste	Reuse for Original Purpose	0	0	0	0
	Recycling	1065.77	1101.25	983.94	756.71
	Other Recycling	0.77	5.25	12.61	10.93
	Total	1066.54	1106.50	996.55	767.64
	Rate (%)	96.12%	96.52%	97.00%	94.91%
Hazardous Business Waste	Reuse for Original Purpose	0	0	0	0
	Recycling	114.10	147.08	217.24	182.92
	Other Recycling	12.16	22.51	8.03	8.08
	Tota	126.25	169.59	225.26	191.00
	Rate (%)	98.10%	98.90%	99.13%	99.81%

Waste Direct Disposal Situation (Unit: Metric Tons)

Category	Handling Method	2021	2022	2023	2024
General Business Waste	Landfilling	0	0	0	0
	Incineration for Energy Recovery	0	0	0	0
	Simple Incineration	43.01	39.85	30.80	41.16
	Other Treatment	0	0	0	0
	Treatment Unknown	0	0	0	0
	Total	43.01	39.85	30.80	41.16
Hazardous Business Waste	Landfilling	2.18	1.88	1.73	0.37
	Incineration for Energy Recovery	0	0	0	0
	Simple Incineration	0	0	0	0.00
	Other Treatment	0.27	0.00	0.24	0.00
	Treatment Unknown	0	0	0	0.00
	Total	2.45	1.88	1.97	0.37

E. Air Pollution Prevention

Zyxel Group's subsidiaries MitraStar Technology and Wuxi MitraStar are the main manufacturing sites. During production, Zyxel Group has no emissions of ozone-depleting substances, sulfur oxides, or other significant air pollutants, with only volatile organic compounds (VOCs) and nitrogen oxides (NOx) being emitted. In 2024, total emissions amounted to 3.79 metric tons and 0.02 metric tons, respectively. All required quarterly reporting and related fee payments have been duly completed in compliance with regulations.

	2021	2022	2023	2024	2025 target
VOCs	6.56	8.66	9.27	3.79	10% Reduction
NOx	0.04	0.04	0.06	0.02	

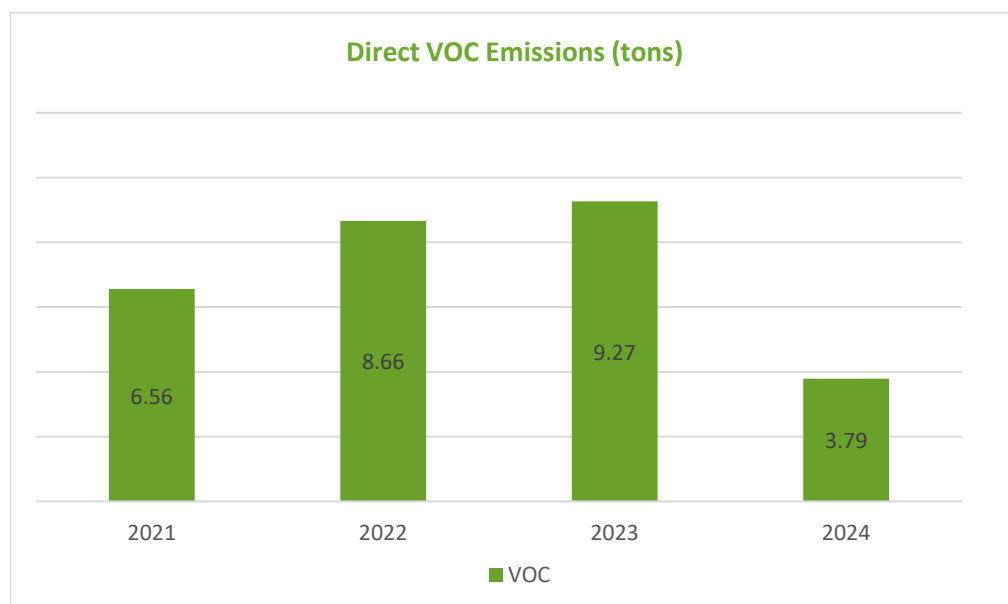
Note1: The scope of air pollution calculation covers MitraStar's Hsinchu and Wuxi facilities. Zyxel and Zyxel Networks are non-manufacturing companies and do not generate air pollutant emissions.

Note2: Unit: VOC emissions, metric tons

Reduction of Volatile Organic Compounds (VOCs)

To reduce volatile organic compound (VOC) emissions, the Company has implemented active measures such as minimizing residuals in chemical containers and requiring solvent containers to be sealed when not in use.

In 2024, a high-efficiency wave soldering furnace was introduced, equipped with advanced temperature control, heat recovery technology, and optimized structural design. The new system significantly improves energy efficiency and process stability while reducing fumes and VOC emissions during heating, thereby mitigating impacts on air quality.



F. Biodiversity

We have responded to the TNFD biodiversity initiative by establishing the "Zyxel Group Biodiversity and No Deforestation Commitment," which has been approved by the Board of Directors. This commitment involves engaging with external stakeholders across all business operations and value chain management. Additionally, biodiversity is integrated into our risk assessments concerning the ongoing management of operations, and we have identified no biodiversity-related risks in our operations, taking proactive measures to address potential challenges.

We have also incorporated biodiversity into our supplier code of conduct, requiring suppliers to comply and support biodiversity alongside the value chain. Zyxel Group is taking active steps to preserve biodiversity and forest conservation, reducing negative impacts on the natural environment and addressing the challenges posed by climate change to ecosystems. **We aim to complete the TNFD nature-related financial disclosure report by 2025 and will publish it on our official website.**

Biodiversity and No Deforestation Commitment

Zyxel Group and its value chain suppliers and partners avoid establishing factories or conducting operations near globally or nationally significant biodiversity areas.

- Compliance with all international and local forest and biodiversity laws and regulations relevant to our operations.
- Avoiding or minimizing the impact of Zyxel Group's value chain operational activities on biodiversity.
- Conduct regular biodiversity risk assessments, set priorities and targets, and adopt mitigation measures according to the mitigation hierarchy (Avoidance, Minimization, Restoration, and Offset) to achieve the goal of No Net Loss (NNL) in operational activities.
- Aim to achieve Net Positive Impact (NPI) on the environment and ecology, as well as No Gross Deforestation by 2050, committing to biodiversity preservation and preventing deforestation.
- Collaborating actively with non-profit organizations to support initiatives and efforts related to forest and biodiversity conservation.
- Promoting biodiversity awareness among stakeholders such as employees, suppliers, etc., and organizing actions that contribute to ecological conservation.

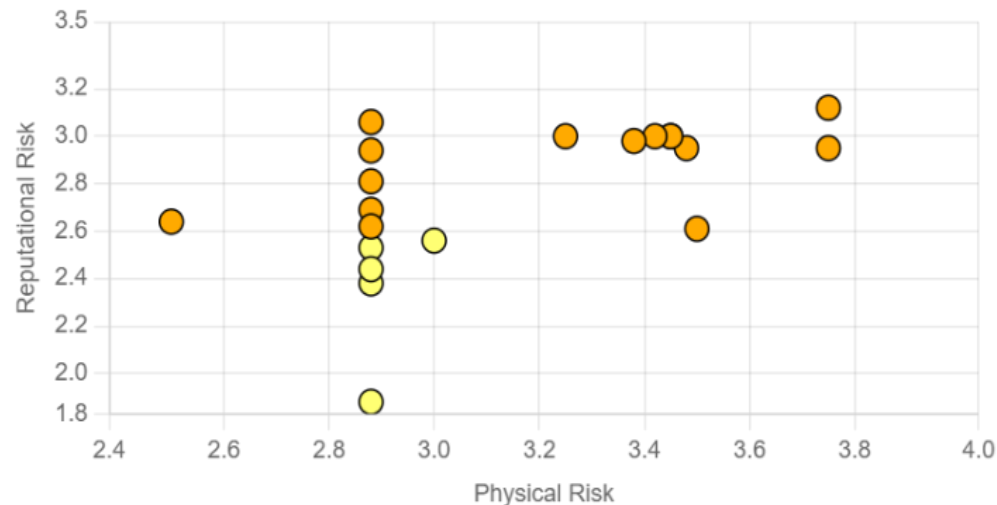
Biodiversity Risk Assessment

Zyxel Group utilizes the Biodiversity Risk Filter (BRF) tool and database developed by the World-Wide Fund for Nature (WWF) to assess biodiversity risks associated with its own operations and those within its supply chain. The BRF tool evaluates risks based on the "Dependency" and "Impact" relationships between business activities and biodiversity. It categorizes these risks into eight major types and 33 specific risk items, including both Physical Risks and Reputational Risks. Zyxel Group also plans to incorporate future regulatory risks into its analysis in line with BRF updates.

The company has conducted risk assessments for its 20 global locations, spanning Asia, Europe, and the Americas, as well as for 20 key suppliers. These assessments consider the industry attributes, operational locations, and the significance of each supplier to Zyxel's operations.

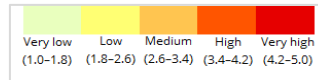
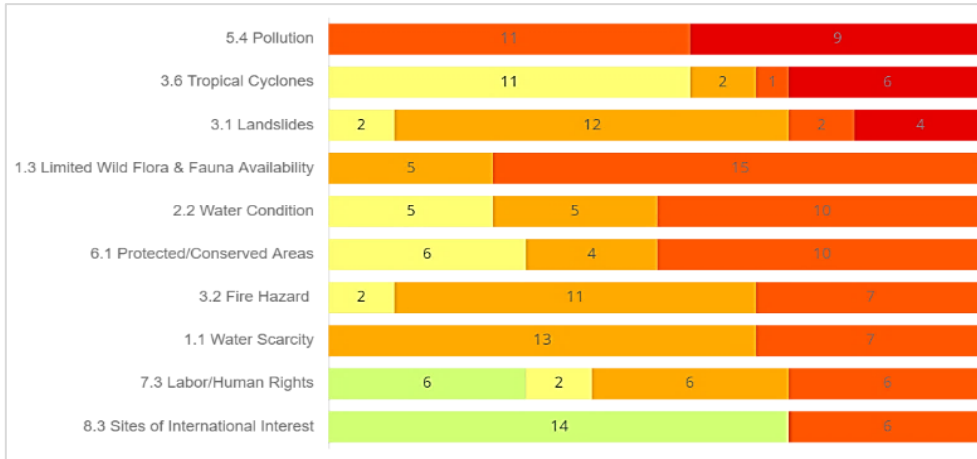
Biodiversity is also integrated into Zyxel Group's risk management framework, aligning with climate change-related financial impact assessments (TCFD). The results of these analyses prioritize high-risk areas, where immediate mitigation measures are taken to minimize ecological impacts.

Physical and Reputational Risk Assessment Matrix for Company Operational Sites

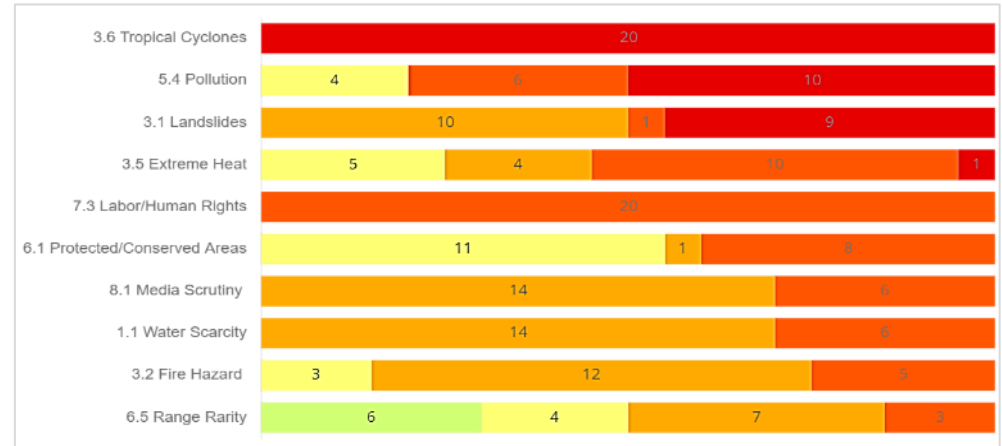


Top 10 Risk Categories - Number of Operational Sites with Risk Ratings

Zyxel Group



Suppliers



Biodiversity Risk Analysis Results

Based on BRF analysis, Zyxel Group's 20 operational sites across Asia, Europe, and the Americas, along with 20 key suppliers, were evaluated. The analysis identified the top 10 risk factors for each site, including both dependency and impact risks. Risks such as limited wildlife resources, water quality issues, water shortages, and pollution, which are not relevant to the company's industry, were excluded.

The analysis revealed that for both Zyxel Group's operational sites and its suppliers, tropical cyclones pose the highest dependency risk, while proximity to protected areas represents the highest impact risk.

Category	Item	Mitigation Measures
Dependency Risk	Tropical Cyclones	Tropical Cyclones: Conduct annual emergency response drills across all sites in accordance with disaster emergency procedures.
Impact Risk	Protected Areas	Ensure compliance with all international and local forestry and biodiversity laws and regulations at operational locations.

Biodiversity Risk Mitigation Measures

To address biodiversity risks, Zyxel Group is committed to ensuring that its operations comply with all international and local forestry and biodiversity laws and regulations. The company adopts avoidance and mitigation measures to minimize environmental and biodiversity impacts.

Regular assessments of biodiversity impacts are conducted, integrating biodiversity protection into business decisions. Zyxel plans and carries out ecological conservation activities, strengthens environmental education for employees, and encourages their participation in biodiversity protection efforts. The company also actively collaborates with local communities, supporting biodiversity-related issues and participating in the establishment and management of local protected areas, further reducing the impact of business activities on the natural environment.

For suppliers, Zyxel leads efforts in biodiversity protection, ensuring that they adhere to principles of sustainable resource use. The company prioritizes sourcing environmentally certified materials from suppliers to prevent impacts on local biodiversity.

Ecological Conservation Actions

Zyxel Group's operational sites are located in densely developed urban areas, not near ecological protection zones. The construction and operation of company facilities have not significantly impacted the surrounding ecosystems. We strictly adhere to environmental regulations to prevent our operations from affecting biodiversity conservation. In Taiwan, through the Zyxel Foundation, we continue to undertake natural ecological protection projects and conduct employee education and advocacy. We initiate a series of activities to promote natural conservation and biodiversity, fulfilling our responsibility to mitigate ecological impacts and achieve a positive environmental impact with no deforestation.

Factory Green Beautification

Awarded the "Factory Green Beautification and Environmental Maintenance Competition Prize" by Hsinchu Science Park.

MitraStar Park, Zyxel Park

Both the MitraStar site and Zyxel site are equipped with parks, with the goal of preserving biodiversity. These parks also provide spaces for employee relaxation and serve as educational environments for promoting environmental diversity.

MitraStar Park

The green area of the park reaches 5,140 m²



Zyxel Park

The green area of the park reaches 9,533m²



Biodiversity and Ecological Conservation Tour

Ecological experts have been invited to organize biodiversity and ecological conservation guided tours within the company's parks.



Nature Valley Environmental Trust Base" Reforestation Project

Zyxel Foundation has adopted the "Nature Valley Environmental Trust Base" reforestation project, specifically the "Pencil Tree Conservation Ark Plan," located near the Zyxel Group headquarters in Hsinchu County. This project aims to restore the endangered pencil tree species, offering hope for its future and actively supporting environmental sustainability and biodiversity.

Additionally, Zyxel Foundation collaborates with the Nature Valley Environmental Trust Base to organize ecological experience activities.

These events allow employees to connect with the land, experience valuable natural and cultural assets, calculate their daily carbon emissions, and measure the carbon storage of trees. This initiative integrates ESG education deeply into the employees' consciousness.



| Sustainable Product

A. Green Collaboration System

B. Sustainable Design

C. Sustainable Manufacturing

D. Sustainable Packaging & Shipping

E. Disposal & Recycling

F. Carbon Footprint Disclosure

G. Green Channel



Sustainable Product



Sustainable Product commitment

The era of green consumption is approaching as the world's awareness of environmental protection and concern about climate change is raised. We, as an international network communication company, are deeply aware that developing green industries and following international green regulations will help sharpen our global competitive edge. Zyxel Group formulates green product policies, works together with the employees, suppliers, and customers in confronting the impacts of climate change on the world, commits to the minimization of the environmental impacts throughout our products' life cycle, and supports the net-zero emission initiative with them.



Sustainable Strategy: Innovative sustainable product



Major Issues: Sustainable product



Stakeholders: Customer Supplier



SDGs



Performance Highlights

22 products use PCR recycled plastic for their casings

100% fully implemented packaging design
without PE bags
(except for customer-specific requirements/EMS)

100% of product boxes made from
Recycled Paper

100% of product designs incorporate considerations for easy
**assembly, disassembly,
and refurbishment.**

For **80.7%** of shipped products, pallet stacking utilization reached **≥85%**

Products certified with
Taiwan EPA Carbon Footprint Label.

Deployed **a platform for product carbon footprint calculation and management.**

0 products violating hazardous substance management

Green Product Policy

Zyxel Group's green product policy focuses on ensuring that products meet international environmental standards throughout their design, manufacturing, packaging, transportation, and recycling processes. The policy aims to develop strategies to reduce environmental impact and includes five key implementation policies: compliance with environmental regulations, green product research and development, minimizing the environmental impact over the product lifecycle, restrictions and regulations on harmful substances, and green supply chain management. These efforts are directed towards sustainable development, reducing resource consumption, lowering pollution, and promoting a circular economy with green products.



Green Product Management Strategies


Zyxel Group's subsidiaries, MitraStar Technology, Zyxel Communications and Zyxel Networks, strictly control their product quality and obtain the ISO 9001 & TL 9001 quality management system certificate on an ongoing basis. Different green management systems are introduced based on the business nature, e.g., R&D and OEM of products, brand management, and channel sales, for the product life cycle involving product design, supply chains, green products, manufacturing, packaging and transportation, and waste and recycling, thereby monitoring the environmental impacts of the products throughout all stages, from raw materials, production, transportation, use to disposal.

The products of our subsidiaries are sold through the green channels of e-commerce platforms to mitigate the environmental impacts of the sale. In addition, marketing programs are developed for green products to motivate customers to buy the products and to give green education.

We launch a product carbon footprint label project to answer the customers' demand for information on the carbon emissions of the products and achieve green marketing for consumers by disclosing the carbon footprints of the products.



Targets and Achievements

Major Issue	Operational Impact	Actions	Performance Indicators	2024 Goals	2024 Achievements			Goals			SDGs
								2025 short-term	2027 mid-term	2030 long-term	
Green Products	Enhance the sustainable value of products by implementing green product research and designs to reduce environmental impact.	<ul style="list-style-type: none">Green product-related design guidelines and checklists establishment.Product carbon footprint inventory and management.Green product design and packaging implement.	<ul style="list-style-type: none">Develop operational procedures for product carbon footprint.Achieve product carbon footprint management targets.Proportion of green product design implementation.	<ul style="list-style-type: none">Use PCR recycled plastic for product casings.Adopt plastic-free packaging.Use recycled paper for product boxes.Provide product carbon footprint reports upon customer requests.	<ul style="list-style-type: none">14 products used PCR recycled plastic casings.Plastic-free packaging.75% recycled paper for product boxes.Provided product carbon footprint reports upon customer requests.	V	<ul style="list-style-type: none">Implement ISO 14064-1/14067 module for the product carbon footprint platform.Achieve certification for the first carbon-neutral product (ISO 14068-1).	<ul style="list-style-type: none">Develop comprehensive product environmental footprint impact reports.100% implementation of green product design.	<ul style="list-style-type: none">Use recycled plasticEnergy-efficient hardware/softwarePlastic-free packaging100% recycled paper packagingComprehensive environmental footprint reportsDesign considerations for disposal/recycling/repair/reuse/r efurbishment/durability/SoC		

A. Green Collaboration System

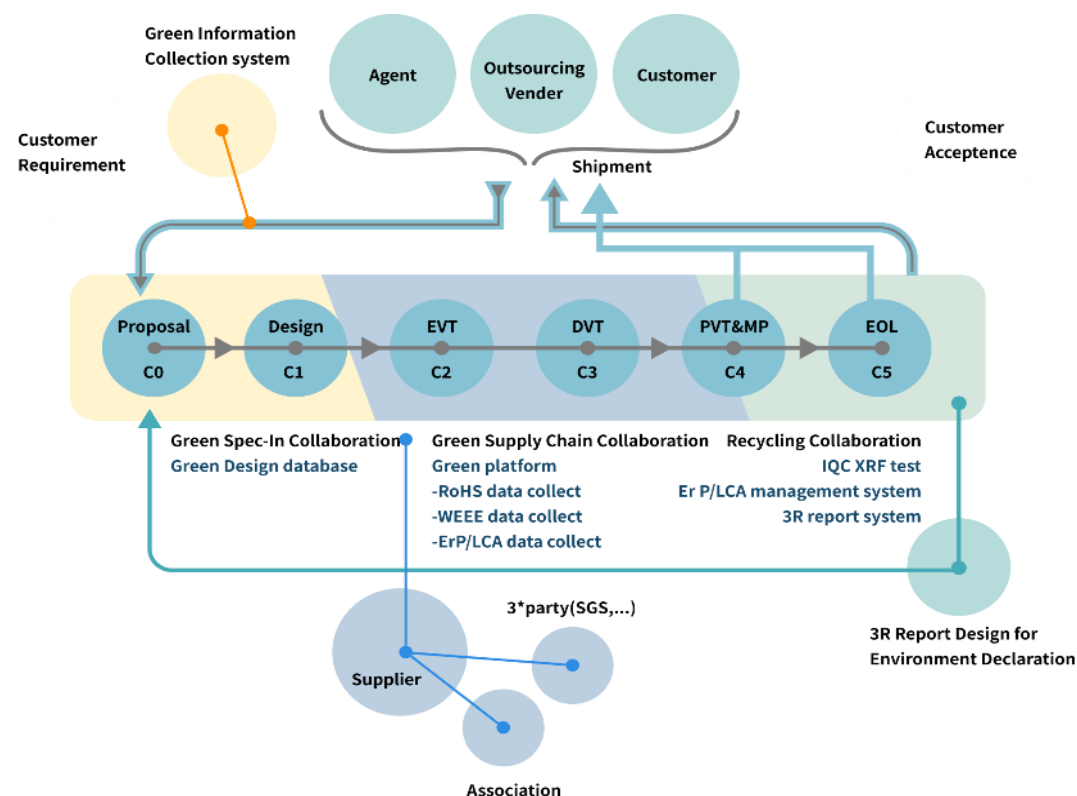
We continue to develop and launch products that are energy-efficient, low in toxicity, easy to disassemble, and recyclable, delivering reliable services to our customers. At the same time, we strictly require our suppliers to comply with a wide range of international environmental regulations and directives, including the EU Restriction of Hazardous Substances (RoHS), Waste Electrical and Electronic Equipment (WEEE) Directive, Packaging and Packaging Waste Directive, Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), Battery Directive, the Ecodesign for Sustainable Products Regulation (ESPR), due diligence on conflict minerals at both product and organizational levels, the Stockholm Convention on Persistent Organic Pollutants (POPs), California Proposition 65, and the U.S. Toxic Substances Control Act (TSCA). These efforts aim to prevent pollution, minimize environmental impacts, and advance our sustainable development policies in collaboration with our value chain partners.

In addition, we integrate these regulatory requirements with the sustainability assessment principles of ISO 9001 & TL 9000 Quality Management Systems and ISO 14040 Environmental Management – Life Cycle Assessment – Principles and Framework. Through our Product Life Management System (PLMS), which applies an electronic and structured approach, we effectively manage and oversee the entire product development process and life cycle to reduce environmental impacts. Meanwhile, our operations are certified under the ISO 14001 Environmental Management System, ensuring continuous improvement in environmental performance.

Sustainable Product Collaboration System

To strengthen green product management, Zyxel Group has developed its own “Green Product Collaborative Information Management System,” which closely monitors the environmental impacts throughout all stages of the product life cycle—from raw materials, production, and distribution to usage and end-of-life disposal. The system is jointly implemented at MitraStar Technology’s Hsinchu and Wuxi plants and has consistently maintained certification under the IECQ QC 080000 Hazardous Substance Process Management System.

This system encompasses four key components: the Green Parts and Design Database, the Product Life Cycle Assessment (LCA) Management System, the Product 3R (Reduce, Reuse, Recycle) Recyclability Assessment Database System, and the Green Supply Chain Hazardous Substance Restriction/Prohibition Management System. Through this integrated framework, Zyxel ensures its green products fulfill corporate commitments to environmental responsibility—delivering low toxicity, waste reduction, easy disassembly, recyclability, and energy efficiency. With the Green Product Collaborative Information Management System in place, Zyxel has advanced multiple sustainability strategies, establishing itself as a leading enterprise in green and sustainable product development within the industry.



B. Sustainable Design

Zyxel Group's green product objective is to apply scientific data analysis at the design stage to estimate the potential environmental burdens, impacts on human health, and effects on ecosystems, with the goal of minimizing such impacts to the greatest extent possible. We are committed to optimizing product energy efficiency and component resource allocation to mitigate climate-related risks. All product energy-efficiency design principles are developed in compliance with international standards, covering issues such as detoxification, dematerialization, and decarbonization. Particular emphasis is placed on product energy-efficiency testing methods and performance levels, with key references including the EU Regulation (EU) 2024/1781, the Ecodesign for Sustainable Products Regulation (ESPR), and the EU Code of Conducts for Broadband Communication Equipment.

In addition to improving product energy efficiency, Zyxel and MitraStar's green products also adopt low-power external power supplies, designed to comply with the EU Regulation (EU) 2024/1781, the ESPR, the U.S. Department of Energy (DoE) Level VI standard, and Canada's CSA C381.1-08 NRCAN standard. These measures aim to further reduce consumer energy consumption during the product use

Three Principles of Green Product Design:

1. Material Selection for Products: Based on three criteria: :

Reduced Usage, Utilization of Recycled Materials, Consideration of Material Suitability

Reduced Usage:

To align with the circular economy, Zyxel reduces the use of virgin materials from the initial stage of the product life cycle and promotes parts sharing to minimize material usage.

- Implemented standardized parts design, defining 38 categories of components, with 305 part numbers designated as PCL to enhance parts commonality.
- Defined 21 hardware circuit design modules, of which 8 modules have been completed and introduced into key projects for mass production, while 13 modules are still under design and verification.
- Depending on product structure and thermal requirements, Zyxel adopts up to 95% post-consumer recycled (PCR) plastic materials.
- Launched its first green product with a PCR plastic casing at the end of 2022.
- By 2024, seven mass-produced customized green terminal products feature casings made with PCR plastic

Consideration of Circular Economy and Resource Recycling:

- **Selection of eco-labeled components:** choosing chipsets and power supply units certified with RoHS, Energy Star (Note), ESPR, and CoC.
- **Implementation of hazardous substance management:** prioritizing user safety and health in product design and development, while emphasizing environmental friendliness and coexistence with nature. All products are designed in compliance with RoHS, WEEE, ESPR, and REACH standards.

Note: The Zyxel Group Sustainability Committee's Green Product Team has established the Group's Green Product Design Guidelines. Subsidiaries may adopt different green product designs depending on local regulatory requirements and customer demands; thus, actual designs may vary from the general guidelines stated above.

According to the European Rapid Alert System for Dangerous Products (RAPEX) 2024 report, the number of unsafe products produced by Zyxel Group was zero.

2. Product Structural Design Principles: Simplification, Standardization, and Modularization

Aiming to reduce unnecessary hardware design to lower energy consumption and decrease product size, thereby reducing carbon emissions. Cloud-based CAD tools with AI computation are used to optimize product structure design, achieving the same structural strength with minimal plastic usage.

Execution Results:

- Completed the revision of the green product design guide, including PCR plastic, plastic-free packaging, recycled aluminum, etc.
- Implemented 38 projects focused on easy assembly/disassembly, achieving a 100% completion rate.
- Implemented 37 redesign projects, with a completion rate of 97.37%.
- Integrated PCR recycled plastic into product casings in 16 projects.
- Fully implemented plastic-free packaging design (except for special customer requirements/EMS).
- Achieved over 85% pallet stacking utilization in 41 projects, with a completion rate of 83.67%.
- Adopted single PCB designs in 30 projects to avoid using multiple boards, achieving a completion rate of 71.43%.



3. Product Usage Design Principles: High efficiency, energy saving, low impact, and extended product lifespan

Aiming to enhance the practicality and satisfaction of consumers with the product.

Energy-saving Design:

- Software Energy-saving Design**
 - Power-saving Mode:** Automatically enters power-saving mode when Ethernet connection is inactive.
 - Wake-up Mechanism:** Continuously maintains power-saving mode until network activity resumes.
- Scheduling Mode: Schedules:** Scheduling power-saving modes based on user habits
- Hardware Energy-saving Design**
 - Component selection:** Use of high-performance, low-power consumption parts
 - LED Indicators:** Zyxel Communications Use highly efficient LED bulbs; reduce default LED brightness; adjust brightness through buttons or software.
 - External Power Supply:** Choose power supplies certified by RoHS, Energy Star, ErP; high-efficiency energy conversion: >90% DC/DC conversion; optimized energy supply for Type C power supply.



Note: The Green Product Team under Zyxel Group's Sustainability Committee establishes the Group's Green Product Design Guidelines. However, as the business scope and customer attributes of each subsidiary may vary, product designs must also comply with local regulations and customer requirements. Therefore, the actual green product designs may differ from the general principles stated above.

Easy Refurbishment : Casing design facilitates easier maintenance and refurbishment, meeting low-impact requirements.

- Snap-fit Design to replace Adhesives and Hot-melt
- Adhesive-free Assembly: Back and front covers are assembled without adhesives, allowing technicians to disassemble the product casing during refurbishment without special tools
- Textured Design: Special embossed texture design on the back cover prevents scratches during refurbishment

Durability: Prolongs the product's lifespan

- Meets IP Standard:** Outdoor routers comply with IP65 or higher waterproof and dustproof standards, ensuring product functionality in harsh environments.
- Built-in SFP/SFP+:** Incorporates SFP/SFP+ casing, supports various network architectures and aiding service providers in seamless upgrades using the same product, thereby avoiding wastage during technological upgrades.

C. Sustainable Manufacturing

We focus on the inputs and processes during manufacturing, including source management of raw materials, clean production efficiency at the supplier end, output from the manufacturing process, the product itself and its provided services, and the byproducts of production and the related processes. All material flows, including energy and resource flows, related to these inputs and outputs are the environmental footprint concerns we have for the manufacturing process. Through a comprehensive assessment of environmental performance indicators, we consider the results and impacts, quantitatively analyzing the value created for society and its correlations.

We are verified by ISO 14001:2015 Environmental Management System and ISO 45001:2018 Occupational Health and Safety Management System, aiming to maintain the effectiveness of the environmental health and safety management system. We continue to promote continuous improvement activities, develop improvement plans, assess their effectiveness, and undergo annual external audits conducted by verification bodies.

Additionally, we have obtained IECQ QC080000:2017 certification for hazardous substance process management, ensuring that all products comply with customer and relevant regional requirements for hazardous/substance restrictions and recycling directives. We go beyond standard requirements to establish internal requirements for green products, environmental protection, safety, health, and the manufacturing environment and processes.

Sustainable Raw Materials

Policy

Zyxel Group is committed to sustainable raw material management, covering the entire process from sourcing to the production and sales of the final product. By actively collaborating with internal and external stakeholders, we aim to use resources responsibly and reduce environmental impact. Our approach to manage and utilize raw materials aligns with sustainable development principles, promoting environmental protection, sustainable resource utilization, and create a circular economy and co-prosperity with nature within the supply chain. Zyxel Group has established the "Sustainable Raw Materials Policy," which has been approved by the Board of Directors.

Strategy

1. Strictly follow international environmental management standards for hazardous substances and customer requirements to ensure product design and manufacturing comply with relevant international regulations.
2. Implement source management of sustainable raw materials to reduce the burden and impact of raw materials on the natural environment.
3. Promote circular economy and resource regeneration, striving to continuously improve product sustainability and the cycle of co-prosperity with nature.
4. Increase the discount rate of environmental impact for raw materials, requiring raw materials to pass third-party inspection to reduce environmental damage from supply sources.
5. Work together with business partners and value chain stakeholders to jointly promote best practices and cooperation in sustainable raw materials.
6. Identify and protect global and national key biodiversity conservation areas, avoiding the use of raw materials that may come from such regions to reduce natural resource consumption and ecological impact.

Sustainable Raw Material Actions

● Raw Material Selection Priorities

Implement Life Cycle Assessment (LCA) to evaluate the entire life cycle of raw materials, including resource consumption and environmental impact. Recycling is the key consideration, involving not just end-of-life processing but also material recovery and reuse. We analyze "closed-loop recycling" and "open-loop recycling" and find that recycling plastic products can significantly save about 97% of production energy, optimizing resource circulation and reducing waste.

● Tracking Raw Material Sources

Apply LCA to trace the environmental impact of products from raw material procurement, manufacturing, usage, to disposal, identifying environmental impact hotspots and certified by a third party. Zyxel Group emphasizes the "Reduce, Reuse, Recycle" (3Rs) principle to minimize waste, extend product life, and increase recycling rates, thus reducing overall environmental impact.

● Reducing Negative Environmental Impacts of Raw Material Production

Use Life Cycle Impact Assessment (LCIA) to identify environmental impacts from raw material procurement to final disposal, highlighting the most significant environmental impact stages to guide sustainable design and operational decisions. Analyze environmental issues like Global Warming Potential (GWP) and Ozone Depletion Potential (ODP), using data and model results to implement eco-design measures, support policy development, and identify opportunities to reduce environmental impacts, providing scientific basis for product environmental labeling.

● Reducing Negative Social Impacts of Raw Material Production

According to ISO 14020 series standards, disclose environmental information about products and services, and attach environmental labels on products, sustainability reports, or promotional materials. These labels are based on scientific and fair assessment methods to help consumers understand the environmental impact of products and make more informed choices.

● Setting Targets for Sustainable Raw Material Shares and Recycled Material Ratios

Provide transparent environmental information about products based on ISO 14025 Type III environmental labels, showing specific environmental data and benefits. Since 2022, we have implemented this environmental declaration system, aiming to set targets that meet all customer needs and improve continually to achieve consensus.

● Reporting Progress on Sustainable Raw Material Procurement Targets

Require all suppliers to obtain ISO 14064-1 verification statements from third-party certification bodies to promote LCA concepts and self-emission source identification, achieving 100% completion. Next, we require key component (e.g., PWBA, power adapters, PCB motherboards, Ethernet cables, BOSA, plastic mechanical parts) suppliers to obtain ISO 14067:2018 verification. In the next phase, we will focus on reduction requirements and plans according to the ISO 14064-2 and ISO 14068-1 standards.

● Trainings for Raw Material Management Personnel

Provide training on LCA and ESG basic concepts to business teams in order to effectively interact with customers and understand their needs. All LCA analysis team members hold ISO 14067 Lead Auditor qualifications. After receiving business feedback, they conduct professional analysis to support decision-makers in ESG strategy formulation and assist the procurement team in setting targets. To foster knowledge of sustainability and the capability to procure sustainable raw materials, training courses for supplier management personnel are offered, including basic and advanced versions of "Supplier ESG Education Training Materials," to integrate sustainable procurement concepts into supplier selection and management.

D. Green Packaging & Shipping

1. Product Packaging

Suppliers are required to adhere to the EU "Packaging and Packaging Waste Directive," with "Reuse," "Recycle," and "Reduce" as the primary guiding principles. *Note

Green Packaging Design Principles:

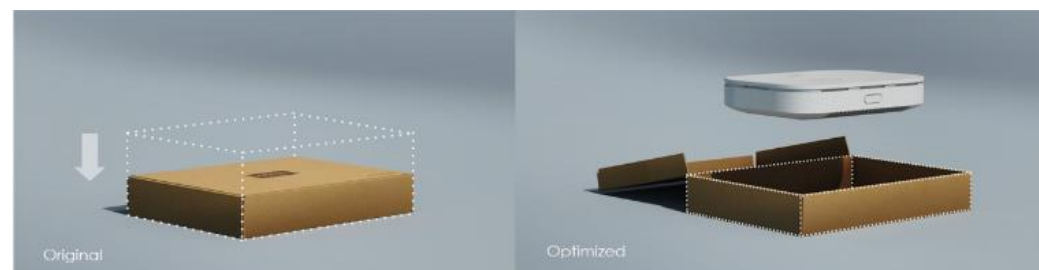
- Ensure materials are recyclable and biodegradable.
- Use of post-consumer recycled fiber.
- Prioritize the use of non-toxic, eco-friendly inks, adhesives, and other packaging materials that are safe for humans and the environment to promote sustainable development.
- Eliminate single-use plastic products.
- Optimize product packaging proportions.
- Reduce packaging volume and weight.
- Clearly label recycling and disposal information.
- Optimize pallet utilization efficiency.



Note: The Zyxel Group's Sustainability Committee's Green Product Team has established the Group's Green Product Design Guidelines. Due to differences in business sales scope and customer attributes among the various subsidiaries under the Group, product designs need to adhere to local regulations and customer requirements. Therefore, actual designs for green products may differ from the general principles mentioned above.

2. Product Transportation

Optimizing pallet utilization and product loading efficiency are key focuses in transportation design, as increasing loading rates can significantly contribute to carbon reduction. By refining product casing designs to reduce packaging volume, standardizing pallet specifications, and adjusting packaging dimensions, Zyxel Group aims to enhance the stacking and loading efficiency of pallets and containers. This approach not only increases the quantity of products transported per shipment but also substantially reduces greenhouse gas emissions during transportation, aligning with carbon reduction and environmental sustainability goals.



E. Green End of Life

We require the suppliers to adopt the 3Rs and disassembly process in the product recycling phase as the guiding principles for product design when designing products. We also provide proactive guidance for the suppliers in completing WEEE surveys and preparing 3R reports on an irregular basis to create a “product recycling library” for the reference of recycling companies and consumers from different countries for recycling and disassembly, thereby fulfilling the obligation to actively inform.

The companies also register for WEEE separately in European countries and/or enroll in WEEE programs jointly and take direct responsibility for finance and management. In addition, we report real information on their products and the sales thereof, ensure there are appropriate measures in place, and collaborate with distributors complying with the WEEE legislation of the countries where they operate.

F. Carbon Footprint Disclosure

Product Carbon Footprint Inventory Plan

The Company's “Product Carbon Footprint Inventory Plan” adopts the concept of source management, where life cycle thinking is introduced at the initial design stage of products. Thus, by initiating the plan, we incorporate the product design process into the environmental impact assessment and take every possible chance to minimize the direct and indirect environmental impacts of the products so as to achieve the aim of the Product Carbon Footprint Inventory Plan, i.e., implementing the eco-friendly/ecological/sustainable design and manufacturing of our products.

Product Carbon Footprint and Environment Carbon Footprint Calculation Platform

Starting 2021, in Zyxel Group undertook the initiative of independently developing a product carbon calculation platform and implementing a life cycle assessment software database. Through these efforts, we assist Zyxel Group in presenting the environmental impacts caused during product design, development, and manufacturing in various indicator forms such as carbon footprint, water footprint, ozone depletion, etc. We transform these environmental impact indicators into further analytical indicators for human health and natural resource consumption. This empowers us to provide assessment data on the environmental friendliness level to end customers during service delivery, and helps us fulfill our commitment to achieving sustainable product commitment.



Zyxel Group Information Web						
查詢 產品 廠商 報表 語系 登出						
查詢 產品 廠商 報表 語系 登出						
我的盤查 接收的盤查指令 發送的盤查指令 已查詢過數的材料清單						
新增產品型						
搜尋：產品名稱/型號、盤查名稱、盤查說明 依狀態篩選 僅顯示原料階段/進行中						
盤查編號	產品名稱/型號	盤查名稱	盤查類型	盤查說明	發送時間	盤查狀態
18	WiFi	1	產品型		2025/07/18 09:25:22	原料階段
17	124	ASD	產品型		2025/06/26 10:45:21	原料階段
16	ZNET-2_S	2023 ZNET-2_S	產品型		2025/06/24 11:18:25	原料階段

G. Green Channel

Green Marketing

By integrating virtual platforms with physical stores, Zyxel Networks also distributes products through e-commerce channels. With no warehouses or physical shelves required, and by enabling two-way interaction with consumers, online sales significantly reduce marketing costs while minimizing the environmental impacts associated with traditional retail channels.

In addition to offering B2C services through Zyxel Marketplace (for online licensing and subscription services) and B2B services via Zyxel Circle, the company also launched its own e-commerce platform, Zyxel Store, in 2022. Initially covering the 27 EU member states, the platform has since expanded to the UK and U.S. markets, further strengthening our online marketing capabilities.

Aligned with our long-term sustainability strategy, Zyxel Networks' online platforms have achieved steady double-digit growth in customer numbers each year since launch, with a cumulative growth of 33% between 2022 and 2024. Beyond hardware sales, we are actively expanding software services—online digital licensing has grown year by year, with software subscription services now accounting for about 20% of total online business. This transition not only supports customer adoption of digital solutions but also contributes to the advancement of net-zero marketing strategies.



Green Education

Through the quick after-sales services and systems, Zyxel Communications and Zyxel Networks carry out a series of educational green product marketing campaigns and selling programs for consumers to raise their awareness of green products and motivate them to purchase the products. Green education and products can thus be promoted by changing the consumers' awareness/attitude and buying behavior on an experiential basis.

Zyxel Group spares no effort to disseminate eco-friendly concepts. Internally, the Company actively implements green product design and encourages the employees to take part in environmental protection events. Externally, we are dedicated to proactive interaction and cooperation with government agencies, communities, and industries in the hope of ingraining the concept of a green environment and fulfilling corporate responsibility with our influence as an international enterprise.

Promotion of Green Design

Zyxel Communications and Zyxel Networks products are designed to be highly efficient and energy-efficient, to cause less pollution, and to have longer lifespans. Their design employees are also required to view consumer value, practicality, and satisfaction as considerations when designing the products. Related energy-saving technologies have been put into practice as follows:

- Automatic power consumption adjustment based on the status of the connected household appliances
- Automatic power consumption adjustment based on the length of network cables
- Wireless network connection timing
- Automatic device hibernation
- Custom PoE Power Scheduling Feature (Zyxel Networks)
- Smart energy-efficient fans
- Smart Ethernet energy-saving function

Improvement of Employees' and Consumers' Green Awareness

- Encourage the employees to participate in internal environmental protection and energy-saving campaigns such as electricity saving in offices, waste battery recycling, etc.
- Actively join environmental protection activities in the community, e.g. the science park's Industrial Safety and Environmental Protection Month events
- Organize environmental protection experience sharing sessions
- Post articles with green topics
- Employee Carbon Footprint Label Design Competition

| Friendly Workplace

A. Diversity & Inclusion Recruitment

B. Human Capital Development

C. Human Right

D. Workplace Health & Safety



Friendly Workplace

Talent is the most valuable asset supporting the continuous growth of the company. In addition to fostering an innovative and diverse company culture, we are committed to providing employees with a challenging, enjoyable, and fairly rewarding work environment.

We prioritize the hiring of local employees at our operational sites around the world, encouraging contributions from marginalized groups. In addition to establishing comprehensive management systems to safeguard employee rights, providing smooth labor-management communication and complaint channels, we also offer competitive compensation and benefits, launch a variety of work-life balance programs, and ensure a safe and healthy working environment, all aimed at nurturing the holistic well-being of our employees.

Through a comprehensive education and training system and employee development planning, we assist employees in enhancing their professional skills and personal growth, making them a crucial driving force for the company's sustainable development.



Sustainable Strategy: Creating Shared Value



Major Issues: Talent Attraction & Retention, Talent Cultivation & Development, Human Rights Management, Workplace Health & Safety



Stakeholders: Employee Supplier Government



SDGs

Performance Highlights

Taiwan Talent Sustainability Action Alliance	Women in Tech 18.4% of Senior Executives are Women 24.3% of STEM Positions Held by Women	Human Capital Return on Investment 6.52	Average Employee Training Hours 28.9 hours Average Training Cost per Employee NTD 1,863	Conducted Human Rights Due Diligence
Outstanding Occupational Safety and Health Unit	Completion Rate of Human Rights-Related Training 99.71%	Occupational Safety Education Coverage Rate 99.77%	Major Occupational Accidents 0 cases	Conducted Employee Engagement Survey

Policies

Build a friendly workplace

Provide a good working environment, pay attention to employees' physical and mental health and career development

Protect the rights and interests of employee






Diversity and inclusion, human rights protection, no discrimination, bullying, harassment

Commitment

Support and respect, within its sphere of influence, the protection of international human rights set out in the United Nation's Universal Declaration of Human Rights, the International Labor Organization's (ILO) fundamental conventions and the Global Compact.

- Restrict any discrimination, harassment or persecution in the workplace. Forbid any discrimination regarding race, color, religion, national origin, gender, age, disability, sexual orientation, gender identity, pregnancy, political factions and marital status.
- Provide a safe working environment and require extensive training and safe equipment.
- Employees must be committed to maintaining a safe and healthy work environment by employing all safety operation procedures and principles while conducting business.

Friendly Workplace Objectives and Results

Strategy	Issue	Operational Impact	Strategic Actions	Performance Indicators	2024 Target	2024 Achievements	Status	Goals			SDGs
								2025 short-term	2027 mid-term	2030 long-term	
Creating Shared Value	Talent attraction & retention	Attracting and retaining top talent can enhance operational performance.	Monitor market salary trends to ensure competitive total compensation.	Indirect employee turnover rate	<15%	13.4%	V	<15%	<14%	<12%	
	Talent cultivation & development	Diverse training programs will attract and retain talent	Provide diverse talent training programs	Annual training program completion rate	>92%	96%	V	>96%	>96%	>97%	
			Ensure professional skills training opportunities for staff	Satisfaction with professional skills training courses (Maximum score: 5 points)	>4 分	4.68	V	>4.7分	>4.7 分	>4.8 分	
	Human Right Management	Maintain human rights to establish a sustainable work environment	Focus on women's career development	percentage of female managers	>30.7%	32.8%	V	>30.7%	>30.8%	>31%	
			Human rights awareness promotion	Completion rate of human rights training courses	>98.5%	99.7%	V	>99.7%	>99.8%	100%	
	Employee Care	High-Quality Work Environment and Employee Care to Enhance Employee Engagement	Providing Comprehensive Employee Facilities Offering Diverse Employee Activities	Employee Activity Satisfaction Rate	≥ 80%	90.1%	V	≥ 90%	≥ 90%	≥ 92%	
	Workplace Health & Safety	Maintain a safety-first work environment to ensure continuous operations and steady growth.	Promote a safety culture	Coverage rate of occupational safety education courses	>98.5%	99.7%	V	>99.7%	>99.7%	100%	
			Implement preventive management	Number of major occupational accidents	0	0	V	0	0	0	

A. Diversity and Inclusion Recruitment

Human resource structure

As of the end of 2024, Zyxel Group employed 3,690 people, with full-time employees accounting for 79.3% and temporary staff for 0.5%. Among regular employees, 19.2% were in managerial positions, 53.6% were professionals, 9.5% were administrative staff, and 17.7% were direct labor. The workforce comprised 57.7% male and 42.3% female employees. Due to the nature of the technology industry and labor market dynamics, the proportion of male employees is higher than that of female employees; however, the overall gender ratio remains relatively balanced. Geographically, 63.3% of employees were based at the headquarters and subsidiaries in Taiwan. The average employee age ranged from 30 to 50, with an average tenure of 8 years. This human resource structure supports the company's steady and sustainable growth.

	Categories	Zyxel Group			MitraStar			MitraStar, Wuxi			Zyxel Communications			Zyxel Networks			Total Number / Proportion		
		Male	Female	Subtotal	Male	Female	Male	Male	Male	Subtotal	Male	Female	Subtotal	Male	Female	Subtotal	Male	Female	Total
Type	Full-time	45	91	136	409	398	807	361	327	688	440	216	656	422	216	638	1,677/57.3%	1,248/42.7%	2,925/79.3%
	Part-time	1	0	1	0	0	0	0	0	0	2	1	3	8	5	13	11/64.7%	6/35.3%	17/0.5%
Job	Manager	21	27	48	98	40	138	77	57	134	102	36	138	78	25	103	376/67.0%	185/33.0%	508/19.2%
	Professional	20	33	53	246	101	347	145	80	225	318	136	454	333	156	489	1,062/67.7%	506/32.3%	1,661/53.6%
	Administration	4	31	35	3	38	41	22	69	91	20	44	64	11	35	46	60/21.7%	217/78.3%	268/9.5%
	Direct Employee	0	0	0	62	219	281	117	121	238	0	0	0	0	0	0	179/34.5%	340/65.5%	634/17.7%
Area	Taiwan	45	85	130	440	477	917	0	0	0	296	173	469	275	164	439	1,056/54.1%	899/45.9%	1,955/64.5%
	Asia	2	0	2	394	324	718	361	327	688	4	4	8	31	20	51	431/55.3%	348/44.7%	779/25.5%
	Americas	0	0	0	0	0	0	0	0	0	49	21	70	14	1	15	63/74.1%	22/25.9%	85/2.8%
	Europe	0	0	0	0	0	0	0	0	0	76	24	100	110	25	135	187/56.4%	50/21.1%	237/7.8%
Age	<30	2	9	11	136	168	304	85	53	138	60	26	86	74	33	107	276/ 53.6%	239/46.4%	515/16.9%
	30-50	32	64	96	632	572	1,204	269	273	542	283	171	454	306	161	467	1,259/56.4%	972/43.6%	2,231/73.1%
	>50	13	12	25	66	61	127	7	1	8	82	25	107	50	16	66	211/64.9%	114/35.1%	325/10.6%
Average Tenure		11.7	9.4	10.1	9.8	7.5	8.7	6.1	6.7	7.2	8.6	8.2	8.4	7	7.3	6.9	8.0	7.5	8.0

Notes: The above employee figures include overseas subsidiaries, except for Zyxel Group, which excludes Black Cat Information, and MitraStar Technology, which excludes XSquare Communications Corporation.

Notes: Regular employees refer to permanent full-time staff. Part-time employees include staff without guaranteed working hours, short-term contract employees, and interns.

Notes: Employees hired under dispatch arrangements are mainly production line support staff at MitraStar Technology in Wuxi.

1. Comprehensive Talent Recruitment

In an effort to promote all-round talent solutions, the Company ensures a good work environment and integrates the resources from industry, academia and the government for organizing various recruitment campaigns, developing online exposure, and engaging in interactions on social media.

Talent is recruited through physical channels, including employee reference programs, campus recruitment, campus internship programs, industry-academia cooperation, and R&D substitute services. Newsletters are used for internal marketing. We also run the Company's website, social media, Facebook page, LinkedIn page and YouTube channel to increase reach.

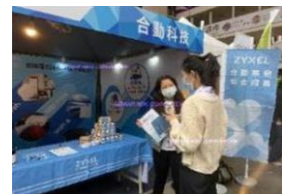
Young Talent Cultivation

Committed to empowering future young talents, enhancing competitiveness, and promoting the development of network communication research and technology, Zyxel Group focuses on campus talent development. Through initiatives such as "Internship Programs" and "Industry-Academia Collaboration," the company actively nurtures future talents in network communication research and technology.

Campus Recruitment: In Taiwan, the campus recruitment activities take place annually during the recruitment season in March to April. Each session involves HR staff paired with engineers, aiming to provide participants with not only basic information about the company but also an in-depth understanding of network communication expertise. Depending on the situation, various interactive games may be prepared to engage the public and further enhance the company's image in the network communication field. In 2024, Zyxel Group participated in campus recruitment activities at six major universities in Taiwan.

Internship Program: Zyxel Group's university internship program offers students the opportunity to engage in internships ranging from one semester to one year through face-to-face interviews. Interns receive compensation that exceeds the statutory minimum wage, free lunch, and dedicated guidance from departmental staff. This program allows interns to experience the operations of the company's internal information services department while integrating their academic knowledge and accumulating practical experience. In 2024, Zyxel Group hosted 12 interns from leading universities in Taiwan.

Campus Recruitment Marketing and Internal Referrals



2025 TALENT, in Taiwan —

Sustainable Talent Action Alliance

Joined the "2025 TALENT, in Taiwan" alliance to promote sustainable talent development



FB: [link!](#) LINKEDIN : [link!](#)

2. Diverse and Inclusive Workplace

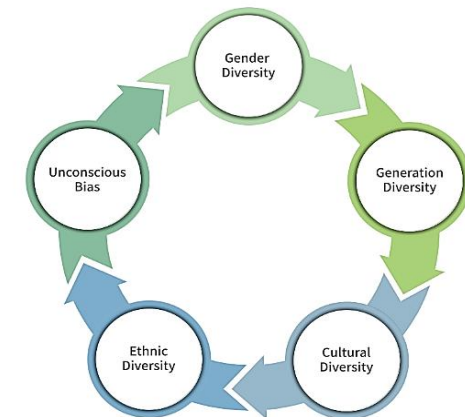
Zyxel Group and its subsidiaries across global operations adopt an open and fair approach, utilizing diverse channels to recruit outstanding talent. We comply with local regulations and the RBA (Responsible Business Alliance) Code of Conduct. Employment decisions are made without discrimination based on race, color, religion, nationality, gender, age, disability, sexual orientation, pregnancy, political affiliation, or marital status. We do not employ child labor or forced labor and ensure the protection of the rights of minorities, individuals with disabilities, women, migrant workers, and non-employee workers.

Zyxel Group adheres to the RBA Code of Conduct and local regulations, and has established procedures such as the "Recruitment and Labor Management Procedure," "Employee Code of Conduct," and "Employee Appointment Regulations," dedicated to building an equal opportunity and inclusive workplace.

Diversity and Inclusion Policy

Zyxel Group provides a friendly workplace of gender equity, generational inclusion, and cultural diversity. Our employees with different cultures and experiences around the world learn from and communicate with each other to form collaborative cohesion and contribute to the Company in their own ways.

The "Zyxel Group Diversity and Inclusion Policy" has been established to implement relevant action plans. Different action plans in line with the policy aiming for diversity and inclusion are developed according to the definitions of diversity.



New Employee Overview

In 2024, Zyxel Group hired a total of 969 new employees, including 262 indirect employees. Subsidiary MitraStar Technology and its China-based subsidiary, MitraStar Technology (Wuxi), employed direct staff, with a total of 707 new direct employees. Among all new hires, 581 were male (60%) and 388 were female (40%). The average recruitment cost per employee was NT\$3,000.

Number of New Hires / New Hire Rate in 2024

	Indirect Employee		Direct Employee	
	Number of Employees	New Hire Rate	Number of Employees	New Hire Rate
Taiwan	182	11.6%	0	0.0%
Asia	43	8.4%	707	297.1%
Americas	11	11.8%	-	-
Europe	26	11.2%	-	-
Male	169	11.3%	412	230.2%
Female	93	10.2%	295	86.8%
≤30	129	46.4%	450	346.2%
31-49	114	6.3%	257	70.4%
≥50	19	6.0%	0	0.0%
Supervisor	70	12.5%	0	0.0%
Non-Supervisor	190	10.3%	707	136.2%
Total	262	10.9%	707	136.2%

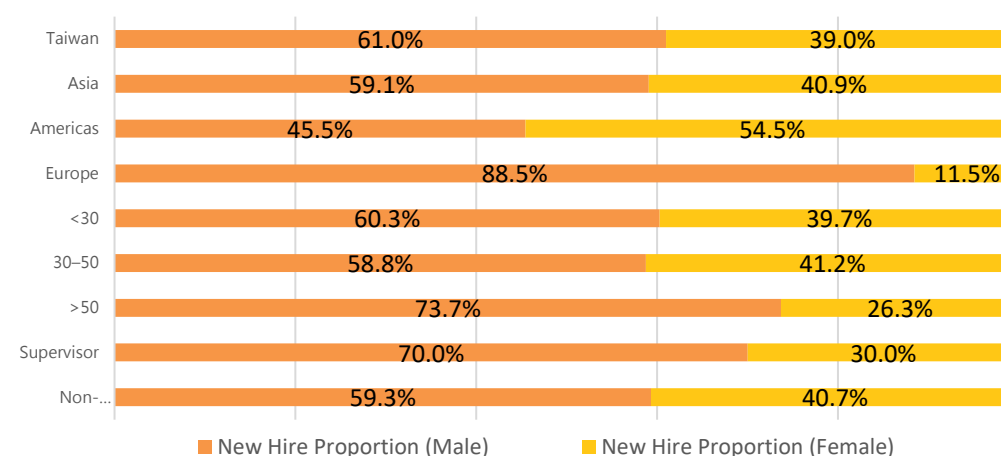
Enhancing New Hire Retention

Establishing an Indirect Personnel Newcomer Care Mechanism: Design a satisfaction survey for new hires one month after joining, complemented by newcomer care interviews. This aims to strengthen the integration of new hires with their mentors and departments, provide timely assistance for any adaptation issues, and effectively stabilize new employees.

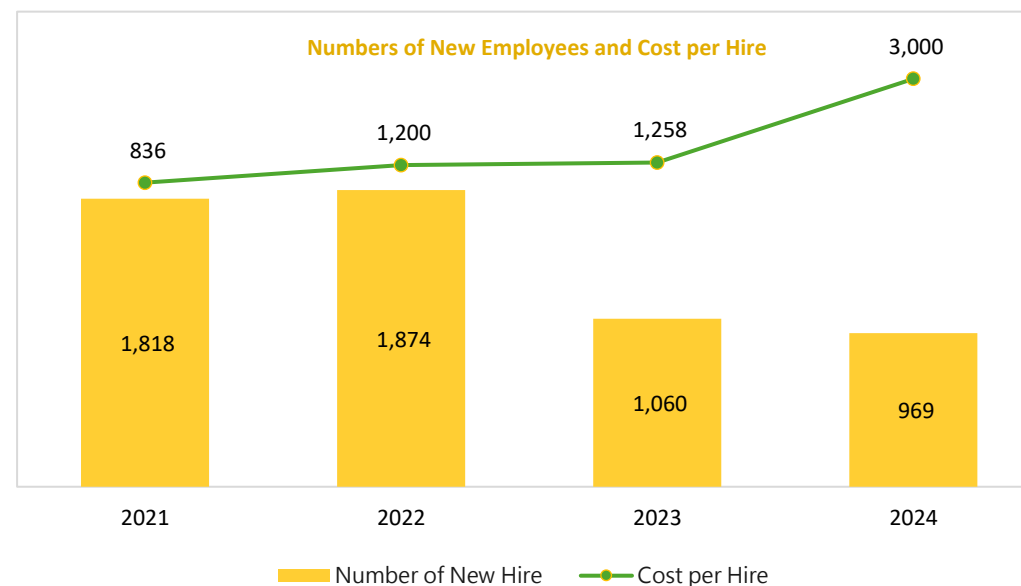
Establishing Direct Personnel Newcomer Training: To reduce instability among new hires on the production line, design specialized training for direct line employees. The training includes company policy introductions, environment orientation, ESG courses, occupational safety courses, production line quality/green products, ESD/6S, and more.

Rising Recruitment Costs: Recruitment expenses have increased year by year, reflecting the company's strong commitment to talent.

Gender Ratio of New Employees - by Region, Age, and Management Level



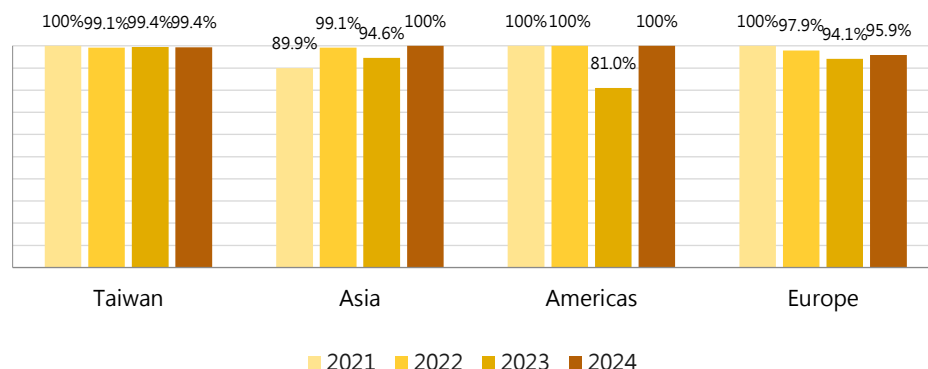
Numbers of New Employees and Cost per Hire



Local Employment

To enhance market insight and operational efficiency across global sales locations, the Company actively recruits local talent and appoints senior executives of overseas subsidiaries primarily from the local workforce. This approach ensures that management practices are aligned with local cultures and customs, thereby strengthening business resilience and market adaptability. Local employment is defined as employees holding the nationality of the country where the operations are located. In 2024, the proportion of local managers reached 99.4% in Taiwan, 100% in China, 100% in the Americas, and 95.9% in Europe, with corresponding headcounts of 316, 139, 24, and 47 employees respectively.

Historical Proportion of Local Management Hires



Employment of Minorities

Zykel Group respects the unique cultures of minority groups, and talent recruitment is conducted without discrimination based on race or ethnicity. The company collects information on employee ethnicity to evaluate policies and practices related to equal employment opportunities. We respect individual privacy, and personal data related to minority groups is protected.

2024 Employment of Minority Groups / Proportion in Managerial Positions

	Number of Minority Group Members	Number of Minority Group Managers	Proportion of Minority Group Members
Taiwan	12	0	0.6%
China	32	0	4.6%
Americas	8	0	8.6%

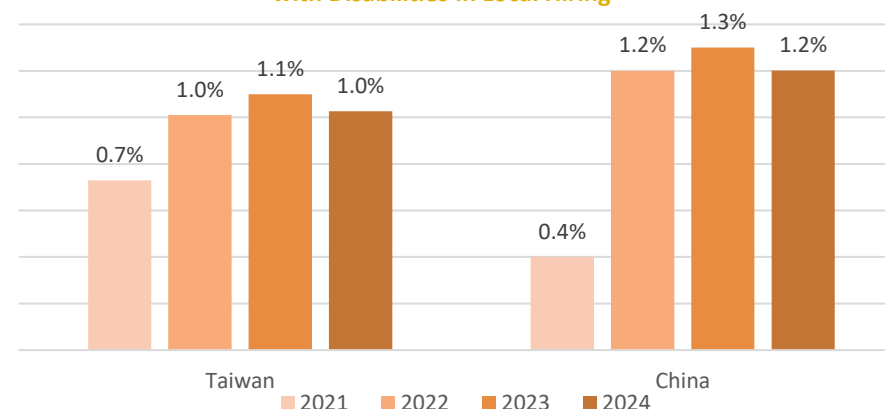
Note: In Taiwan, minority groups refer to indigenous people and new immigrants; in China, minority groups refer to ethnicities other than Han; in the United States, minority groups refer to individuals who are not Caucasian or White.

Note: Managerial positions include entry-level, mid-level, and senior management roles.

Employment of Individuals with Disabilities

Zykel Group provides employment opportunities for people with disabilities in line with the principle of fair hiring, while ensuring workplace accessibility through facilities such as ramps, elevators, and barrier-free restrooms. In 2024, the employment of people with disabilities across regions was as follows: in Taiwan, 19 employees with disabilities accounted for 1.02% of the total workforce, meeting local regulatory requirements; in China, 9 employees with disabilities represented 1.2% of the workforce.

Historical Proportion of Employees with Disabilities in Local Hiring



Non-Employee Workers

Non-employee workers include temporary staff, as well as contractors engaged in security, cleaning, and catering services, and on-site medical personnel. In 2024, due to manpower shortages caused by production adjustments and the pandemic, MitraStar continued to collaborate with high-quality intermediary companies to allocate a portion of the work to temporary employees. By offering employment conditions that exceed labor law standards and providing company meals, we attracted talent to join our workforce. Additionally, we regularly offer opportunities for temporary employees to transition into permanent positions, aiming to establish long-term and stable working relationships with our staff.

2024 Number of Non-Employee Workers

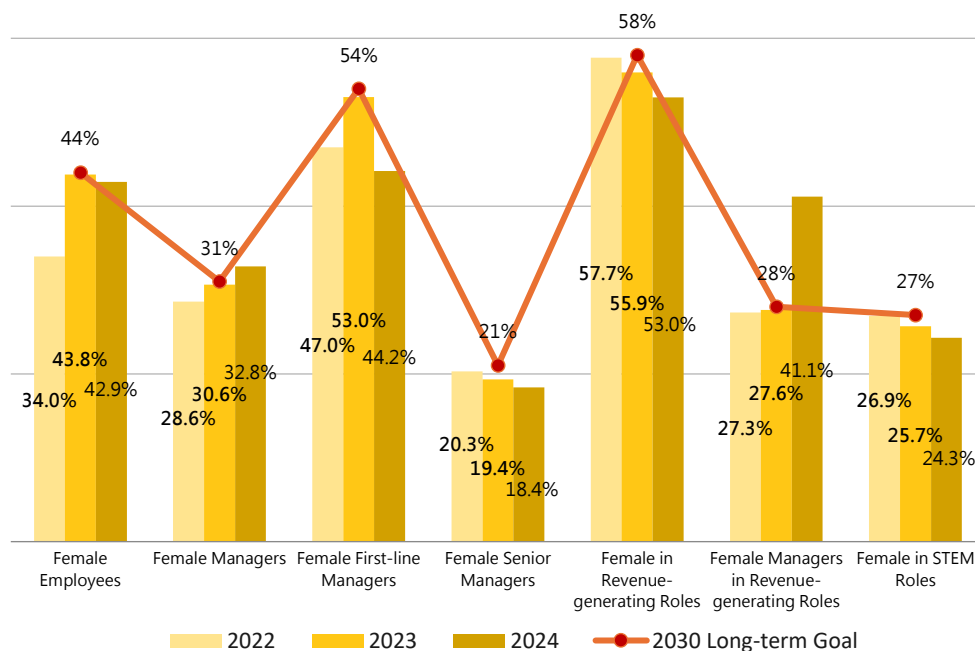
	Number
Taiwan	110
China	38
Americas	14
Europe	8
Total	170

Gender diversity

Zyxel Group ensures gender equality in employment rights, with no impact on hiring, compensation, or promotion based on gender. Women make up 42.9% of the total workforce, with women managers at 32.8% and women in senior management roles at 18.4%. Women represent 24.3% of STEM positions. Due to the nature of the technology industry, management and professional engineering roles are predominantly male, while women are more prevalent in revenue-generating departments. The proportion of female employees remains stable each year, with a strong focus on the promotion and development of female colleagues, and no significant fluctuations in the percentage of female managers.

To enhance talent attraction and engagement through gender diversity, the company has set a 2030 goal to achieve gender balance in its talent pipeline, particularly for more challenging roles for women.

Overall Female Proportion



Parental Leave & Return to Work

Zyxel Group cares for and respects the workplace environment, allowing employees to care for their families and contribute their skills without worry. We have partnered with childcare facilities to offer discounted rates for employees in need.

When employees need to personally care for family members, they can apply for "Family Care Leave," which allows up to seven days per year. In cases where a new family member requires parental leave, employees can apply for "Parental Leave Without Pay" according to the law. Before the leave ends, the company proactively arranges reemployment planning.

Parental Leave & Return to Work in 2024

	Male	Female	Total
Number of individuals eligible for parental leave (A)	41	48	89
Actual number of individuals applying for parental leave (B)	4	20	24
Parental leave application rate (B/A)	9.8%	41.7%	27.0%
Number of employees qualified to return to work after parental leave (C)	6	23	29
The number of people returning to work after parental leave (D)	2	17	19
Rate of employees returning to work after parental leave (D/C)	33%	73.9%	65.5%
Number of employees returning to work after parental leave in 2021 (E)	1	14	15
Number of people who have returned to work after parental leave and worked continuously for one year in 2021 (F)	0	14	14
Retention rate of employees after parental leave (F/E)	0%	100%	93.3%
Paid Parental Leave for Primary Caregivers (weeks)	81.6 weeks		
Paid Parental Leave for Non-Primary Caregivers (weeks)	50.9 weeks		

Employee Turnover Analysis

In 2024, Zyxel Group had 1,262 employee departures (male 55.3%, female 45.9%). The turnover rate remained stable, with no M&A or layoffs exceeding 10% of employees or 1,000 individuals in the past three years.

Number of Employee Departures / Turnover Rate in 2024

	Indirect Employees		Direct Employees	
	Number	%	Number	%
Taiwan	227	14.5%	73	26.0%
Asia	68	13.3%	866	363.9%
Americas	9	9.7%	-	-
Europe	19	8.2%	-	-
≤30	89	32.0%	577	443.8%
31-49	190	10.5%	358	98.1%
≥50	44	13.9%	4	16.7%
Supervisor	120	21.4%	0	0.0%
Non-Supervisor	204	11.1%	939	180.9%
Total	323	13.4%	939	180.9%

Note: Number of departures refers to full-time permanent employees who left.

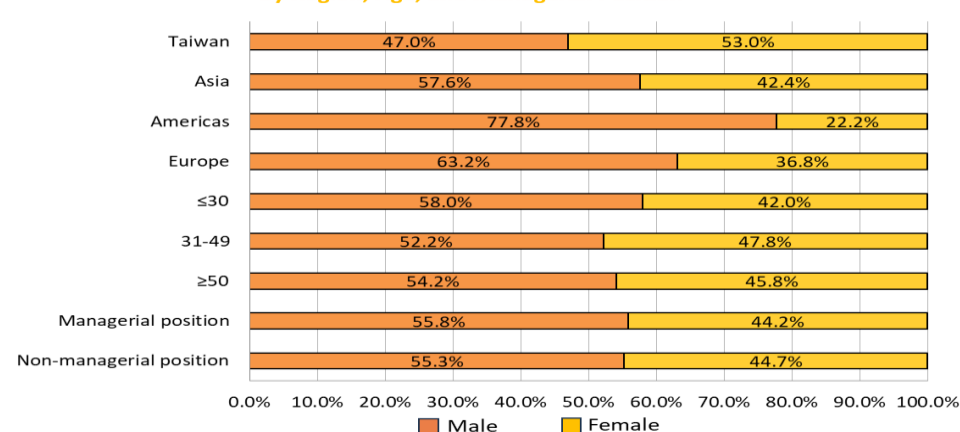
Note: The turnover rate is calculated as the number of direct (or indirect) full-time permanent employees who left during the year divided by the total number of direct (or indirect) full-time permanent employees at the end of the year.

Historical Turnover Rate / Voluntary Turnover Rate

	2021	2022	2023	2024
Turnover Rate	41.8%	35.7%	36.3%	43.1%
Voluntary Turnover Rate	34.1%	23.8%	34.1%	38.8%
Involuntary Turnover Rate	7.7%	2.4%	2.2%	4.3%

Note: Total employee turnover=Voluntary turnover + Involuntary turnover

Gender Distribution of New Employees in 2024 – by Region, Age, and Managerial Position



Turnover Reduction Strategy

Zyxel Group is committed to long-term talent retention. By integrating group resources, the company enhances organizational weaknesses, improves talent development management mechanisms, career development opportunities, and offers various benefits to increase employee retention.

- **Establishing an Exit Interview Mechanism:** Supervisors and HR familiar with the organization conduct exit interviews to gather feedback, aiming to reduce turnover rates.
- **Building a Key Talent Database:** Regularly track and evaluate talent development to retain key employees, assess potential risks, and manage departures to prevent the loss of business secrets.
- **Internal Transfer Opportunities:** Analyze individual skills, adjust job content and work environment, and offer internal transfer opportunities to retain employees.
- **Talent Rehire Program:** HR collaborates with department supervisors to regularly review the list of former employees. For those interested in returning and deemed suitable, the company actively provides rehire opportunities.

Internal Job Replacement Rate

The Group has established succession plans for specific positions, ensuring smooth business continuity through internal training and development programs. Internal job postings are periodically initiated to allow employees to pursue positions that align with their career goals.

Historical Internal Hiring Rate

	2021	2022	2023	2024
Number	11	12	11	11
%	3.2%	2.8%	6.1%	2.7%

Note: Total Number of Indirect Employee Vacancies Filled by Internal Candidates / Total Number of Company Vacancies

3. Comprehensive Talent Retention Program

Employees are valuable assets to the company. To ensure long-term employee retention, Zyxel Group has established a high-quality work environment through comprehensive management systems and incentive measures to attract and retain talent.

Compensation

Zyxel Group's employee compensation policy is designed to balance the interests of shareholders and employees, and is governed by the "Salary and Allowance Management Procedure" to ensure that the company's salary and benefits practices comply with legal regulations and effectively protect employee interests.

Starting salaries for new employees are determined based on factors such as educational background, professional knowledge and skills, and years of experience, ensuring that the minimum starting salary is above the statutory minimum wage.

The compensation structure includes base salary, position allowances, shift allowances, and overtime pay, with compliance to local "Labor Standards Act" requirements in Taiwan. To maintain competitive overall compensation, the company provides a comprehensive promotion system and adheres to local regulations. Employees receive timely bonuses based on the company's profitability each year in the first quarter. Additionally, to encourage long-term service and continued contribution, the company offers annual cash bonuses or long-term incentive plans ranging from 1 to 3 years, ensuring that overall compensation remains competitive in the market.

Compensation for all employees is not differentiated based on gender, age, race, nationality, religion, political affiliation, or sexual orientation. It fully reflects individual job performance and aims to achieve fairness and reasonableness while protecting personal information related to compensation.

Bonuses and Employee Rewards

Zyxel Group offers various incentive and reward programs to encourage outstanding performance from employees and teams and to share the company's operational success. These include: Lunar New Year bonuses, year-end bonuses, performance bonuses, special excellence awards, and stock options for high-performing employees.

Lunar New Year Bonuses:

Bonuses are provided annually during the Lunar New Year, Dragon Boat Festival, and Mid-Autumn Festival in Taiwan.

Profit Sharing Bonuses:

According to the "Performance Bonus Guidelines," bonuses are given based on the company's profit achievement rate. These include quarterly bonuses, annual bonuses, and special bonuses, which are provided to both indirect and direct employees to share in the company's profits.

Employee Stock Options:

The "Employee Stock Option Issuance and Subscription Guidelines" are established to offer stock options to high-performing employees. This aims to attract and retain outstanding talent long-term, while also motivating employees, enhancing their engagement, and fostering a sense of belonging.

For further details, please refer to the 2024 Annual Report (pp. 61–62).

Rewards for Creative and Inventive Proposals:

With the aim of encouraging employees to be engaged in innovative R&D, Zyxel Group has developed the "Guidelines on Rewards for Creative and Inventive Proposals" to offer rewards for creative proposals, patent application proposals, and invention patents.

Incentive Projects:

A wide range of incentive projects is provided to motivate our employees to give suggestions for job improvements and praise employees for their remarkable performance by posting their contributions on the internal website. In doing so, an incentive and a role model are provided for the employees. Cohesion among the employees can thereby be improved to boost the corporate competitiveness.

Employees of the Year:

Every year, department heads would recommend employees with exceptional performance as candidates for all employees to vote for the "Employees of the Year". Zyxel Group also offers rewards and acclamation to the winners to recognize their achievements. In 2024, a total of 7,531 outstanding employees and 136 model employees were recognized.

Reward for Long Tenures:

In the year-end company banquet, employees with long tenures will be rewarded and recognized for their long-time contribution to Zyxel Group.

The ratio of the minimum wage for entry-level personnel to the local statutory minimum wage

Work area	Category	Gender	
		Male	Female
Taiwan	indirect employees	1.33	1.33
	direct employees	1.00	1.00
China	indirect employees	1.27	1.26
	direct employees	1.10	1.10

Gender Pay Gap in Average Base Salary/Total Compensation

Work area	Category	Job Level	Male	Female	
				Average Base Salary	Total Compensation
Taiwan	indirect employees	supervisory position	1	0.80	0.80
		non-supervisory position	1	0.81	0.79
	direct employees	-	1	0.98	0.99
China	indirect employees	supervisory position	1	0.93	0.82
		non-supervisory position	1	0.99	0.77
	direct employees	-	1	1.00	0.99

Gender Pay Gap in Average Salary/Bonus and Median Salary/Bonus

Work area	Category	Male	Female			
			Average Salary	Median Salary	Average Bonus	Median Bonus
Taiwan	indirect employees	1	0.79	0.78	0.70	0.72
	direct employees	1	0.99	1.00	0.81	0.60
China	direct employees	1	0.80	0.82	1.00	0.79
	indirect employees	1	0.99	1	1.00	0.99

Benefits Superior to Statutory Regulation

Flexible working hours	We provide one hour of flexibility for the work day's starting and ending times to help colleagues deal with commuting.
Employee Benefits	<ul style="list-style-type: none"> Established the "Zyxel Group Welfare Committee" to organize large-scale events across the entire group: Family Day, annual dinners, sports activities, cultural events, employee travel. Various subsidies: Subsidies for club activities, Dragon Boat Festival and Mid-Autumn Festival benefits, birthday welfare points, emergency assistance, Employee Assistance Program (EAP). Group insurance: Providing group insurance for employees and their dependents.
Work environment facilities	The gymnasium includes a multi-sport court, rhythm classrooms, fitness center, and leisure room. We also provide a convenience store, staff canteen, staff dormitory, coffee bar, female breast pumping room, and free parking for colleagues On-site services including banks, insurance services, shuttle bus are also available.
Health improvement	Health inspection services are provided for general employees, supervisors, new employees, and high-risk employees. The inspection items and frequency exceed regulatory requirements. For employees who need medical treatment, Zyxel Group provides one-day medical leave and medical subsidies.
Probationary leave	We exceed the labor law requirements by offering three days of leave during probation.

Note: The data presented in this table cover Taiwan only, while data from other regions are not disclosed due to differing national regulatory requirements.

Insurance & Pension

Zyxel Group provides employees with social insurance that is superior to what the law requires to enhance and protect the basic rights and benefits of employees. In addition to statutory labor insurance and national health insurance, it also provides free group insurance for employees and their spouses and children, including life insurance, accident insurance, critical illness insurance, hospitalization medical insurance, injury medical insurance, cancer medical insurance, and occupational accident insurance. The insurance company's on-site service was also provided: employees can directly conduct insurance consultation and application services inside the company.

The Committee of Employee Pension Reserve Administration has been established in accordance with the Labor Standards Law to supervise the deposit process of pension funds into the Central Trust Bureau. Employees who chose to adopt the new pension system would have 6% of their monthly salaries automatically transferred to their personal pension accounts at the Labor Insurance Bureau.

Note: Data disclosed for Taiwan and China only; subsidiaries in Asia, Europe, and the Americas are excluded due to varying minimum wage standards.

Note: Gender pay ratio is shown with male = 1.

Note: Average total compensation refers to annual salary including basic pay, allowances, and bonuses.

Note: Per TWSE regulations, non-supervisory full-time employee salary data and year-on-year comparisons are available on MOPS.

B. Human Capital Development

Cultivating talents and learning culture

Based on the strategy of cultivating qualified and potential employees, we provide diversified learning resources and programs to strengthen all employees' professional skills and knowledge. Also, through the principle of knowledge and experience sharing, we encourage our employees to expand their experience level and to accumulate intellectual assets. For our efforts in nurturing talents, we won the bronze medal in the "Talent Development Quality Management System (TTQS)". We believe that good training quality will help our colleagues continue to grow and become an important driving force for the company's continuous advancement.


Human Capital Development Policy

- Consolidate human capital and improve the efficiency of core talent assets
- Cultivate corporate human resources and improve employee performance
- To meet the needs of organizational development, improve the company's productivity and competitiveness

Human Capital Development Strategy

- Establish a training system for multi-career planning and development
- Provide customized learning consultation and multiple learning channels
- Form an expert network system to provide knowledge inheritance and skill teaching

Human Capital Development Objective and Result

Sustainable Strategy	Major Issues	Operational Impact	Strategy action	Performance Indicators	2024 Target	2024 Achievements	Status	Goals			SDGs
								2025 short-term	2027 mid-term	2030 Long-term	
Creating Shared Value	Talent cultivation & development	Diverse training programs will attract and retain talent	Provide diverse talent training programs	Annual training program completion rate	>92%	96%	V	>93%	>94%	>95%	
			Ensure professional skills training opportunities for staff	Satisfaction with professional skills training courses (Maximum score: 5 points)	>4	4.65	V	>4.1分	>4.2 分	>4.3 分	

Human Capital Return on Investment

	2021	2022	2023	2024
Human Capital Return on Investment	7.66	8.33	7.98	6.52

Note: Return on Human Capital Investment = (Operating Revenue - (Operating Expenses - Employee-Related Expenses)) / Employee-Related Expenses

Employee Development Programs

To support employees in their growth and transformation throughout various stages of their careers, the Company has designed a variety of development programs tailored to different objectives. These include mentoring systems, team-based learning mechanisms, professional community exchanges, and strategic development plans. Through these initiatives, employees are encouraged to enhance their professional competencies, expand their networks, strengthen leadership skills, and prepare for future challenges.

Development Program Themes

Based on employees' functional attributes and career stages, Zyxel Group has designed diverse development programs covering themes such as leadership training, cultural education, digital transformation, and career and retirement planning. These initiatives aim to cultivate key talent, enhance organizational resilience, and respond to the evolving needs of future industry transformations.

Leadership Training

Tailored training programs are provided for current managers and potential leaders, integrating practical exercises with performance evaluation mechanisms to strengthen management capabilities and organizational succession. In 2024, 14 of the employees promoted to managerial positions had previously participated in these leadership training programs, which contributed to improved decision-making efficiency.

Cultural Education

To support the establishment of operations in Vietnam, Vietnamese language and cultural awareness courses were introduced to enhance cross-border communication and cultural integration. In 2024, a total of 45 training hours were conducted, preparing 68 reserve cadres for the Vietnam office, thereby helping to shorten the time required to launch new overseas sites.

Digital Transformation Capability Building

Zyxel Group continues to strengthen employees' digital skills. Since the implementation of the SAP digital platform in 2023, 32 training sessions have been organized to improve system application capabilities among managers and employees, driving the digitalization of organizational processes. Additionally, five AI seminars were held in 2024, alongside external AWS professional training courses. These efforts enabled the successful introduction of an AI-based customer service machine learning system, enhancing the CSO unit's responsiveness to customer inquiries and significantly reducing working hours.

Career and Retirement Planning

The Company provides retirement planning consultation to help employees understand existing retirement systems and offers resources for re-employment learning. For employees whose contracts are terminated, Zyxel Group complies with local laws to provide severance pay, unemployment benefits, and vocational training information and assistance, thereby safeguarding employees' basic rights and ensuring stability during transition periods.

Learning Formats of Development Programs

Mentoring and Coaching

According to the needs of development programs, mentors are assigned to provide one-on-one guidance, helping employees clarify their goals and strengthen competencies. For employees with performance gaps, Performance Improvement Plans (PIP) are implemented with targeted coaching to enhance both performance and skills.

Team and Community-based Learning

Business units actively promote cross-team learning and knowledge transfer. Through technical and experience-sharing sessions, employees are able to strengthen practical skills and foster teamwork. On average, more than 60 thematic exchange sessions are held annually, covering topics such as SW R&D learning groups, CSO technical exchange forums, PQA automation workshops, PM/PLM learning sessions, Sales practice sharing, and HW R&D technical exchanges.

Part-Time Employee Training

Zyxel Group also values the training of part-time employees. For interns, On-the-Job Training (OJT) is arranged to facilitate workplace learning, complemented by elective online courses that provide general corporate knowledge.

Talent Development Strategy I: Create a training system for diverse career planning and development

Corporate University

Founded in 2006 with the aim of training all types of required talent and fostering their core competitive edges. We develop a competency-based training system, offer customized learning consultations and a diverse range of learning channels, and form an expert network system enabling the internal lecturers and consultants to be trained to pass their knowledge on and teach skills.

Rich learning resources

With our systematic management and training plan, we have also expanded our courses through use of on-line e-School learning. Along with internal/external training, all employees have many opportunities to improve their professional skills and their interaction with others. The courses include: new employee training, management courses of all levels, industrial safety, environment protection, marketing, quality assurance, research and development as well as other general and advanced sessions.

In addition to regular training courses, Zyxel also helps employees developing themselves in terms of collaborative ability and personal specialties. The in-depth, all-aspect development projects in turn make it possible for Zyxel Group to benefit from the talents.

Dual-Ladder Career Development

Provide a dual-ladder career roadmap which consists of both management-level and professional-level career training.

Multiple Career Plans and Development

Development Facet: Job rotation helps provide comprehensive training for Zyxel Group personnel.

Product Facet: Zyxel Group has a great variety of product lines and cross-product development.

Global Facet: Co-work with our subsidiaries and branch offices for a broad international point of view.

Education and Training Focus

Key Talent Development

Select key talent for the organization to carry out training and development plans based on the needs and future development of the organization.

Management Competency Training

Develop indicators for the leadership competencies required for the Group's management, utilize 360-degree competency assessment tools to identify deficiencies in their management competencies in an objective manner, and continuously enhance the competencies through training.

Professional Competency Training

Set up a department responsible for training and development to draw up a wide range of competency-based talent development programs and training blueprints comprehensively and systematically.

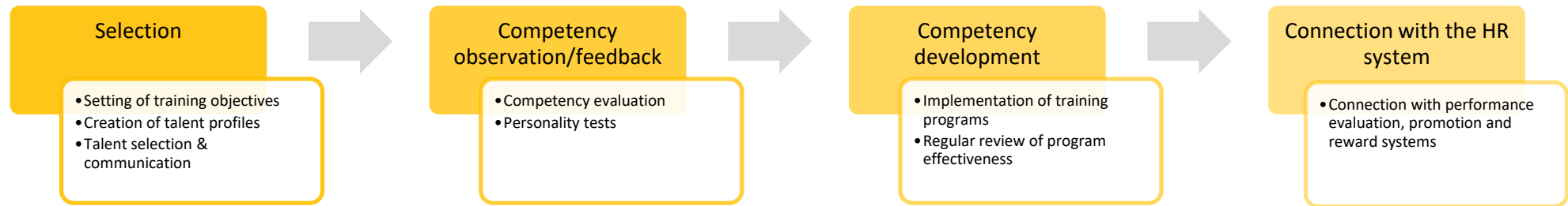
Education and Training System Blueprint

Job Position	Training by Job Level	Training by Competency	General Education and Training	Interpersonal Communication	OJT	SD
Strategic level	Leadership competency training for top management	Management strategy, market analysis, competitive edge, international management	Visions and values	and coordination		
Operating level	Training for new management	R&D positions: Innovative thinking, problem analysis and solving	Core competency courses	Microsoft Office utilization		
Management level	Leadership competency training for entry-level and middle management	Sales positions: Customer orientation, project management	Quality awareness	Knowledge on network communication products		
		Marketing positions: Project management	Occupational safety awareness	Employee health management	Job instruction	Further education courses for self-development
		Customer service positions: Customer orientation, problem analysis and solving	Information security awareness	Self-encouragement	Training programs	
Individual contributor	Basic job management and team communication training		CSR awareness	Stress/emotional management	Daily guidance	
			Customer satisfaction			
			Service quality			
New employee	New employee training	Education for new employees' transition to their departments				

Key Talent Development

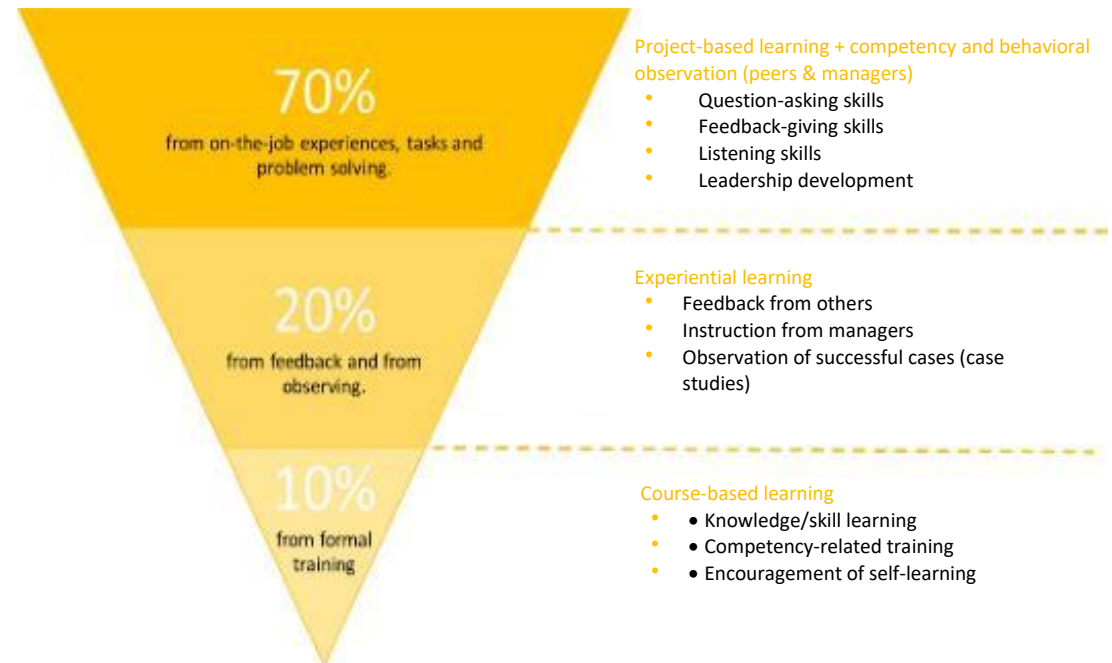
Zyxel Group always values talent training and development. As the industry advances and changes, we put our focus on the departments' needs for key talent development and transformation training and develop a comprehensive talent development process model. A diverse range of training programs is also formulated to ensure that the competencies of the key talent meet the organization's needs and thereby allow them to confront future challenges jointly with Zyxel Group.

Talent Development Process Model



Election of R&D Talent for Transformational Development

The R&D of hardware requires collaboration between R&D, mechanism, and verification departments. To ensure quality and efficiency in meeting the needs of customers, the organization needs integrated leadership roles with technology backgrounds to effectively connect the lateral resources. Therefore, we initiate an HPL (H/W Project Leader) training and development program to follow the talent development process model involving creating a talent profile for a role, selecting key talent with a certain level of R&D experience, and formulating training plans based on the 70-20-10 rule. The hardware R&D engineers are thereby allowed to step out of their field of expertise to learn the competencies of project management professionals (PMPs) and gain knowledge and skills in project management. With the help of project-based and experiential learning, they can also enhance their eight competencies required for being an HPL and make corrections through actual practices during their gradual transition to an HPL.



Talent Development Strategy II:

Offer customized learning consultations and a diverse range of learning channels

Diverse learning channels

According to different job roles and development needs, we provide a variety of learning channels, combining a variety of the most suitable teaching methods, tools and activities, and design a diversified and systematic step-by-step development plan to help with different learning needs. We work to help employees grow their skills and abilities.

Internal training: internal e-school courses for professional skills, cultural and general knowledge along with management training.

External training: we provide subsidies for external training courses or conferences to offer employees with more opportunities to learn and to expand their professional knowledge.

Online learning: our online platform provides digital learning courses and experience sharing. Comprehensive learning resources are open anytime for employees anywhere.

Supervisor's guidance: cultivating the necessary skills in each team member for their job roles

Help from mentoring: each new employee has a mentor to help he or she understanding Zyxel Group's company culture as well as to offer advice.

International personnel cultivation: online English courses and international projects.

eSchool Online Academy

Integrate various learning resources of Zyxel Group with e-learning and establish an online learning platform eSchool Online Academy, which provides employees with a platform for querying and recording all-round learning resources. In addition to searching for the courses they want to learn on the platform, employees can also search for the courses they want to learn on the platform. The platform clearly grasps the learning process

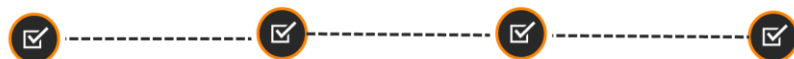


Talent Development Strategy III:

Form an expert network system for passing knowledge on and teaching skills

New Hire Camp

To help new employees quickly become accustomed to the organization and its culture, we develop individual guidance plans specifically for them before their on-boarding and designate mentors to assist the new hires. The system gives the new employees a helping hand to shorten their learning curve and smoothly complete the required basic job training. A series of training courses on general knowledge, covering both online learning courses and physical courses, are also designed for the employees in order for them to more understand Zyxel Group's related systems and fit in with the corporate culture.



Pre-onboarding

- Designate mentors for new employees
- Complete the guidance and learning items

Onboarding Day

- Show the new employees around the environment
- Explain the new employee guidance handbook

1 month after onboarding

Understanding goals during the onboarding period

3 months after onboarding

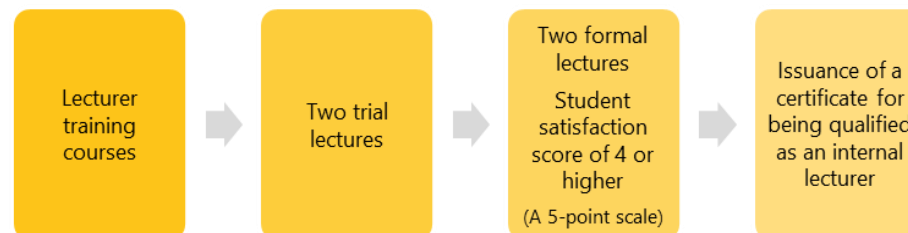
- New employee training (online + physical courses)
- Pay attention to the employees' adaptation to work and carry out new hire performance evaluations

In 2024, a total of 6,607 participants completed new employee training sessions.

Internal Lecturer Training

The internal lecturers and consultants are trained to pass their knowledge on and teach skills, which are two of the objectives of education and training. The Group has a well-developed internal lecturer training system to train talented trainee lecturers and accumulate our knowledge inheritance and training capacities.

Internal Lecturer Training System



- Development Goal: To develop internal talents with secondary skills and effectively pass on knowledge and skills within the organization.
- Development Outcome: As of 2024, a total of 33 internal trainers have been developed, with a cumulative teaching time of 962.6 hours, achieving the company's strategy of nurturing organizational talent and reducing costs.

Training hours/cost

In 2024, a total of over 95,815.83 training hours were delivered through both in-person and online courses, with 25,980 training participants. On average, each employee completed 28.9 training hours. The total training expenditure amounted to NT\$4,138,728, with an average training cost of NT\$1,863 per employee.

Item	Category	Number of Trainees	Training hours
Age	<30	8,232	57,021
	30-50	15,677	33,552
	>50	2,071	5,243
Gender	Male	15,616	61,111
	Female	10,364	34,705
Job category	Managerial Indirect Employees	3,976	6,878
	Non-managerial Indirect Employees	13,641	16,731
	Direct Employees	8,363	71,759
Course category	New Employee Training	6,607	71,559
	Management Training	416	1,090
	Professional Training	8,661	13,402
	Other Training	10,296	9,765
Total		23,896	25,980

Average training cost of employees (NT\$)

	2021	2022	2023	2024
Total training cost	2,131,939	6,726,476	4,144,066	4,138,728
Employee Number	2,251	2,329	2,433	2,221
Average training cost	947	2,888	1,703	1,863

Note: Training hours include employees in Taiwan and China.

Internal Transfer and Rotation Policy

Zyxel Group has always prioritized nurturing high-quality, potential talent. For employees with excellent performance evaluations who are identified as having development potential by their supervisors, the training and development department works with them to draft an Individual Development Plan (IDP). This plan addresses their developmental needs and suitability for certain projects. It includes short-term job rotations or role transitions to help them gain diverse experiences, broaden their perspectives, and bring new insights back to their original positions to spark innovation.

In 2024, the internal transfer rate reached 3.33%.

International Assignment Mechanism

In terms of cultivating international talent, Zyxel Group strategically develops globally mobile employees. The company plans to recruit talent either locally or from within the parent company to strengthen its expanding bases and quickly build a pool of elite professionals worldwide. Senior leadership and the training and development unit collaborate to identify and develop high-potential candidates. After communicating with these individuals, the company tailors training programs aligned with future organizational development and strategic objectives.

Course Satisfaction Survey

	2021	2022	2023	2024
Number of Respondents	404	517	487	850
Training Satisfaction Average Value (out of 5)	4.50	4.61	4.65	4.38

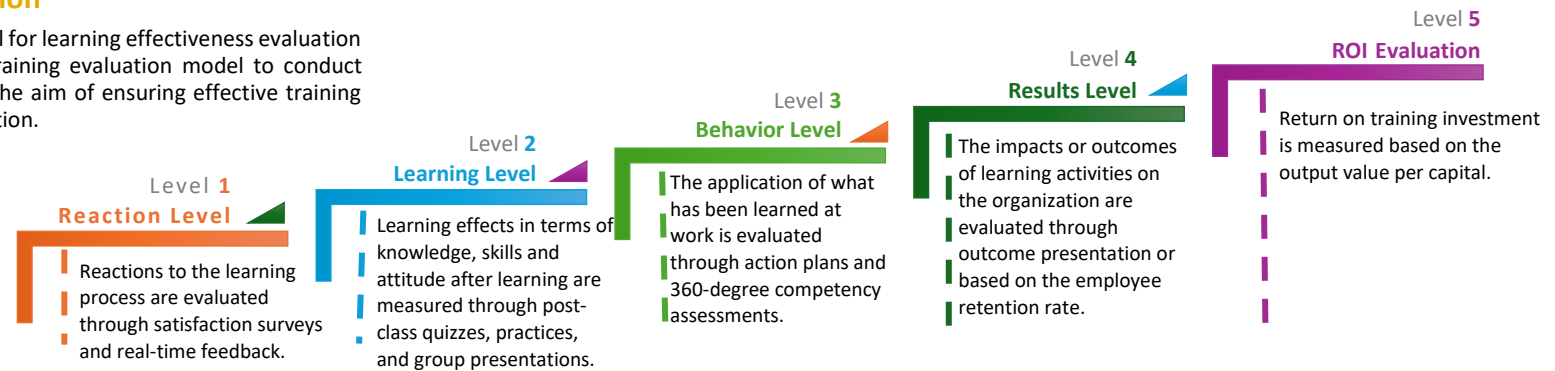
Performance Management

In order to fairly evaluate performance of employees, then reward them properly with job transfer, promotion, salary raise or training courses and to recognize the core competence and career path of every employee, Zyxel Group has created the “Performance evaluation guideline” to coordinate targets and plans. The guideline will ensure that PDCA is implemented effectively for Zyxel Group to align with the business roadmaps.

The new recruits will receive their first evaluation as soon as they are hired, while current employees are evaluated in the mid-year period and by the end of the year. Managers and their associates will discuss the progress of annual plans, confirm needs for additional trainings and draft new objectives and plans for the upcoming year. In 2024, The employee performance evaluation completion rate was 100%.

Training Effectiveness Evaluation

Zyxel Group adopts the Kirkpatrick Model for learning effectiveness evaluation in conjunction with Jack Phillips’ ROI training evaluation model to conduct training effectiveness evaluations with the aim of ensuring effective training as well as talent development and retention.



Evaluation Type

Item	Target	Frequency	Description
Management by Objectives (MBO)	All Employees	Once a Year / Real-time Adjustments	At the end of each year, the next year’s operational strategy is set, and specific goals are established by each Business Unit (BU) at the beginning of the following year. Senior management then cascades these goals down to departmental and individual levels. Throughout the execution of these goals, regular mid-term and end-of-term reviews are conducted to assess progress and performance. If there are any changes to the goals, managers can make adjustments as needed to ensure alignment with the intended objectives.
Performance and Competency Assessment	All Employees	Twice a Year	Performance evaluations are conducted twice a year: mid-year and at year-end. During these evaluations, managers and employees review the achievement of goals, and managers provide evaluations and feedback based on both job performance and behavioral competencies. The weight of these evaluations differs for management and professional roles, emphasizing the importance of both achieving results and demonstrating good behavior.
Performance Ranking	All Employees	Once a Year	Based on the annual goal achievement, performance, and potential, performance rankings are conducted at the BU/Div. level, differentiated by management and professional roles. These rankings serve as a key reference for talent development and compensation systems.
Multi-dimensional Competency Evaluation	Specific Professionals (Key Talents, Leadership Talents, etc.)	As Needed, Based on Project Planning	For specific professional personnel, key talents identified by the organization undergo development assessments through a planned project. These assessments include "180° to 360° feedback" from supervisors and peers, which serves as a reference for further development.
Agile Dialogue	Cross-organizational project team	Conducted on an ongoing, as-needed basis.	A cross-organizational software R&D team was established to integrate resources, share technologies, strengthen business unit capabilities, and deliver flexible solutions while broadening R&D

C. Human Rights Management

Human Right Policy

- Committed to respecting the human rights of all stakeholders, including customers, employees, suppliers, contractors, communities, and investors.
- Our Human Rights Policy supports internationally recognized human rights standards and principles, including the "United Nations Universal Declaration of Human Rights," the "United Nations Global Compact," and the International Labour Organization's "Declaration on Fundamental Principles and Rights at Work." The policy is established based on the "United Nations Guiding Principles on Business and Human Rights" to ensure the protection of employee rights.
- In addition to adhering to relevant international standards and complying with the laws and regulations of the countries where we operate, Zyxel Group implements its Human Rights Policy in accordance with the "Responsible Business Alliance (RBA) Code of Conduct." We have also established a "Supplier Code of Conduct" to collaborate with supplier partners in protecting human rights.
- This policy applies to all Zyxel Group entities and direct operational activities, products, or services. It encompasses employees, customers, suppliers, contractors, and partners, ensuring the protection of human rights issues related to nationality, race, social class, language, thought, religion, political affiliation, place of origin, birth, gender, sexual orientation, age, marital status, appearance, physical or mental disabilities, and other groups.

For more details, please visit Zyxel Group's official website: [Human Rights Policy](#).

Human Right Management Implementation Policy

- Ensuring freedom of employment, equal job opportunities, training and development, and promotion opportunities.
- Safeguarding the labor rights of different ethnic groups, establishing a diverse, inclusive, and harmonious workplace environment.
- Legal and fair working hours and remuneration, with equal pay for equal work guaranteed.
- Prohibition of modern slavery, child labor, forced labor, and human trafficking.
- Zero tolerance for any form of harassment, bullying, or discrimination.
- Establishing information security and confidential information protection mechanisms to safeguard the information security of employees, customers, and suppliers.
- Taking measures to provide a safe, healthy, and hygienic working environment.
- Establishing a free two-way communication channel to provide employees with the freedom to express their opinions.
- Supporting employees' freedom of assembly, association, and collective bargaining rights.


Human Rights Management Organization

Zyxel Group's human rights management is overseen by the Board of Directors at the highest level. Under the Zyxel Group Sustainability Committee, the Labor and Human Rights Team is responsible for executing human rights management, with the Sustainability Audit Team conducting reviews. The Sustainability Committee regularly reports on execution results to the Board of Directors.

Achievements

- In 2024, **no incidents involving forced labor, human trafficking or other human rights violations occurred within the Group** and no human rights-related complaints were received, handled and solved via the formal reporting mechanism.
- Completion Rate of Human Rights-Related Training Courses: **99.71%**
- Completion Rate of Employee Sexual Harassment Prevention Courses **99.71%**

Human Rights Goals and Achievements

Target	Major Issue	Operational Impact	Actions	Performance Indicators	2024 Target	2024 Achievement		Goals			SDGs
								2025 short-term	2027 mid-term	2030 long-term	
Creating Shared Prosperity Value	Human Rights Management	<ul style="list-style-type: none"> Human Rights Protection Promote the concept of human rights 	Focus on Women's Career Development	Percentage of Female Managers	>30.7%	32.8%	V	>30.7%	>30.8%	>31%	
			Human Rights Awareness Advocacy	Completion Rate of Human Rights Training Courses	>97%	97.7%	V	>98.5%	>99%	100%	

1. Human Rights Management Process

Zyxel Group has established a human rights management policy that outlines an implementation framework to address human rights issues encountered during operations. This involves identifying human rights risks, including the affected parties and specific issues. For different risk categories, we develop preventive guidelines and employ various investigation methods to assess the extent of human rights risks. By implementing mitigation measures and providing complaint channels, we aim to prevent incidents that could harm human rights, while continuously monitoring and improving our practices.



Identify issues and objects

Zyxel Group conducts internal and external stakeholder surveys by sending questionnaires by email and posting the questionnaires on the official website to gain a grasp of the issues of the stakeholders' concern, thereby identifying the parties exposed to high human rights risks, including the employees and suppliers. The issues and parties are then used as indicators for assessing the level of human rights risks and managing the risks.

Establishment of Preventive Procedures

For Employees: In addition to the "Work Rules", "Employee Handbook", and "Regulations for Staff Employment" specifying requirements for human rights protection, the "Regulations for Sexual Harassment Prevention Measures, Reporting and Punishment", "Management Procedure for Anti-forced Labor", "Procedure for Protection of Child and Underage Labor", "Management Procedure for Prohibition of Mental and Physical Abuse", "Anti-discrimination Management Procedure", "Religion and Belief Management Procedure", and other internal management regulations have been developed to explicitly affirm that we protect the rights of our employees and ensure they have access to appropriate care.

For Suppliers: To further ensure the human rights of all personnel in the supply chain, the "Code of Conduct for Suppliers" has also been instituted to, jointly with the suppliers, protect and take care of their employees.



Identification of Issues and Parties at Risk

Employees are a vital foundation for the sustainable development of the business, and human rights issues have become a key focus in the global ESG landscape in recent years. It is essential to proactively and systematically identify potential human rights impacts and their possible locations. For employees and suppliers considered high-risk groups, Zyxel Group employs various risk assessment methods. Based on the likelihood and severity of risks, we identify critical human rights issues and establish targets and strategies for implementing mitigation measures.

Employees:

“Labor Risk Factor Identification and Assessment Form”: The “Zyxel Group Risk Management Team” conducts a human rights risk survey for the employees using the “Labor Risk Factor Identification and Assessment Form” every year. The survey covers human rights topics such as “child labor”, “forced and compulsory labor”, “disciplinary measures and discrimination”, “working hours”, and “remuneration and compensation” and gives scores for the probability and frequency of occurrence and severity of the risk issues concerning the topics based on their descriptions. The risk level is then calculated using the hazard level assessment method to identify high-risk issues and a “high-risk item assessment result report” is issued. The report describes the control measures and the high-risk issues and rectifications made for the high-risk issues and records the reviews verified subsequently.

Internal Audit: Our subsidiaries carry out internal audits based on the RBA Code of Conduct. Document audits focusing on “child and underage labor”, “forced labor”, “discrimination and discipline”, “freedom of association and communication”, “working hours and wages”, and other human rights issues are executed. An audit report is then issued based on the audit result. The subsidiaries determine the required improvements and the deadline according to the level of the deficiencies and implement subsequent follow-ups while performing further on-site audits.

Suppliers:

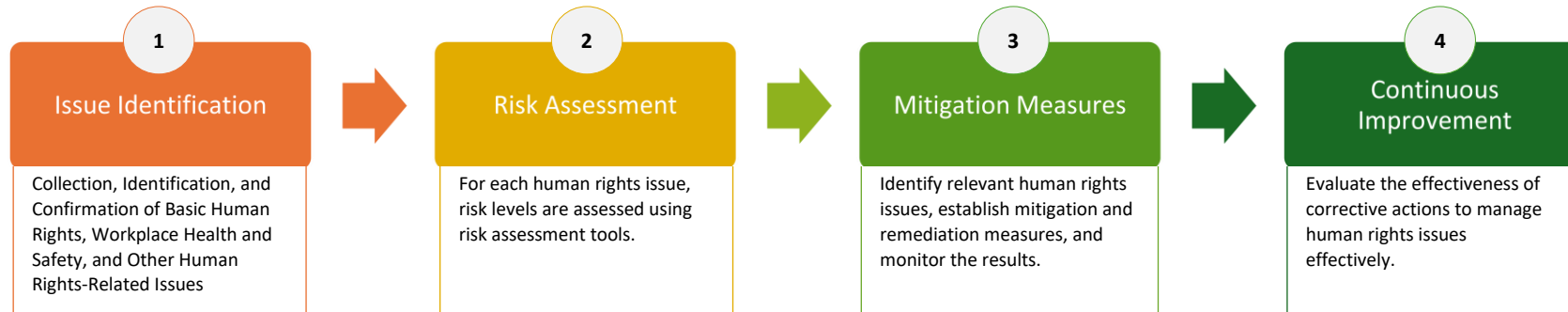
With the “Supplier Social Responsibility Evaluation Questionnaire” designed in accordance with the RBA Standards and “on-site audits”, the suppliers are audited for human rights issues such as “child and underage labor”, “forced labor”, “discrimination and discipline”, “freedom of association and communication”, “working hours and wages” and an audit report is issued to identify the human rights risks that may occur to the suppliers.



Human Rights Due Diligence

To ensure the implementation of its human rights policy, Zyxel Group has expanded its human rights due diligence in line with international standards and the European Union's "Corporate Sustainability Due Diligence Directive." This expansion is based on the annual Human Rights assessment results from the "Labor Risk Factors Identification and Assessment Form." The Zyxel Group Sustainability Committee's Labor and Human Rights Team conducts due diligence following the "Human Rights Due Diligence Process," which includes identifying potential human rights issues, assessing risks, implementing mitigation measures, and pursuing continuous improvements. To gather broader feedback and insights into the company's Human Rights issues, the team distributes online questionnaires to employees. This process helps in further understanding the current state of Human Rights issues within the company and employees' feedback, guiding future Human Rights risk management and strategies.

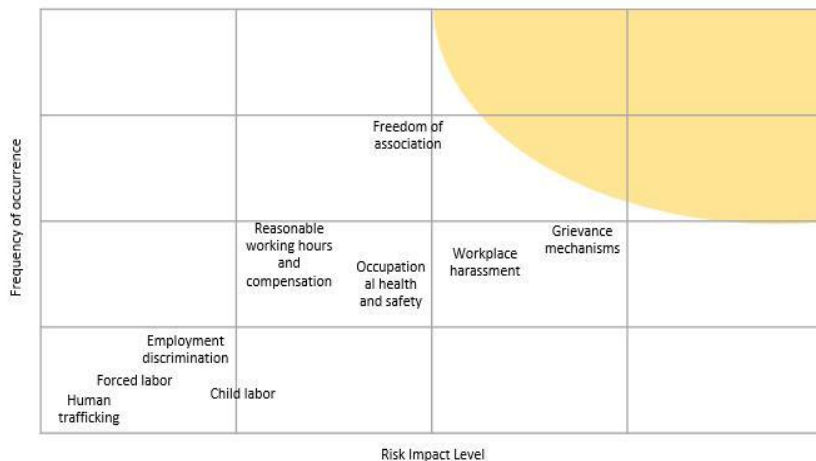
Human Rights Due Diligence Process



Human Rights Issues

In 2024, Zyxel Group expanded its human rights survey by referencing RBA-related issues and identifying 9 new topics: reasonable working hours and compensation, human trafficking, child labor, forced labor, occupational health and safety, workplace harassment, employment discrimination, freedom of association, and grievance mechanisms. In total, 25 human rights issues were included in the questionnaire. The survey was extended to all Group employees, including subsidiaries MitraStar Technology, Zyxel Communications, Zyxel Networks, and Wuxi MitraStar, covering both indirect and direct employees, including migrant workers. A total of 1,464 responses were collected, with a response rate of 50.01%. Based on frequency and impact, issues were categorized into low, medium, and high risk.

Human Rights Risk Matrix Chart



Human Rights Due Diligence Risk Response

The analysis identified "reasonable working hours and compensation" and a "safe and healthy working environment" as higher-risk issues. The company will implement several response measures and continue to track and improve in these areas.

Human Rights Issue	Mitigation Measures	Follow-up and Improvements
Reasonable working hours and wages	<ul style="list-style-type: none">Ensure a minimum salary level higher than the basic statutory wage for the employeesFlexible commuting system	Create an overwork management and tracking mechanism were taking one day off is required for every seven days of work
A work environment of safety and health	Ask the employees to follow the "Management Procedure for the Identification and Assessment of Safety and Health Hazards"	<ul style="list-style-type: none">Pass the certification audit for the ISO45001Conduct regular follow-ups on groups with potential health risks

Mitigation Measures

2. Labor-Management Relations and Communication

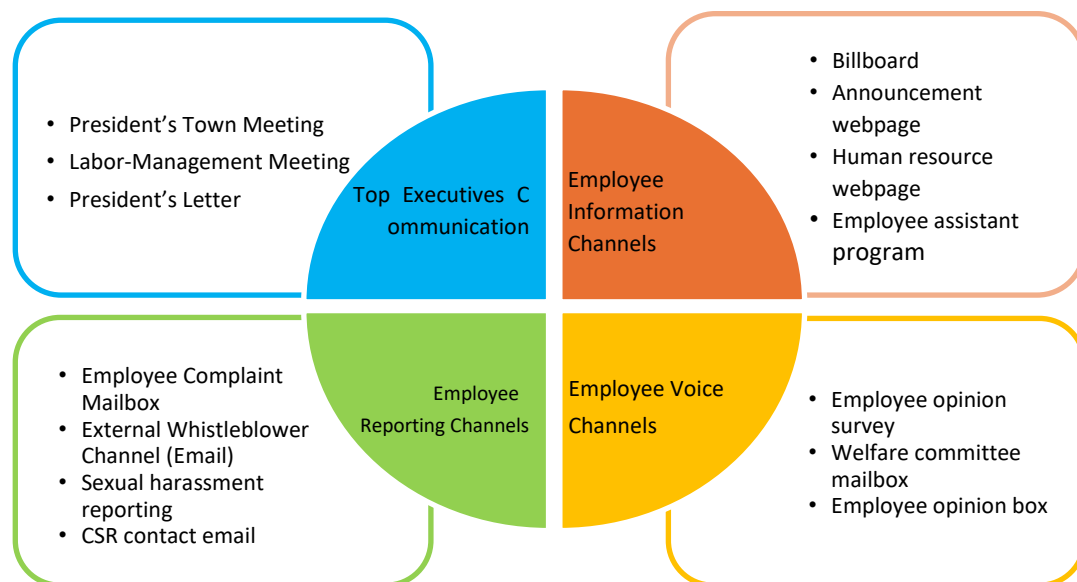
In addition to the identified high-risk issues, we develop goals and strategies for the human rights issues of significant concern. The Company executes mitigation measures and actions and establishes a mechanism for continuing follow-ups and improvements to monitoring the implementation effectiveness. Our measures for mitigating the impact of the human rights issues focus on **diverse communication channels, dissemination campaigns, education, and training** to achieve the goals set according to the implementation guidelines under Zyxel Group's human rights policy. °

Multiple communication channels

Zyxel Group not only have legitimate and competitive wages, working hours, benefits, vacation and retirement offerings, but also provide adequate channels for employees to communicate their thoughts and ideas with the management and to receive positive feedback through constructive interactions.

We strive to keep these communication channels open between employees and the management. Such conduits include meetings, suggestion boxes, bulletin boards, internal documents and e-mails for work groups. Managers are also given the opportunity to talk to their colleagues directly, in face-to-face affairs like "Free to Speak", "Groups of Honor" and "Town Meetings". In these events, employees can freely express their opinions or doubts about company policies, followed up on by responsible managers.

Communication Channels



Freedom of Association

Zyxel Group respects employees' rights to collective bargaining and freedom of association. The company has established the "Freedom of Association and Labor-Management Meeting Procedures" to inform employees that they are free to join any organization of their choice without facing any negative consequences or retaliation from the company.

Labor-Management Committee

Zyxel Group has established a "Labor-Management Committee," with representatives from both sides elected by the workforce. Regular labor-management meetings are held, where management presents work-related measures, and the labor representatives offer suggestions. This ensures mutual agreement on various issues, fostering a harmonious relationship. During quarterly labor-management meetings, labor representatives communicate with management to advocate for employees' rights. Over the years, internal communication has remained smooth, with 100% of employees covered by collective bargaining agreements.

The number of cases reported through the communication channels

	2021	2022	2023	2024
Labor management meeting MitraStar, Zyxel Communications, Zyxel Networks	19	23	52	58
Employee opinion survey MitraStar, Zyxel Communications, Zyxel Networks	404	517	487	1,164
President's Town Meeting MitraStar, Wuxi MitraStar, Zyxel Communications, Zyxel Networks	35	55	24	1
Employee congress Wuxi MitraStar	19	62	39	28
Employee opinion box and hotline	1	4	7	2

Employee Engagement Survey

Zyxel Group conducts an "Employee Engagement Survey" by distributing online questionnaires on human rights-related topics to widely collect and analyze feedback from employees. This process deepens communication with employees, allowing more appropriate protection of employee rights and facilitates improvements. In addition to periodic assessments of organizational status, the survey also targets specific groups to understand their needs and make rolling, flexible adjustments to optimize human capital investment effectively.

Survey Objectives

- **Satisfaction:** Evaluate employees' satisfaction with job content, environment, and compensation benefits to identify factors affecting satisfaction and develop corresponding improvement measures.
- **Sense of Purpose:** Identify issues related to job goals and role responsibilities to further optimize work processes and organizational structure.
- **Well-being:** Assess whether employees maintain a balance between work and life, understand its impact on reducing work-related stress, and promote overall employee well-being and long-term loyalty.
- **Stress Level:** Evaluate employee work stress levels and their impacts to identify sources of stress and develop measures to alleviate it, promoting psychological health.
- **Support:** Gauge employees' views on leadership style, management capabilities, and level of support to identify strengths and areas for improvement in leadership effectiveness.
- **Engagement:** Understand employees' perceptions of work challenges and sense of achievement to determine if they find their work challenging and meaningful, aiming to enhance work motivation and engagement.

Survey Subjects

In 2024, the scope of the survey was expanded to include all Group employees, covering indirect employees, direct employees, and foreign migrant workers, achieving a 100% coverage rate with a total of 1,464 responses collected · Questionnaire recovery rate 50.01%.

Types	Number of Employees by Proportion	Response Rate
Indirect Employees	29%	76%
Direct Employees	40%	77%
Foreign Migrant Workers	31%	92%
Total Response Rate		81%

Note: The proportion of direct employees does not include foreign migrant workers.



Satisfaction



Sense of Purpose



Well-being



Stress Level



Supportiveness



Engagement

Survey Items and Results

Employee engagement was surveyed on a 5-point scale, with a high engagement target set at 3.8.

Item	Average Score
Satisfaction	3.93
Sense of Purpose	3.88
Well-being	3.81
Stress Level	3.82
Supportiveness	3.77
Engagement	3.82
Average Score	3.84

Item/Year	2023	2024	2024 Target
Percentage of Highly Engaged Employees (High Engagement ≥ 3.8)	81%	57%	60%

Response Measures and Improvement Actions

Through response measures and improvement actions, the company can effectively address employee engagement survey results and translate survey data into practical improvements, thereby enhancing employee satisfaction and overall work performance.

- **Strengthening Career Development Support:**

1. Establish a formal career counseling mechanism to provide individualized guidance.
2. Regularly organize professional skill training and cross-departmental exchange activities to stimulate learning motivation.

- **Enhancing Work-Life Balance:**

1. Review working hours and overtime policies to ensure reasonable arrangements, with proper compensatory leave and overtime pay systems.
2. Organize health promotion activities and provide psychological counseling to help employees effectively manage stress.

- **Improving Grievance and Feedback Mechanisms:**

1. Establish accessible and secure anonymous grievance channels to encourage employees to speak up.
2. Enhance transparency and timeliness in grievance handling, and regularly disclose improvement results.
3. Strengthen the role and accountability of supervisors in grievance handling to build greater employee trust.

Prevention of Workplace Unlawful Infringement

To protect employees from physical or mental unlawful infringement that may cause physical and mental health issues during their work, the company explicitly states, through written declarations and educational training, a zero-tolerance stance and attitude toward any unlawful infringement by company management, between employees, or from customers and strangers toward company employees.

Workplace Unlawful Infringement Statement:

Defines workplace unlawful infringement as any incident where staff experience abuse, threats, or attacks in a work-related environment (including commuting), which clearly or implicitly challenges their safety, well-being, or health. This includes physical, psychological, and verbal unlawful infringement, sexual harassment, and stalking.

Prevention of Workplace Unlawful Infringement

- Revise the "Prevention of Unlawful Infringement in the Course of Duty" operational guidelines.
- Conduct educational training to explain the definition and response measures for workplace unlawful infringement.
- Display "Workplace Unlawful Infringement Statement" posters within the facility for awareness.
- Announce it on the internal employee management system bulletin board.
- Provide channels and methods for filing complaints, encouraging employees to use the internal complaint handling mechanism for such disputes. Employees are required to assist in ensuring a workplace free from unlawful infringement. Anyone witnessing or hearing about such incidents should notify the HR department or call the employee complaint hotline.

Human Rights Complaint Channels

Zyxel Group will conduct confidential investigations upon receiving a complaint. If the investigation confirms the complaint, appropriate disciplinary action will be taken. Retaliation against the complainant, whistleblower, or those assisting in the investigation is strictly prohibited and will also result in disciplinary action.

Employees who halt operations or move to a safe location due to the discovery of imminent danger to their physical well-being or life while performing their duties will not face any adverse consequences for their actions.

Complaint Hotline: 51140 Complaint Email : care@zyxelgroup.com

Human Rights Protection Training

Zyxel Group provides online learning courses. All new employees are required to undergo training on compliance with human rights regulations, sexual harassment prevention, and comprehensive occupational safety after participating. The annual mandatory corporate social responsibility course for all employees covers the following topics. In 2023, the number of participants, training hours, and coverage rate for human rights-related courses are shown in the table below.




In 2024, a new "Workplace Gender Equality Education" course will be introduced for all employees.

Training was provided to HR managers and staff responsible for handling bullying or harassment reports. In 2024, an external "Workplace Sexual Harassment Prevention Workshop" was held, and awareness was raised among general managers. In 2024, advanced training on "Workplace Sexual Harassment Prevention" will be provided, focusing on process handling and other foundational knowledge for general managers.

Human rights education and training/ Sexual harassment prevention training

	Required Trainees	Actual Trainees	Training Hours	Coverage Rate (%)
MitraStar- HsinChu site	756	753	377	99.6%
MitraStar- Wuxi site	5,971	5,957	2,979	99.77%
Zyxel Communications- HsinChu	434	434	217	100%
Zyxel Networks- HsinChu	381	379	379	99.5%
Total	7,542	7,523	3,951	99.71%

Campaigns

President's Town Meeting	Employee EDM	Workplace Unlawful Infringement Prevention Poster
		

Human Rights Policy and Issue Management

Prohibition of Discrimination, Harassment, or Abuse

In the **Code of Conduct**, it is explicitly stipulated that any form of discrimination, harassment, or persecution in the workplace is strictly prohibited. Employees must not be treated unfairly on the basis of race, color, creed, nationality, gender, age, disability, sexual orientation, pregnancy, political affiliation, or marital status. The **Anti-Discrimination Management Procedure** further sets out the processes and measures for preventing and addressing any form of discrimination.

Zyxel Group has also established the **Regulations on Sexual Harassment Complaints and Disciplinary Actions** to prevent workplace sexual harassment and safeguard equal employment opportunities. Multiple complaint channels are available, including verbal reporting, dedicated hotline, fax, written letters, and email. In addition, a **Sexual Harassment Complaint Review Committee**, composed of both company and employee representatives, has been set up to handle reported cases and determine appropriate disciplinary actions. This demonstrates the Company's commitment to preventing sexual harassment as a fundamental responsibility to protect employees.

In 2024, no incidents of discrimination, harassment, or persecution were identified at any of Zyxel Group's operating sites.

Prohibition of Forced Labor and Child Labor

Zyxel Group firmly supports the elimination of forced labor as defined by the **International Labour Organization (ILO)** and is committed to prohibiting the use of child labor. The Company has clearly stipulated that no person under the age of 16 shall be employed, as stated in the **Employee Recruitment Policy**, which requires all employees to be at least 16 years old. Furthermore, the **Child and Juvenile Worker Protection Procedure** sets forth specific measures to prohibit child labor and to safeguard the safety, health, education, and development of juvenile workers.

All new employees are required to present valid identification documents upon onboarding, enabling the Company to verify their age and ensure compliance with the regulations. In 2024, no incidents of child labor were identified at any of Zyxel Group's operating sites.

Living Wage and Equal Pay

The company ensures minimum wages meet living standards, provides annual paid leave, and guarantees fair remuneration. All workers, regardless of gender, race, or nationality, are entitled to equal pay for equal work. Employment of temporary, dispatched, and outsourced workers complies with local laws.

Working Hours

The company avoids excessive overtime, defines daily and weekly maximum working hours, and compensates overtime in line with labor laws.

Freedom of Religion

Zyxel Group respects employees' religious rights and supports regular faith-based gatherings, such as English Bible study sessions.

Human Rights of and Care for Foreign Employees

There are 140 production line employees at the MitraStar Hsinchu site, most of which are foreign migrant workers. 80% of them are Filipino and 20% are Vietnamese.

Zero Payment from Migrant Workers

In compliance with the RBA Trafficked and Forced Labor – Definition of Fees, MitraStar ensures responsible employment and recruitment that prevent the employees from being exploited when being employed. It protects their labor rights by making sure that they do not pay any expense for application, recruitment, employment and placement and bears processing fees to enable its foreign employees to work in Taiwan without worry. MitraStar Technology pays in full the expenses and placement fee required for its direct foreign employees to work when they are hired and requests the recruitment agencies not to charge the employees the placement fee.

Care for Foreign Employees

Life: In the dormitories, there is a convenience store offering foreign employee's snacks from their countries/groceries to meet their needs.

Health: Brand-new en-suite dormitories are provided for the employees to ensure their health.

Mentality: During the pandemic, MitraStar has provided grocery buying assistance, offered special meals, and organized festival activities to enrich the lives of employees in the dormitories while they were advised against going out.

Communication Meetings

Quarterly labor-management meetings with foreign employees are held as scheduled, providing a regular platform to discuss working conditions with employee representatives.

Privacy and Personal Data Protection

Regulations: Zyxel Group takes the employees' privacy and personal data protection seriously. Thus, the "Personal Data Protection Regulations" have been established to require our employees and suppliers to comply with Taiwan's "Personal Data Protection Act" and "Regulations for the Maintenance of the Safety of Personal Data and Files", the EU's "General Data Protection Regulation (GDPR)", and the laws and regulations concerning personal data protection of the countries where we operate in so as to regulate the protection, management, maintenance and treatment of personal data. We specify that personal data must be used in a legal and reasonable manner by personnel with particular permission to secure the storage and transmission of the data.

Dissemination and Education: Dissemination, education and training on the protection of personal data are implemented. All our employees are required to complete our CSR courses every year. These courses to the employees to respect any individual's private information during data processing. The Internal Auditing Office conducts irregular audits for personal data protection and management to ensure a thorough human rights-based management approach to privacy and personal data protection.

Supplier Management: Zyxel Group also audits the suppliers for their privacy and personal data protection and requires them to abide by the related laws and regulations to respect privacy and protect personal data together with them.

Human Rights Issue Management Practices and Goals


Human Rights Issue	Target	Planned targets	Regulation and Practice	Risk Assessment	Mitigation Measures	Remediation and mitigation measures	2024 Achievements
Reasonable working hours and wages	All employees	Compliance with reasonable working hours and remuneration standards	Compensation Policy	<ul style="list-style-type: none"> • Labor Risk Assessment Form • RBA Internal Audit • Human Rights Due Diligence 	<ul style="list-style-type: none"> • Minimum pay above legal wage • Overtime pay ensured • Gender pay gap monitored for equal pay 	<ul style="list-style-type: none"> • Overtime tracking (one-day-off-in-seven rule) • Flexible working hours 	<ul style="list-style-type: none"> • Overtime tracking report for managerial reference • Monthly departmental overtime statistics reported to management
Interdiction of forced labor	All employees	No major violations of laws and regulations	<ul style="list-style-type: none"> • Anti-Forced Labor Management Procedure • Management Procedure for the Prohibition of Mental and Physical Abuse 	<ul style="list-style-type: none"> • Labor Risk Assessment Form • RBA Internal Audit • Human Rights Due Diligence 	Provide multiple communication channels	<ul style="list-style-type: none"> • Human rights training 	Human rights protection training was provided to 956 participants, achieving a coverage rate of 98.2%.
Zero tolerance of harassment and bullying	All employees	No sexual harassment complaints	<ul style="list-style-type: none"> • Sexual Harassment Prevention, Complaint, and Disciplinary Measures • Written Statement on the Prevention of Workplace Violence 	<ul style="list-style-type: none"> • Annual Site Risk Assessment on Unlawful Infringements • Labor Risk Assessment Form • Human Rights Due Diligence 	<ul style="list-style-type: none"> • Annual “Prevention Plan for Unlawful Infringements in the Performance of Duties” • Provide multiple communication channels 	<ul style="list-style-type: none"> • Quarterly Workplace Infringement Prevention Committee meetings with records. • Human rights protection training 	Workplace infringement prevention training.
Non-discrimination	Female employees Foreign workers	No discrimination complaints	<ul style="list-style-type: none"> • Employee Recruitment Policy • Anti-Discrimination Management Procedure 	<ul style="list-style-type: none"> • Labor Risk Assessment Form • RBA Internal Audit • Human Rights Due Diligence 	Provide communication and grievance channels	<ul style="list-style-type: none"> • Human rights training • Sexual harassment prevention course 	Human rights protection training and sexual harassment prevention courses: 956 participants, with a coverage rate of 98.2%.
Physical/mental health and work balance	All employees	Activity satisfaction ≥ 90% (score of 4 or above)	Regular Labor-Management Meetings	<ul style="list-style-type: none"> • Employee Participation Rate • Human Rights Due Diligence 	<ul style="list-style-type: none"> • Comprehensive employee facilities • Diverse clubs and employee activities 	Employee Activity Satisfaction Survey	Quarterly labor-management meetings with employees and foreign workers held as scheduled.
A work environment of safety and health	All employees	Zero occupational accidents Zero incidence of occupational diseases	Environment, Health, and Safety (EHS) Policy	<ul style="list-style-type: none"> • High-Risk Workload Group Assessment • Annual Health Check • Annual Musculoskeletal Survey • Human Rights Due Diligence 	Employee training on hazard identification procedure	<ul style="list-style-type: none"> • ISO 45001 management system certification obtained • Regular monitoring of high-risk health groups 	ISO 45001 certified.
Human rights protection by suppliers	Suppliers	100% completion of awareness and training programs	Supplier Code of Conduct	<ul style="list-style-type: none"> • Supplier CSR Questionnaire • Supplier On-Site Audit 	Annual supplier audits to prevent human rights risks	<ul style="list-style-type: none"> • Require suppliers to implement corrective actions on human rights risks • Establish the Supplier Code of Conduct 	Supplier Code of Conduct completion rate: 100%
Responsible mineral sourcing	Suppliers	Survey coverage: Zyxel and Zyxel Networks > 99%, MitraStar > 80%	Conflict Minerals Prohibition Statement	<ul style="list-style-type: none"> • Conflict Minerals Survey 	Conflict Minerals Prohibition Statement published	Require suppliers to provide the Metal Minerals Source Survey Form.	Survey coverage rate: Zyxel 99.96%, Zyxel Networks >99.7%, MitraStar 82%.

D. Workplace Health and Safety

Our employees are our most important asset as well as the foundation of corporate sustainable development. Zyxel Group promises to offer the employees a workplace of well-being, health and safety. Through a diverse range of welfare measures and activities, every employee receives proper care. The physical and mental health of our employees are maintained with comprehensive health management and care in order for them to achieve work-life balance. In accordance with the ISO 45001 Occupational Health and Safety Management System, we provide our employees with a safe work environment and maintain the rights and interests as well as safety of the contractors, thereby building a workplace of well-being, health, and safety.



Goals and achievements

Sustainability Target	Issue	Operational Impact	Strategy	Performance Indicators	2024 Target	2024 Achievement		Future goals			SDGs
								2025 short-term	2027 mid-term	2030 long-term	
Create shared value	Occupational safety and health	The Company can ensure continuous operations and steady growth in a work environment with safety as a priority	Promote safety culture	Occupational safety course coverage	>99.6%	99.77%	V	>99.8%	>99%	100%	
			Implement preventive management	Number of major occupational accidents	0	0	V	0	0	0	

1. Workplace of Well-being: Work-Life Balance

LOHAS Diverse Activities

The company established the Zyxel Group Employee Welfare Committee to create a high-quality work environment and provide benefits beyond legal requirements, supporting employees in achieving work-life balance and overall well-being. An Employee Welfare Committee website has also been set up to provide information and services.

- **Group-wide events:** Family Day and Annual Banquet, with more than 2,400 participants (employees and family members) in 2024.
- **Sports season activities:** About 304 participants in 2024.
- **Arts and cultural activities:** Concerts (Music Corner), art installations, etc.
- **Club activities:** Over 17 clubs (sports, yoga, dance, painting, charity, etc.) subsidized by the committee, with more than 10,000 annual participants.
- **Employee travel:** Shifted from group tours to flexible self-selected travel options.
- **Partner stores:** Corporate agreements with vendors offering discounts on food, clothing, housing, and transportation.
- **Other benefits:** Festival allowances (Dragon Boat Festival, Mid-Autumn Festival, birthdays), emergency assistance, and EAP (Employee Assistance Program).

Freedom of association

The company fully supports the freedom to establish clubs and has continuously provided subsidies each year. Currently, more than 17 active clubs are in operation, covering a wide variety of interests:

- **Ball Games:** Basketball, Volleyball, Badminton, Table Tennis, Golf, Softball
- **Outside Activities:** Swimming
- **Dancing:** Oriental Dance, Hip-Hop Dance Club, Yoga Club, Tai Chi, Fitness Training Club, Aerobics Club
- **Art:** Oil Painting Club, Board Games Club
- **Public service:** Charity Service Club
- **Music:** Folk Guitar Club

In addition to regular internal club activities, employees are also encouraged to engage in external exchanges, such as participating in friendly or official competitions in various sports, as well as showcasing the activities of the Oil Painting, Oriental Dance, Tai Chi, and Guitar clubs outside the company. With a wide variety of clubs to choose from, Zyxel Group Holdings hopes employees can gain new friendships and perspectives through club participation, helping them to balance work and life while enriching their well-being.



Sports Season Activities



Sports Season Activities



35th Anniversary Family Day Event



35th Anniversary Family Day Event

Working place

Zyxel Group aims to promote work-life balance among its employees. We have various welfare facilities, including a gymnasium, recreation room, convenience store, employee cafeteria, coffee bar relaxation area, a lactation room for nursing mothers, and on-site services such as banking and group insurance.

Gymnasium with badminton, volleyball, basketball, billiards, table tennis, aerobics and weight training rooms allow employees to enjoy their favorite sports for better physical and mental health. In 2024, over 20,000 people used the Gymnasium.

Employee Welfare

- **Dining Delights:** The Zyxel Group Holdings cafeteria offers more than seven buffet lines every day. In addition, a coffee lounge provides nearly ten meal options, giving employees a variety of choices each day.
- **Dormitory:** Visiting employees can reside in the dorm until they find a more suitable place to stay in the future.
- **Parking Space:** All employees who commute by car or motorcycle can enjoy free parking spaces. Aside from the motorcycle parking lot, a four-level, underground car park is also provided. Special parking space for pregnant, injure and honor employees.
- **Group Insurance:** Provide group insurance for colleagues and dependents, and arrange insurance company personnel to provide insurance consulting and claim application services for colleagues.

Female-friendly Workplace

Zyxel Group cares about the relationship between the employees and their children as well as the female workers' needs at work and values gender equality at work. Therefore, a work environment offering diversely comprehensive protection and assistance in terms of systems/regulations, welfare measures, and employee facilities is provided.

Discrimination and Harassment Management Standards and Regulations: The "Code of Conduct for Employees" stipulates that the employees must not be discriminated against, harassed or persecuted on the basis of gender, sexual orientation, pregnancy or marital status. The "Regulations for Sexual Harassment Prevention Measures, Reporting and Punishment" specify that the complaints made through the sexual harassment reporting channels and sexual harassment investigations shall be kept under wraps to protect the right to privacy and personality rights of the persons involved.

Flexi time making juggling family and work possible: This system allows the employees to arrive or leave 0.5 hour early or late to meet their needs for picking up their young children, taking care of their families, or dealing with personal matters.

Unpaid Parental Leave and Resumption of Work: The employees may apply for "family leave" when they need to take care of their family members. If the employees have a need to take care of their newborn family members, they may apply for "unpaid parental leave" in accordance with the laws. We make plans for their resumption of work on our own initiative before the end of their unpaid parental leave.

Health Protection of Female Workers: Follow-ups are conducted using the "Maternal Health Protection Survey" to assist the Company and the employees in jointly assessing hazardous health risk factors and relevant protection measures.

Various Benefits for Female Workers: We set up breastfeeding rooms equipped with heartwarming amenities and facilities and provide car and motorcycle parking spaces for expectant mothers to create a work environment friendly to female workers.

Coffee shop



Yoga room



Gymnasium



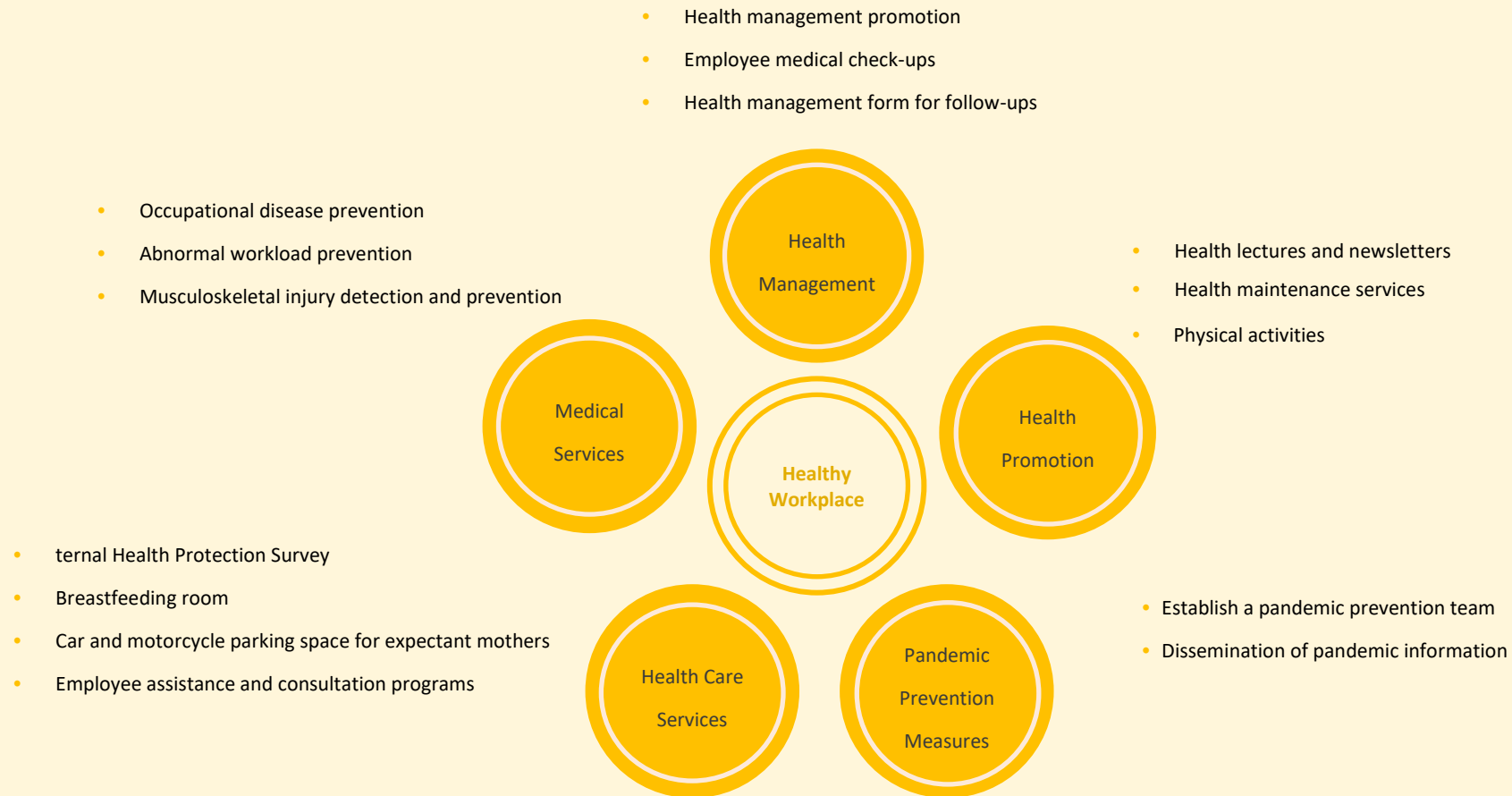
Sports court



2. Healthy Workplace: Health Care for Employees

Zyxel Group cares about the physical and mental health of the employees and aims to boost their performance in all fields and promote their health. In addition to driving the employees' productivity at work, we hope that they can have a better quality of life and achieve work-life balance.

Thanks to our efforts, we were certified as a "Sports Enterprise" and received the "Workplace Health Promotion Certificate" from the government, stiffening our positive stance on the importance of health management for the employees.



Health Management

For general employees, management, and new employees, medical check-ups superior to those required by the laws in terms of examination items and frequency are provided every year. Medical check-ups involving advanced health management and examination items are also available for the management. The production line employees at high risk receive lead ion and ionizing radiation tests and all the examination expenses are paid by the company.

Employee health check-ups: Every year, Zyxel Group Hsinchu site provides regular employee health check-ups that exceed government standards. Physical checkups: according to the result of checkups, follow-up targets are categorized into different levels for the highest level of employee wellbeing - A: Normal, B: recommended to improve with healthy diet and exercise, C: recommended for further physician evaluation. And D: Abnormal, recommended for further treatment.

Except for the arrangement for C and D for further treatment consultation, Zyxel Group also provide one- day sick off and medical subsidy.

Health Management Information Dissemination: We post health-related information on the bulletin board and offer scales and blood pressure monitors for the employees to understand their health status at any time.

Health check hierarchical management results

	A	B	C	D
Zyxel Group	7%	35%	24%	14%
MitraStar	14%	41%	28%	17%
Zyxel Communications	15%	44%	26%	15%
Zyxel Networks	17%	41%	33%	10%
Average	13%	40%	28%	14%

2024 Annual Health Checkup

	Zyxel Group	MitraStar	Zyxel Communications	Zyxel Networks
Number of people	116	849	439	386
Attendance rate	78%	87%	93%	95%

Occupational Disease Prevention

In addition to regular annual health check-ups, physical examinations are also arranged for employees to assess their physical health, which serves as a reference for work arrangements. To prevent occupational diseases, basic health data for workers are established. Examination items include general physical check-ups as well as specific occupational hazard checks (lead, ionizing radiation) conducted in conjunction with the annual health checks.

No records related to occupational diseases have been identified currently.

Abnormal Workload

Every year, processing the high-risk group identification and evaluation, keep tracking the abnormal working load employees and provide them with the health education.

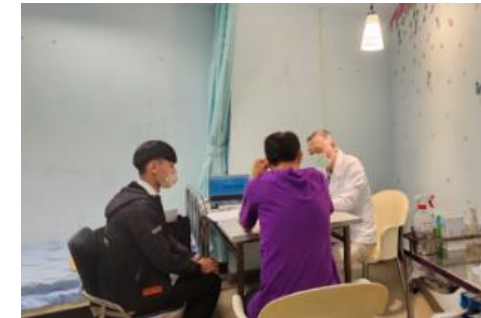
According to the advice of our occupational medicine physician, we conduct follow-ups on and take care of the employees who are identified as having abnormal workload classified as Level 2 or higher, have medium risk of cardiovascular comorbidity, and are under Level D health management according to the "Workload Scale".

Workload Assessment Items

Annual workplace health scale	Overload score	Work pattern
Personal overload score	Monthly overtime hours	-

Musculoskeletal Injuries

Each year, we initiate the 'Employee Musculoskeletal Symptom Survey' to ensure that employees are not suffering from musculoskeletal injuries caused by work-related factors. The questionnaire requires employees to rate their pain for different body parts, and for those who score above four, the cause of the pain is first identified. If the discomfort is determined to be work-related, an occupational specialist, nursing staff, department supervisor, and occupational safety and health management personnel will collaborate to assess the employee's working conditions and implement improvements, ensuring their safety and health in the workplace.



Health check

Multiple Health Promotion Activities

We collaborate with government agencies to organize health promotion activities, such as stress-relieving massages, weight loss activities, cancer prevention seminars, blood -pressure checking, blood donations and vaccination service. The activities effectively help employees to become more conscious about their health. We also prepare the AED training classes to create a health working environment for employees.

Health Promotion Activities

Activity Type	Main Activity
Physical activities	<ul style="list-style-type: none"> Body-moving activities Fast-walking activities
Health maintenance	Massages for stress relief <ul style="list-style-type: none"> Cancer prevention activities Smoking cessation Blood pressure measurement activities Vaccination services Health promotion activities at Mother's Day (measurement of calcaneal bone density/eye pressure/BMI) Away from Metabolic Syndrome: Health Promotion Series Events
Health resources	<ul style="list-style-type: none"> Health lectures AED training courses Health information dissemination



Health lectures



Health lectures

Health Care Center

We have the nurse and doctor to provide the health consultation. Invite the blind masseuse to provide the stress relieving service for employee, and also taken care of disadvantaged people. In 2024, over 2,353 people used this free service and the satisfaction percentage is 95%.

Service:

Medical professionals' consultation service	Medical transfer service
Prevention of professional diseases	Cooperate with the government's four major guidelines for management
Provide employee the consultation service in service hours	

Employee Assistant Program, EAP

An expert team consisting of lawyers and consultants in psychology, financial and health fields provide a round-the-clock counseling service under the Employee Assistant Program (EAP). These experts help employees to overcome physical and mental health issues, legal issues, marriage, education, career management, insurance, tax and finance difficulties, etc. All personal information and records are under strict protection and supervision.

Following the program, various seminars are including tax and living issues are provided. 90% employees are satisfied with the seminars according to the questionnaire. In 2024, a total of 41 cases sought counseling services through the use of the EAP (Employee Assistance Program) employee assistance service program.



Health Protection of Female Workers

Various Benefits for Female Workers

Zyxel Group cares about the relationship between employees and their children and values gender equality at work. Breastfeeding rooms equipped with heartwarming amenities and facilities, including breast milk bags, nursing pads, and emergency hotline phones, are set up and serve as comfortable spaces for our female employees. The employees are provided with satisfaction questionnaires to get their feedback and opinions.

Multiple welfare measures for female employees are also implemented, such as car and motorcycle parking spaces for expectant mothers, to offer a friendly and quality work environment.



Electronic Maternal Health Protection Survey

To effectively enhance the efficiency of health management for our female workers, we, through an online cloud management system, develop a “Female Worker Health Management Assessment Form” for follow-ups to manage the health of the workers in a real-time manner. The occupational health and safety personnel and medical personnel are then conduct job suitability assessments and classification management to smoothly assist the Company and the workers in jointly assessing hazardous health risk factors and relevant protection measures in accordance with the “Regulations of the Maternity Health Protection at the Workplace”.

In 2024, all our female workers were under Level 1 risk management (meaning that their jobs or health issues did not cause harm to them as mothers and their fetuses or babies).

Assessment Procedure:

Starts		Generate a “Maternal Health Protection Assessment Form” through the online information system
Stage 1	Maternal Workers	Fills in the form with the basic information, perceived job limits, and identified risks at work
Stage 2	Department Supervisor	Conducts an assessment to see if work adjustments are required
Stage 3	Occupational Nurse	Issues a health check-up report
Stage 4	Occupational Safety and Health Personnel	Conducts an assessment to determine if the work continuations are to be changed or if control and management measures are to be adopted
Stage 5	Occupational Physician	Assigns a health management level based on the assessment result, gives comprehensive advice on job suitability, and sets a time for the next follow-up
Stage 6	Maternal Workers	Checks the assessment result with the physician

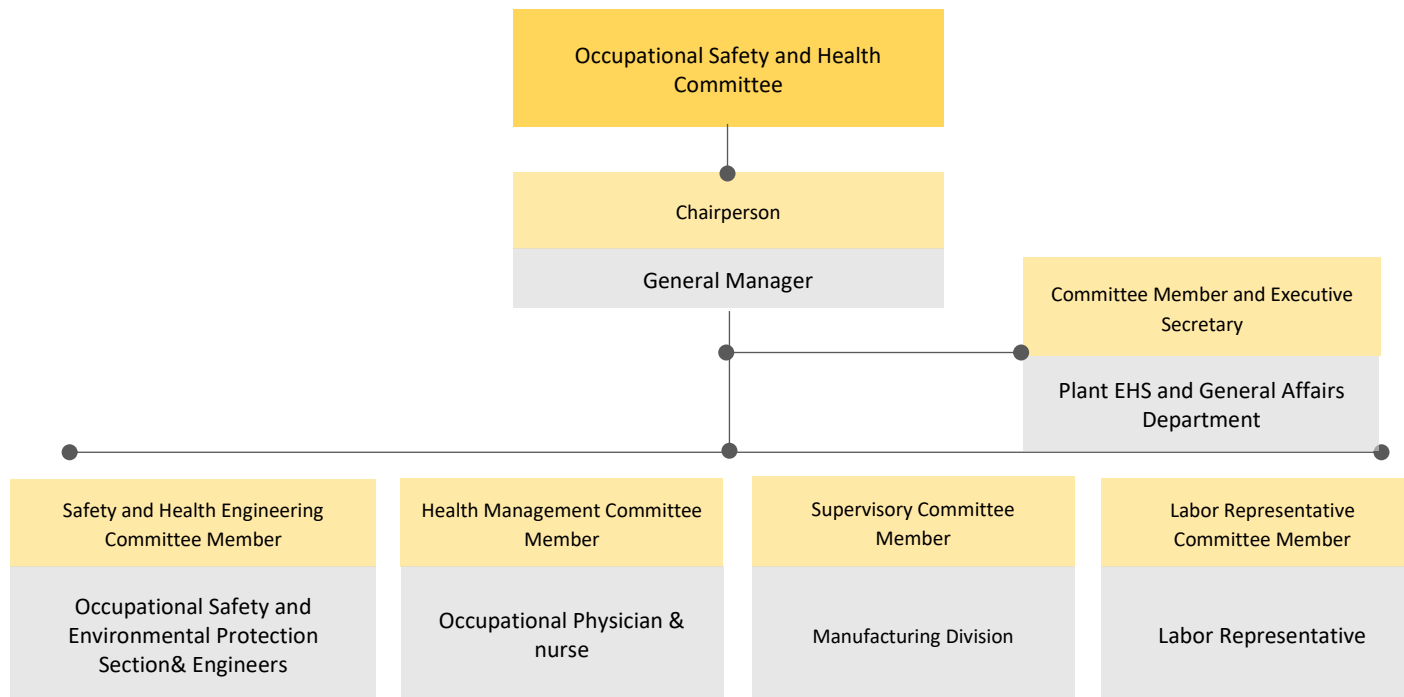
3. Safe Workplace: Workplace Safety and Health

3.1 Occupational Health, Safety, and Environment (HSE) Policy

Zyxel Group Holdings is committed to environmental protection and to ensuring a safe and healthy workplace for all employees, contractors, and individuals under the company's supervision. This commitment is embedded in our Environmental, Health, Safety, and HSF (Hazardous Substance-Free) Policies, which provide the framework for setting, reviewing, and continually improving our HSE objectives. All employees are responsible for complying with these policies and the related manuals.

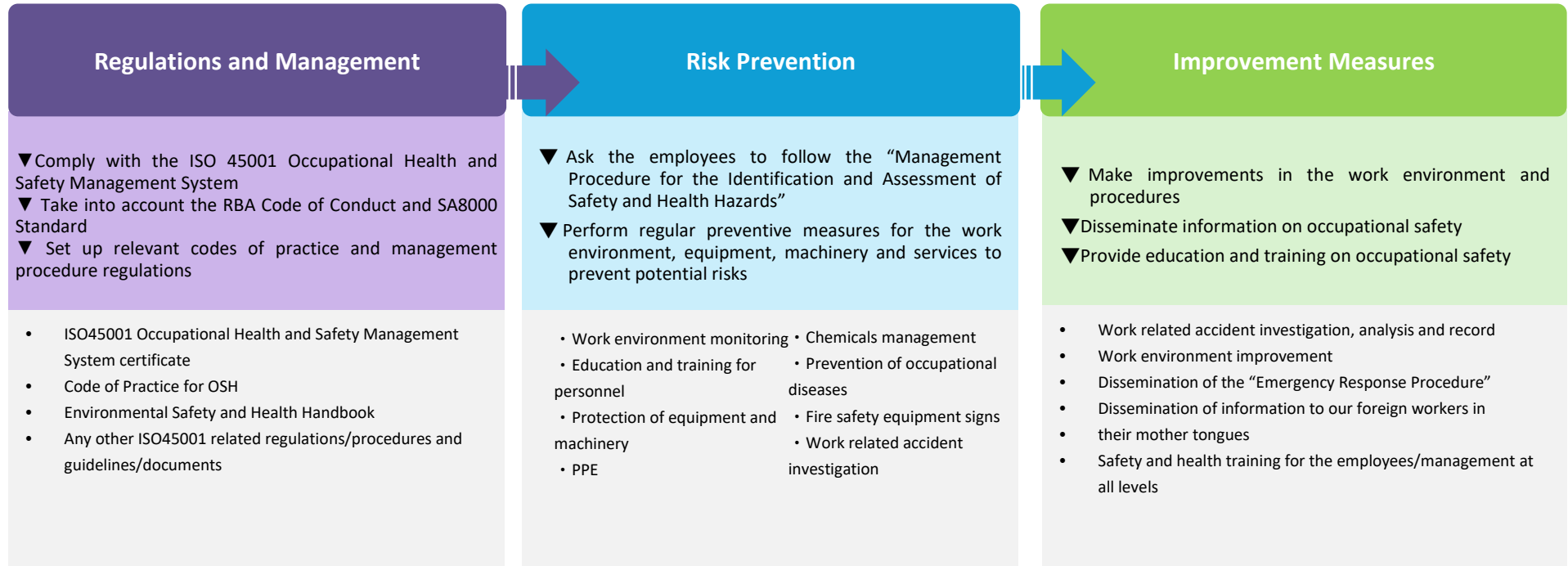
The company complies with all applicable occupational health and safety laws, international standards, voluntary initiatives, and collective agreements. We actively consult with employees and their representatives, where applicable, to strengthen participation in OHS management.

Through systematic integration of quality, environmental, and occupational health and safety management, Zyxel applies the PDCA cycle to build a robust and effective management system. We are committed to continuous improvement in OHS performance by setting priorities, developing action plans, and establishing quantitative targets and indicators to measure progress.



3.2 Safety and Health Management Procedure

Zyxel Group implements environmental safety management in accordance with the “ISO 45001 Occupational Health and Safety Management System”, with the RBA Code of Conduct as well as the SA8000 Standard taken into account. Three sequential implementation guidelines, namely regulations and management, risk assessment, improvement and guidance, are developed to ensure the safety of our employees and contractors in the work environment and achieve the goal of zero incidents.



Step1: Regulations and Management

The subsidiaries of Zyxel Group, MitraStar, MitraStar Wuxi, Zyxel Communications and Zyxel Networks, currently passed the certification audit for the ISO45001 Occupational Health and Safety Management System. We continue to actively ensure their compliance with the latest standard in the country to sharpen their competitive edges.



ISO 45001 Occupational Health and Safety Management System Certificates: MitraStar, Wuxi MitraStar, Zyxel Communications, Zyxel Networks

Step2: Risk Prevention

Environment, Safety, and Health Risk Management

In terms of occupational safety and health risks, preventive measures include workplace environment monitoring, workplace improvements, employee training, machine and equipment protection, personal protective equipment, chemical management, fire safety equipment labeling, occupational accident investigations, risk assessments, and emergency response measures. Through these management mechanisms, we ensure that employees can work in a safe and comfortable environment.

Workplace Environment Monitoring

Physical factors: Noise, illumination.

Chemical factors: Carbon dioxide, organic solvents, lead.

Workplace Environment Improvements

- Implementation of 6S management practices.
- Maintaining a well-ventilated and bright workplace with properly arranged materials.
- Conducting inspections and documentation every six months; any abnormalities are addressed immediately.

Machine and Equipment Protection

Annual inspections of machinery (e.g., forklifts, public facilities) and hazardous equipment (e.g., high-pressure gas devices) are conducted, with hazard labels posted to ensure safety.

Personal Protective Equipment (PPE) Management

Employees potentially exposed to hazardous substances are required to use PPE, with clear labeling and usage instructions.

Temperature, Humidity, Noise, and Vibration Control

- Workplace and warehouse humidity maintained at 35%–60%; component temperature at 15–30°C.
- Accredited agencies conduct semi-annual monitoring; earmuffs or disposable earplugs are provided in designated noise areas.

Chemical Management

- Digital chemical management system with real-time access to updated Safety Data Sheets (SDS).
- “Hazard Communication Program” with training on classification, storage, use, and disposal of hazardous substances.

Firefighting Equipment and Signage

- Firefighting equipment installed per regulations with clear labels.
- Monthly inspections of evacuation signs, extinguishers, and hydrants; evacuation maps and emergency lights installed at key locations.
- Emergency generator ensures sufficient lighting during power outages; annual third-party inspections confirm functionality.



Emergency Response Measures

The “Occupational Safety and Health Hazard Identification and Risk Assessment Procedure” and “Emergency Response Procedure” are reviewed and updated annually or as needed, with employee training provided for compliance.

In addition to semi-annual training on fire extinguishing, reporting, and evacuation, regular emergency drills are conducted for fire, earthquake, and chemical spill scenarios.



Day and night emergency response team

Site	Function Group	Total
MitraStar site	6 Groups: Command Center, Reporting Team, Firefighting Team, Evacuation Guidance Team, Safety Protection Team, and First Aid Team	36 people
Zyxel Communications site	5 Groups: Reporting Team, Firefighting Team, Evacuation Guidance Team, Safety Protection Team, and First Aid Team	33 people

Investigation, analysis and record of occupational accidents

Should any undesired accident happen to our employees or contractors, internal first-aid unit will be dispatched to control the situation while the security unit investigates the possible causes. All department heads will assign engineers to assist the investigation in hope for future prevention and improvement guidelines.

- On the other hand, even false alarms should be elevated monthly through managers, seed personnel in departments and the security unit for the unit to generate reports and to prevent future occurrence.
- Zyxel Group generates monthly statistics of cases, types and causes of employee injury to report on the web for analysis and thus prevention guidelines of frequent accidents
- there's no case of dispute, penalty or indemnification in recent years.
- As required by the law, Zyxel Group reveals its monthly report on occupational accidents.

2024 Occupational injury statistics

	Zyxel Group	MitraStar HsinChu	MitraStar Wuxi	Zyxel Communications	Zyxel Networks	Total
Total work hours(hours)	271,576	1,675,064	3,256,776	925,072	783,568	6,912,056
Number of Occupational Injury Fatalities	0	0	0	0	0	
Number of Severe Occupational Injuries (S.R)	0	0	0	0	0	
Number of Lost-Time Injury Cases	0	0	5	1	1	7
Lost-Time Injury Frequency Rate (LTIFR)	0.00	0.00	1.54	1.08	1.28	1.01
Number of Recordable Occupational Injury Cases	0	0	0	1.09	0	
Recordable Occupational Injury Rate (IR)	0	0	0	0	0	
False Alarm Incident Rate	0	0	0	0	0	
Number of Recordable Occupational Disease Cases	0	0	0	0	0	
Number of Occupational Disease Fatalities						
Lost Days Due to Disabling Injuries			59	11	7	77
Disabling Injury Severity Rate			18.12	11.89	8.93	11.14

Total Occupational Injuries in the Past Four Years

	2021	2022	2023	2024
Total work hours(hours)	6,195,804	6,968,808	7,566,082	6,912,056
Number of Occupational Injury Fatalities	0	0	0	0
Number of Severe Occupational Injuries (S.R)	0	0	0	0
High-Consequence Injury Rate	0	0	0	0
Number of Lost-Time Injury Cases	0	6	6	7
Lost-Time Injury Frequency Rate (LTIFR)	0.86	0.79	0.87	1.01
Number of Recordable Occupational Injury Cases	1	1	1	0
Recordable Occupational Injury Rate	0.16	0.21	0.19	0
Number of Recordable Occupational Disease Cases	0	0	0	0
Employee Data Coverage Rate	77.5%	86.0%	86.3%	85.3%

Note 1: Statistics are limited to Taiwan and China regions.

Note 2: Total Work Hours = Number of employees in that category at the end of the year × Total working days × Daily working hours.

Note 3: Calculate the injury rate (IR) based on 200,000 working hours, where IR = (Total injury cases / Total working hours) × 1,000,000

Note 4: When calculating the quantity and rate of recordable occupational injuries, include the number of fatalities caused by occupational injuries.

Note 5: Only include injuries caused by commuting accidents involving transportation arranged by the organization.

Step3: Improvement

Safety and Health Education Training for Employees and Managers

- Safety and health education and training is required for our employees and management at all levels. According to the regulations, every employee must spend at least three hours for on-the-job in-plant safety and health education and training courses every three years.
- New and transferred employees are required to take a series of pre-service training on environmental safety as well as the ISO45001 management system. For the new employees, the training helps them understand all the systems, regulations, and skills required at work. For the employees transferred to new positions, they may perform tasks only after undergoing relevant training.

Occupational Safety Training Programs

- Environmental, Health and Safety (EHS) Internal Auditor Training
- EHS Training for Indirect/Direct Employees
- EHS Training for Contractors/New Contractors
- Firefighting and Emergency Response Training
- Emergency Evacuation Drill
- EHS and Energy Regulations Seminar
- In-Service Training for Nurses
- Occupational Safety and Health (OSH) Manager Training
- New Hire/In-Service Training for Supervisors
- First Aid Personnel Training
- Organic Solvent Operations Supervisor Training
- Respiratory Protection Training
- Ionizing Radiation Operator Training
- Energy Management Personnel Training
- In-Service Training for Professional Waste Management Technicians

Occupational Safety Education Courses	Number of Trainees	Training Hours	Coverage Rate
General Employees	2,569	1,851	99.77%
New Hires	4,847	112,926	100%
Non-Employee Workers	171	914	100%
Total	7,587	115,691	100%

Dissemination of Information to Foreign Workers in Their Mother Tongues and Education and Training

For our migrant workers, we design occupational health and safety slogans and posters in their mother tongues and provide education and training on the work environment and procedures.



3.3 Contractor Management

Zyxel Group's health and safety policy also covers the activities of contractors in the company, including contract workers, security personnel, catering, and cleaning staff. All contractors are required to observe our "Regulations for Security, Environment, and Hygiene of Contractors". Annual safety and health education and training are provided to contractors, in compliance with human rights-related regulations. Additionally, health care and management are extended to non-employee workers.

Regulations for contractors

- Contractor personnel must receive courses on environment, safety and hygiene topics.
- All on-site operations must be applied first, and contractors will be informed of the possible hazards before entering the work site.
- Supervisors will stay on-site and perform inspections before, during and after the working sessions.
- Application forms must be returned to the safety unit to confirm the completion of jobs.
- Any contractor violating the factory regulations will be penalized and ordered to stop until the condition is corrected.

Contractor training on safety, hygiene, and human rights issues

Each year, contractors receive safety and health education and training to help them understand the risks and hazards in the company's environment and reduce the occurrence of accidents. All security personnel are contracted from reputable professional security companies, selected through rigorous screening and relevant certification training, ensuring the proper execution of security-related tasks. Their education and training for contractors comply with human rights-related regulations.

	Number of required training participants	Number of trainees	Training hours	Coverage rate
contractor	171	171	914	100%

Health follow-ups for contractors

We conduct annual reviews of contractors' health reports and follow up on the health outcomes of non-employee workers, while also promoting care initiatives. At the same time, we provide employees and contractors with diverse meal options, including healthy meals and vegetarian choices.

Occupational injury statistics for contractors

Number of Deaths Due to Occupational Injuries	0
Number of Severe Occupational Injuries	0
Number of Recordable Occupational Injuries	0
False Alarm Incident Rate	0
Number of Deaths Due to Occupational Diseases	0
Number of Recordable Occupational Disease Cases	0



| Community Contribution

- A. Cultivation of Talent
- B. Care for the Community
- C. Environmental Protection



Community Contribution

Upholding the philosophy of giving back to society, Zyxel Group encourages and supports employees to participate in various public welfare activities in response to social needs, internalizing these efforts as part of the company's corporate social responsibility culture.

In addition, to promote environmental awareness, Zyxel Group has long-term commitments to donating to and supporting social organizations, as well as collaborating with government agencies to hold activities focused on ecological conservation, environmental greening, and resource recycling, in order to fulfill corporate responsibility and create a better society and environment.



Strategy: Fulfill civic responsibility



Major Issues: Community contribution



Stakeholders: Community



SDGs

Performance Highlights

Shun-I Chu Zyxel Group Scholarship			
Established 26 years	2024	Sponsored 8	Hosted/Sponsored 8
Donated over NT\$163 million	Donated NT8.94 million, 7 Schools	Talent training activities	Social care campaigns
Benefiting a total of 6,334 students	Benefiting a total of 349 students,		

Philosophies

“Innovation” is one of Zyxel Group’s core values, embedded not only in business practices but also in social engagement. Our senior executives lead by example, motivating employees to actively contribute to community care and social development, creating a ripple effect that broadens positive impact on society and the environment.

Guided by the Zyxel Group Code of Sustainable Practices, we uphold clear commitments to social responsibility, including evaluating the impact of our operations on local communities and, where possible, hiring local talent to strengthen community ties.

Through business activities, in-kind donations, employee volunteerism, and professional public-interest services, Zyxel Group collaborates with civic organizations, charitable foundations, and local governments to promote education and community growth. At our headquarters, we continuously identify schools and organizations in need of support, assess internal resources, and design long-term assistance plans with the vision of building sustainable community care.

Key Themes of Community Engagement



Nurture Talent



Community
Engagement





Environmental Care



Regional
Revitalization

Target and Achievements

Topic	Operational impact	Strategic initiatives	Performance Indicators	2024 goal	2024 achievement		2025 target	2027 mid-term target	2030 long-term target	SDGs
Scholarship donations	Build good relationships with local communities and enhance their corporate images	Provision of scholarships, investment in industry-academia cooperation, and organization and sponsorship of activities related to talent training	Held Every year	Donated every year	Donated NT\$8.94 million. Benefiting a total of 349 students, and 7 schools	V	Donated every year	Annual charitable donations to support talent development programs.		
Talent training activities			Sponsored or held 8 activities		V	Continuously sponsor or co-host related activities annually				
Social care campaigns		Organization and sponsorship of social welfare activities related to environmental protection or carbon reduction in the Company or community	Number of participants per year	Held or sponsored every year	Sponsored or held 8 activities		V	Impacting over 2,000 participants within the company and community	Impacting over 5,000 participants within the company and community	
Environmental protection activities					Held 1 activity	V				



ZYXEL Foundation

Starting from carrying forward the common philosophies of Zyxel Group and the subsidiaries thereof, Zyxel Communications, Zyxel Networks, MitraStar Technology, namely “promoting innovation and start-ups” and “being engaged in social welfare”, Our ZYXEL Foundation actively expands and develops its scope on a continuous basis. With its focus on “encouraging innovation and supporting start-ups”, “training excellent talent”, and “fulfilling social responsibility”, the foundation hopes to serve as the “kindling” to demonstrate the Company’s corporate philosophy of giving back to society to other companies.

More information: <https://foundation.zyxelgroup.com/>



Nuture Talent



Encourage Innovation



Support Entrepreneurship



Implement Social Responsibility

A. Cultivation of Talent

| The Progressive Foundation of Education

Different from non-benefit organizations and foundations carrying corporate names for publicity, the “Progressive Foundation of Education” and “Shun-I Chu and Zyxel Scholarship” were founded privately by Dr. Shun-I Chu, chairman of Zyxel Group, in 1999 for public benefits.

The objectives of Progressive Foundation of Education are public policy research, facilitation of community improvement, and equal education opportunities. Based upon on this groundwork, the Foundation clearly defines its tasks and therefore the plans to sponsor the development of talented people.

- Research consultation and data services related to public affairs, commissioned, or receiving commissions or subsidies for research and promotion of public affairs, policies, and reform-related matters.
- Exchange with relevant domestic and international educational institutions and individuals, enhance international cooperation, and promote research and development of public policies.
- Publish publications related to research and education, public affairs, and policies.
- Establish scholarships to encourage students' pursuit of education.
- Sponsor educational and cultural-related public welfare activities or clubs.
- Sponsor, promote, and organize various activities in natural sciences, humanities and arts, and technology education.
- Reward those who participate in education, culture, science, creative competitions, and excel.
- Other public welfare education matters related to the founding purpose.

| Shun-I Chu Zyxel Group Scholarship

Founded in 1999, the “Shun-I Chu Zyxel Group Scholarship” has supported students for 26 years as of 2024. About 50 students with outstanding academic performances from National Tsing Hua University, National Yang Ming Chiao Tung University, and National Central University benefit from the scholarships every year. It is estimated that the high school scholarships provided for National Chutung Senior High School, National Chunan Senior High School, National Hsinchu Girl's Senior High School, and National Hsinchu Senior High School benefit around 300 students a year.

Since its foundation, the “Shun-I Chu Zyxel Group Scholarship” has awarded over NT\$171 million of scholarships to nearly 6,334 students. In 2024, a total of about NT\$8.84 million of scholarships were awarded to 349 students.

Chairman Shun-I Chu has supported and made a yearly scholarship donation of NT\$200,000 in sponsorship to the Rising Sun Program of National Tsing Hua University since 2016. In 2024, he also sponsored the Spring Foundation Scholarship of National Yang Ming Chiao Tung University to encourage students who are outstanding but economically disadvantaged, which was awarded 1 student.



| Encouraging Innovation and Supporting Start-ups

ZYXEL Foundation hopes to start from schools to encourage students to actively take part in a variety of activities when they are at school. By offering its resources and assistance in support of on-campus lectures and campaigns related to innovation and start-ups, the foundation expects to be the foundation for young students, help them to unlock more of their potential and find their own path.

Date	Speakers	Topics
5/28	Dr. Yung-Fen Hsieh, Founder of Chamcom Technology	Perceptions of Fresh Graduates in the Workplace
12/04	Jun-Hung Cheng, Founder and CEO of Conneid Co., Ltd.	How AI Reshapes Business Models and Innovation



Industry-academia Cooperation

In an attempt to facilitate industry-academia cooperation, enhance the skills and practical capabilities of young talent, and foster corporate R&D potential and talent, the foundation has sponsored and supported the industry-academia cooperation programs about networking and information security to bridge the gap between academia and the industry.

School	Research Project	Period
National Cheng Kung University	FireWallWiz: Scaling Security Samrts	2023-2024

| Fulfillment of Social Responsibility

As a starting point, the foundation fulfills corporate social responsibility by supporting and taking part in public forums, environmental protection activities, and charity and social welfare events in any form. It also encourages putting philosophies with regard to humanistic care, land care, and environmental protection into practice in the hope of using its resources to give back to the society and contribute to social care and development.

In 2024, a total of 16 public forums were held.



Networking Equipment Donation Event

The Zyxel Networks Thailand team supported The Mirror Foundation's "Computers for Children" initiative by donating and installing advanced networking equipment. The team also donated over NT\$100,000 worth of professional equipment to Phra Suthammayantharawithaya School, provided technical support, and hosted career talks to share the latest trends in the networking industry.



B. Care for the Community

We follow the philosophy and footsteps of Dr. Shun-I Chu, our chairman, in giving back to the society. We encourage and support our colleagues to participate in various charitable activities, aligning with social needs, and internalize this as part of our corporate social responsibility culture to effectively contribute to the society.

Zyxel Science Public Welfare Summer Camp

The Zyxel Foundation, in collaboration with IC Voice Radio and Hsuan Chuang University, organized a science-themed public welfare summer camp to provide underprivileged children with the opportunity to engage in positive learning and hands-on science experiences during the summer break. The program accompanied children through interactive scientific activities, fostering early education while creating joyful and enriching childhood memories for disadvantaged and rural students. A total of over 50 teachers and students participated.



Christmas Charity Event

The Zyxel Foundation, together with the Hsinchu City Ai-Xi Community Development Association, continued the "Reindeer Island Tour Project" for the third year. In 2024, donations to Meihua Elementary School in Jianshi Township included dehumidifiers, tablet accessories, and storage bags, improving the learning environment and supporting students' digital education.



Children's Wish Adoption Event

Zyxel Foundation has entered into its third year of adopting Christmas wishes with love.

The foundation invited colleagues to be Santa Clauses and help to fulfill the Christmas wishes of 52 children from Tainan Olive Garden Care Association and Yu-shan Elementary School in Hsinchu County.

By bringing blessings and encouragement, we enjoyed the warm and happy Christmas holiday with the children.



Zyxel Group 35th Anniversary: “Sustainability in Action, Thriving Together”

Sustainability Party × Local Farmers’ Market × Zero-Waste Secondhand Fair

To celebrate the Group’s 35th anniversary, the Company partnered with the National Tsing Hua University Regional Innovation Center to hold the “Sustainability Action Fair.” The event featured 13 local sustainable brands from Hsinchu and promoted green consumption using a digital point system to encourage sustainable lifestyles.

Nearly 1,000 employees participated, raising ESG awareness and strengthening ties with the local community. Employees also brought unused items for exchange or donation, supporting the circular economy and extending resource value.

[\(Video Link\)](#)



2024 Philanthropic Networking Products Donation Initiative

For the third consecutive year, Zyxel Networks and the Zyxel Foundation carried out the Networking Products Donation Initiative. In 2024, the program donated networking products to 33 nonprofit organizations, including the Hondao Senior Citizens Welfare Foundation, the Garden of Hope Foundation, and the Lanyu Lan-En Cultural and Educational Foundation.

In line with the principle of “starting from the local community,” employees volunteered on-site to assist with installation, providing direct support to the daily operations of these organizations.



Since the launch of the initiative in 2022, Zyxel Networks has donated more than 1,000 high-quality networking products, supporting over 100 nonprofit organizations across Taiwan in upgrading their digital infrastructure.

[\(Video link\)](#)

Drink for the Planet – Every Cup Counts for Sustainability

To encourage employees to embrace sustainable lifestyles, the Group launched the “Eco-Points Program” at the Zyxel and MitraStar campuses. Employees who bring their own reusable cups to purchase beverages at on-site cafés can collect points and redeem them for Zyxel co-branded sustainable gifts.

This incentive program raises daily environmental awareness, reduces single-use plastics, and promotes a green consumption culture—helping employees transition toward a low-carbon, sustainable lifestyle through everyday actions.



Collaborating with inBloom – Strengthening CSR Commitments

The Company partnered with Taiwan B Corporation inBloom to launch a limited-edition commemorative bag that integrates subsidiary brand colors with sustainable design concepts, supporting local innovative brands.

inBloom practices eco-friendly and socially responsible production through non-toxic dyeing, natural fabrics, and handcrafting. This collaboration reflects the Group’s commitment to sustainability while promoting a spirit of solidarity and shared growth with local communities in Taiwan.



C. Environmental Protection

Biodiversity – Conservation Adoption Program

The Zyxel Foundation adopted the Tree Fern Conservation Ark at the Nature Valley Environmental Trust, supporting the recovery of endangered tree ferns and advancing environmental sustainability.

In partnership with the Trust, the Foundation also organized eco-experiences—including carbon storage measurement, ecological tours, and carbon footprint simulations—enabling employees to appreciate natural and cultural assets while strengthening ESG awareness and the value of coexistence with nature.



Earth Day – Zyxel Group Sustainability Series

Zyxel Group organized a series of sustainability activities, including a biodiversity tour at MitraStar Park, a DIY moss ball workshop, sustainability-themed talks, and a reusable cup campaign. These activities enhanced employees' awareness of environmental issues, encouraged sustainable action, and integrated eco-friendly practices into daily life.



Donghaiku Mud Playground – Agri-Food Education

The Zyxel Foundation partnered with National Tsing Hua University and the Taiwan Fenghezi Association to promote innovative agri-food education through community-based experiential activities. The Mud Playground at Donghaiku encouraged Hsinchu residents to connect with the land, fostering awareness of sustainable living and food systems.



Appendix

Index of GRI Standard Indicators

Statement of use:	Zyxel Group Holdings Co., Ltd. reports in accordance with the GRI Standards for the period from January 1, 2024 to December 31, 2024, with the information referenced in the GRI Content Index.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector	N/A

GRI Sustainability Reporting Standards 2021

Code	Disclosure	Chapter in the Report	Page	Description
GRI 2: General Disclosures 2021				
1. The Organization and its Reporting Practices				
2-1.	Organizational details	About Zyxel Group	6	For details, please refer to the company's <u>2023 annual report</u>
2-2.	Entities included in the organization's sustainability reporting	About this Report Corporate Governance: B. Financial Performance	3 34	
2-3	Reporting period, frequency and contact point	About this Report	3	from Jan. 1, 2023 to Dec. 31, 2023.
2-4	Restatements of information	About this Report	3	No significant changes.
2-5	External assurance	About this Report	3	
2. Activities and Workers				
2-6	Activities, value chain and other business relationships	About Zyxel Group Value Chain: B. Supplier Sustainability Management	6 55	The number of employees did not fluctuate significantly from the previous reporting period.
2-7	Employees	Friendly Workplace: A. Diversity and inclusion Recruitment	106	
2-8	Workers who are not employees	Friendly Workplace: A. Diversity and inclusion Recruitment	106	No significant changes from the previous reporting period.
3. Governance				
2-9	Governance structure and composition	Corporate Governance: A. Governance Structure	28	
2-10	Nomination and selection of the highest governance body	Corporate Governance: A. Governance Structure	28	
2-11	Chair of the highest governance body	Corporate Governance: A. Governance Structure	28	
2-12	Role of the highest governance body in overseeing impact management	Corporate Governance: A. Governance Structure	28	
2-13	Delegation of responsibility for impact management	Corporate Governance: A. Governance Structure	28	
2-14	Role of the highest governance body in sustainability reporting	Sustainable Management: B. Sustainability Committee	15	
2-15	Conflicts of interest	Corporate Governance: C. Business Ethics	36	
2-16	Communication of critical concerns	Corporate Governance: A. Governance Structure	28	
2-17	Collective knowledge of the highest governance body	Corporate Governance: A. Governance Structure	28	
2-18	Evaluation of the performance of the highest governance body	Corporate Governance: A. Governance Structure	28	
2-19	Remuneration policies	Friendly Workplace: A. Diversity and inclusion Recruitment	106	

Code	Disclosure	Chapter in the Report	Page	Description
2-20	Process to determine remuneration	Corporate Governance: A. Governance Structure	28	
2-21	Annual total compensation ratio	-	106	not disclosed
4. Strategy, Policies and Practices				
2-22	Statement on sustainable development strategy	Sustainable Management: A. Sustainability Management Framework	14	
2-23	Policy commitments	Sustainable Management: A. Sustainability Management Framework	14	The policy commitments are also published on the Zyxel group website: link
2-24	Embedding policy commitments	Corporate Governance: C. Business Ethics	36	
2-25	Processes to remediate negative impacts	Corporate Governance: C. Business Ethics	36	
2-26	Mechanisms for seeking advice and raising concerns	Corporate Governance: C. Business Ethics Sustainable Management: D. Stakeholder Communication	17	
2-27	Compliance with laws and regulations	Corporate Governance: C. Business Ethics	36	
2-28	Membership associations	Corporate Governance: B. Financial Performance	36	
5. Stakeholder Engagement				
2-29	Approach to stakeholder engagement	Sustainable Management: D. Stakeholder Communication	17	
2-30	Collective bargaining agreements			The relationship between the company and labor is harmonious, and there is no need to organize a labor union, but the company attaches great importance to labor rights and holds regular labor-management meetings
GRI 3 : Material Topics 2021				
3-1	Process to determine material topics	Sustainable Management: D. Stakeholder Communication	17	
3-2	List of material topics	Sustainable Management: D. Stakeholder Communication	17	
3-3	Management of material topics	Sustainable Management: D. Stakeholder Communication	17	

Specific Topics Disclosures

No.	Disclosure Item	Material Topic	Relevant Report Section	Page	Explanation
GRI 200 Series: Economic topics					
GRI 201: Economic Performance					
201-1	Direct economic value generated and distributed	Corporate Governance Talent attraction & retention	Corporate Governance: B. Financial Performance	33	
			Friendly Workplace: A. Diversity and inclusion Recruitment	106	
201-2	Financial implications and other risks and opportunities due to climate change	Climate Strategy	Environment Protection: A. Climate Change	72	
			Appendix: TCFD Index	161	
201-3	Defined benefit plan obligations and other retirement plans	Talent attraction & retention	Friendly Workplace: A. Diversity and inclusion Recruitment	106	
GRI 203 : Indirect Economic Impacts					
203-1	Infrastructure investments and services supported	Social Participation	Community Contribution: A. Cultivation of Talent	148	
203-2	Significant indirect economic impacts	Social Participation	-	-	no significant events

GRI 204: Procurement Practices

204-1	Proportion of spending on local suppliers	Sustainable supplier	-	57	
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GRI 205 : Anti-corruption

205-1	Operations assessed for risks related to corruption	Business Ethics	Corporate Governance: C. Business Ethics	36	
205-2	Communication and training about anti-corruption policies and procedures	Business Ethics	Corporate Governance: C. Business Ethics	36	
205-3	Confirmed incidents of corruption and actions taken	Business Ethics	Corporate Governance: C. Business Ethics	36	There were no reported cases of corruption during the year.

GRI 206 : Anti-competitive Behavior

206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Business Ethics	Corporate Governance: C. Business Ethics	36	no events occurred
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GRI 207 : Tax

207-1	Approach to tax	Corporate Governance	Corporate Governance: B. Financial Performance	33	
207-2	Tax governance, control, and risk management	Corporate Governance	Corporate Governance: B. Financial Performance	33	

Environmental

GRI 302 : Energy

302-1	Energy consumption within the organization	Energy Management	Environment Protection: B. Energy Management	83	The MitraStar and Zyxel sites did not use renewable energy, so the consumption was not disclosed this year.
302-3	Energy intensity	Energy Management	Environment Protection: B. Energy Management	83	
302-4	Reduction of energy consumption	Energy Management	Environment Protection: B. Energy Management	83	

GRI 303 : Water and Effluents (2018)

303-3	Water withdrawal		Environment Protection: C. Water Management	85	
303-4	Water discharge		Environment Protection: C. Water Management	85	
303-5	Water consumption		Environment Protection: C. Water Management	85	

GRI 304 : Biodiversity

304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		Sustainable Environment: VI. Biodiversity	90	none
304-2	Significant impacts of activities, products, and services on biodiversity		Sustainable Environment: VI. Biodiversity	90	none
304-3	Habitats protected or restored		Sustainable Environment: VI. Biodiversity	90	none

GRI 305 : Emissions

305-1	Direct (Scope 1) GHG emissions	Climate strategy	Environment Protection: A. Climate Change	72	
305-2	Energy indirect (Scope 2) GHG emissions	Climate strategy	Environment Protection: A. Climate Change	72	
305-3	Other indirect (Scope 3) GHG emissions	Climate strategy	Environment Protection: A. Climate Change	72	
305-4	GHG emissions intensity	Climate strategy	Environment Protection: A. Climate Change	72	
305-6	Emissions of ozone-depleting substances (ODS)	Climate strategy	Environment Protection: F. Ecological Preservation	89	
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant emissions	Climate strategy	Environment Protection: F. Ecological Preservation	89	

GRI 306 : Waste (2020)

306-1	Waste generation and significant waste-related impacts		Environment Protection: D. Waste Management	87	
306-2	Management of significant waste-related impacts		Environment Protection: D. Waste Management	87	
306-3	Waste generated		Environment Protection: D. Waste Management	87	

GRI 308 : Supplier Environmental Assessment

308-2	Negative environmental impacts in the supply chain and actions taken	Sustainable supplier	Value Chain: B. Supplier Sustainability Management	55	
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Social

GRI 401 : Employment

401-1	New employee hires and employee turnover	Talent attraction & retention	Friendly Workplace: A. Diversity and inclusion Recruitment	106	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Talent attraction & retention Occupational Safety & Health	Friendly Workplace: A. Diversity and inclusion Recruitment Friendly Workplace: B. Human Capital Development	106 132	
401-3	Parental leave	Talent attraction & retention	Friendly Workplace: A. Diversity and inclusion Recruitment	106	

GRI 402 : Labor/Management Relations

402-1	Minimum notice periods regarding operational changes	Human Rights Management	Friendly Workplace: C. Human Rights Management	122	Zyxel Group Holdings complies with the Labor Standards Act on advance notice of termination
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GRI 403 : Occupational Health and Safety

403-1	Occupational health and safety management system	Occupational Safety & Health	Friendly Workplace: D. Workplace Health & Safety	131	
403-2	Hazard identification, risk assessment, and incident investigation	Occupational Safety & Health	Friendly Workplace: D. Workplace Health & Safety	131	
403-3	Occupational health services	Occupational Safety & Health	Friendly Workplace: D. Workplace Health & Safety	131	
403-4	Worker participation, consultation, and communication on occupational health and safety	Occupational Safety & Health	Friendly Workplace: D. Workplace Health & Safety	131	
403-5	Worker training on occupational health and safety	Occupational Safety & Health	Friendly Workplace: D. Workplace Health & Safety	131	
403-6	Promotion of worker health	Occupational Safety & Health	Friendly Workplace: D. Workplace Health & Safety	131	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational Safety & Health	Friendly Workplace: D. Workplace Health & Safety	131	
403-8	Workers covered by an occupational health and safety management system	Occupational Safety & Health	Friendly Workplace: D. Workplace Health & Safety	131	
403-9	Work-related injuries	Occupational Safety & Health	Friendly Workplace: D. Workplace Health & Safety	131	
403-10	Work-related injuries	Occupational Safety & Health	Friendly Workplace: D. Workplace Health & Safety	131	

GRI 404 : Training and Education

404-1	Average hours of training per year per employee	Talent cultivation & development	Friendly Workplace: B. Human Capital Development	114	
404-2	Programs for upgrading employee skills and transition assistance programs	Talent cultivation & development	Friendly Workplace: B. Human Capital Development	114	

404-3	Programs for upgrading employee skills and transition assistance programs	Talent cultivation & development	Friendly Workplace: B. Human Capital Development	114	
GRI 405 : Diversity and Equal Opportunity					
405-1	Diversity of governance bodies and employees	Corporate Governance Talent cultivation & development	Corporate Governance: A. Governance Structure Friendly Workplace: A. Diversity and inclusion Recruitment	28 106	
GRI 406 : Non-discrimination					
406-1	Incidents of discrimination and corrective actions taken	Human Rights Management	Friendly Workplace: C. Human Rights Management	122	
GRI 407 : Freedom of Association and Collective Bargaining					
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Human Rights Management	Friendly Workplace: C. Human Rights Management	122	
GRI 408 : Child Labor					
408-1	Operations and suppliers at significant risk for incidents of child labor	Sustainable supplier Human Rights Management	Value Chain: B. Supplier Sustainability Management Friendly Workplace: C. Human Rights Management	55 122	no events occurred
GRI 409 : Forced or Compulsory Labor					
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Human Rights Management	Value Chain: B. Supplier Sustainability Management Friendly Workplace: C. Human Rights Management	55 122	no events occurred
GRI 410: Security Practices					
410-1	Security personnel trained in human rights policies or procedures	Occupational Safety & Health	Friendly Workplace: D. Workplace Health & Safety	131	
GRI 414 : Supplier Social Assessment					
414-2	Negative social impacts in the supply chain and actions taken	Sustainable supplier	Value Chain: B. Supplier Sustainability Management	55	no events occurred
GRI 415: Public Policy					
415-1	Political contributions	Corporate Governance	-	33	No political contributions
GRI 416 : Customer Health and Safety					
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Green Product	-	-	no events occurred
GRI 417: Marketing and Labeling					
417-1	Requirements for product and service information and labeling	Green Product		-	
417-2	Incidents of non-compliance concerning product and service information and labeling	Green Product		-	In the reporting year, there were no incidents of non-compliance concerning product and service information and labeling.
417-3	Incidents of non-compliance concerning marketing communications	Green Product		-	In the reporting year, there were no incidents of non-compliance concerning marketing communications.
GRI 418 : Customer Privacy					
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Information Security Management Customer Relations	Corporate Governance: E. Information Security Management Value Chain: A. Customer Relations	46 53	no events occurred

Appendix II: SASB Standards Index

Electronic Manufacturing Services & Original Design Manufacturing (MitraStar Technology & Wuxi MitraStar)

Topic/ Code	Accounting Metric	Category	Major Issue	Chapter	Page	Summary																		
Accounting Metrics																								
Water Management																								
TC-ES140a.1	(1) Total water withdrawal and (2) total water consumption, as a percentage in regions with high or extremely high baseline water stress.	Quantitative		Environment Protection: C. Water Management	85	According to the assessment of the Water Aqueduct developed by the World Resources Institute (WRI), MitraStar is located in a low-pressure area (<10%).																		
Waste Management																								
TC-ES150a.1	Amount of hazardous waste from manufacturing, percentage recycled	Quantitative		Environment protection D. Waste Management	87	In 2024, hazardous waste generated from processes amounted to 0.37 metric tons, of which 99.81% was recycled.																		
Labor Practices																								
TC-ES310a.1	(1) Number of work stoppages and (2) total days idle	Quantitative	Human rights management	-	-	In 2024, the recordable work-related injury rate was 0, and the near-miss incident rate was also 0.																		
Labor Conditions																								
TC-ES-320a.1	(1) Total recordable incident rate (TRIR) and (2) near miss frequency rate (NMFR) for (a) direct employees and (b) contract employees	Quantitative	Occupational Safety & Health	Friendly Workplace: D. Workplace Health & Safety	131																			
TC-ES-320a.2	Percentage of the company's operations and Tier-1 suppliers that have undergone an RBA VAP audit or an equivalent audit program, for (a) all company sites/suppliers and (b) high-risk company sites/suppliers.	Quantitative	Sustainable supplier	Value Chain: B. Supplier Sustainability Management	55	<table><tr><td colspan="2"></td><td>MitraStar</td><td>Tier-1 suppliers</td></tr><tr><td rowspan="2">Percentage that have undergone an RBA VAP audit or an equivalent audit program</td><td>All company facilities</td><td>100%</td><td>70%</td></tr><tr><td>High-Risk Facilities</td><td>NA</td><td>NA</td></tr></table>			MitraStar	Tier-1 suppliers	Percentage that have undergone an RBA VAP audit or an equivalent audit program	All company facilities	100%	70%	High-Risk Facilities	NA	NA							
		MitraStar	Tier-1 suppliers																					
Percentage that have undergone an RBA VAP audit or an equivalent audit program	All company facilities	100%	70%																					
	High-Risk Facilities	NA	NA																					
TC-ES-320a.3	(1) Non-conformance rate with the RBA Validated Audit Process (VAP) or equivalent and (2) associated corrective action rate for (a) priority non-conformances and (b) other non-conformances, broken down for (i) the entity's facilities and (ii) the entity's Tier 1 supplier facilities	Quantitative	Sustainable supplier	Value Chain: B. Supplier Sustainability Management	55	<table><tr><td colspan="2"></td><td>MitraStar</td><td>Tier-1 suppliers</td></tr><tr><td rowspan="2">Percentage of RBA VAP audits or equivalent audit programs with non-compliance findings.</td><td>Priority findings</td><td>NA</td><td>NA</td></tr><tr><td>Other findings</td><td>5%</td><td>20%</td></tr><tr><td rowspan="2">Percentage of corrective action plans completed following RBA VAP audits or equivalent audit programs.</td><td>Priority findings</td><td>NA</td><td>NA</td></tr><tr><td>Other findings</td><td>5%</td><td>20%</td></tr></table>			MitraStar	Tier-1 suppliers	Percentage of RBA VAP audits or equivalent audit programs with non-compliance findings.	Priority findings	NA	NA	Other findings	5%	20%	Percentage of corrective action plans completed following RBA VAP audits or equivalent audit programs.	Priority findings	NA	NA	Other findings	5%	20%
		MitraStar	Tier-1 suppliers																					
Percentage of RBA VAP audits or equivalent audit programs with non-compliance findings.	Priority findings	NA	NA																					
	Other findings	5%	20%																					
Percentage of corrective action plans completed following RBA VAP audits or equivalent audit programs.	Priority findings	NA	NA																					
	Other findings	5%	20%																					
Product Lifecycle Management																								
TC-ES-410a.1	Weight of end-of-life products and e-waste recovered, percentage recycled	Quantitative	Green product	-	-	Not applicable, MitraStar products belong to ODM, product recycling is handled by customers, so it is no statistical data.																		

Materials Sourcing

TC-ES440a.1	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	Sustainable supplier	Value Chain: B. Supplier Sustainability Management	55	Because MitraStar is a ODM manufacturer, the materials used are mainly based on customer requirements, and the substances that will be used cannot be confirmed, so it is impossible to fully define and manage our key substances.
TC-ES-000.A	Number of manufacturing facilities	Quantitative		About Zyxel Group	6	There are two manufacturing sites, one is Hsinchu factory in Taiwan and the other is Wuxi factory in China.
TC-ES-000.B	Area of manufacturing facilities	Quantitative		-	-	Hsinchu: 8,950 square meters, Wuxi: 37,196 square meters
TC-ES-000.C	Number of employees	Quantitative		About Zyxel Group	6	2,510 employees

Hardware Standard (Zyxel Communication, Zyxel Networks)

Topic/Code	Accounting Metric	Category	Major Issue	Chapter	Page	Summary
Product Security						
TC-HW-230a.1	Description of approach to identifying and addressing data security risks in products	Discussion and Analysis	Information Security	Corporate Governance: E. Information Security	47	
Employee Diversity & Inclusion						
TC-HW-330a.1	Percentage of gender representation for (1) management, (2) technical staff, and (3) all other employees	Quantitative	Talent attraction & retention	Friendly Workplace: A. Diversity and Inclusion Recruitment	108	
Product Lifecycle Management						
TC-HW-410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	Quantitative	Green product	-	-	The regulations on the control of environmentally hazardous substances are regularly updated. This standard has covered the list of declarable controlled substances listed in IEC 62474, but is limited by the fact that some materials cannot be replaced by current industrial technology or a trace number of residues remains in it. product, so it will not be disclosed for the time being.
TC-HW-410a.2	Percentage of eligible products, by revenue, meeting the requirements for EPEAT registration or equivalent	Quantitative	Green product	-	-	Investigation will be carried out according to customer requirements
TC-HW-410a.3	Percentage of eligible products, by revenue, meeting ENERGY STAR® criteria	Quantitative	Green product	-	-	Investigation will be carried out according to customer requirements
TC-HW-410a.4	Weight of end-of-life products and e-waste recovered, percentage recycled	Quantitative	Green product	-	-	Total weight of scrapped products recycled: 813.56 metric tons; Recycling rate: 24%.
Supply Chain Management						
TC-HW-430a.1	Percentage of Tier 1 supplier facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by (a) all facilities and (b) high-risk facilities	Quantitative	Sustainable supplier	Value Chain: B. Supplier Sustainability Management	57	In 2024, the RBA audit implementation rate for Zyxel and Zyxel Networks suppliers was (a) 100% for all suppliers and (b) 100% for high-risk suppliers.
TC-HW-430a.2	Tier 1 suppliers' (1) non-conformance rate with the RBA Validated Audit Process (VAP) or equivalent, and (2) associated corrective action rate for (a) priority non-conformances and (b) other non-conformances	Quantitative	Sustainable supplier	Value Chain: B. Supplier Sustainability Management	57	In 2024, suppliers of Zyxel and Zyxel Networks achieved a 100% pass rate in RBA audits.
Materials Sourcing						
TC-HW-440a.1	Description of the management of risks associated with the use of critical materials	Discussion and Analysis		Value Chain: B. Supplier Sustainability Management	57	Follow the analysis of the top ten key materials issued by the competent authority in Taiwan, conflict minerals are defined as the company's key substances, and conflict mineral management methods are formulated for risk control.
Activity Metrics						
TC-HW-000.A	Number of units produced by product category	Quantitative		-	-	Business secrets not disclosed
TC-HW-000.B	Area of manufacturing facilities	Quantitative		-	-	Two companies have no manufacturing facilities
TC-HW-000.C	Percentage of production from owned facilities	Quantitative		-	-	Our company is a brand operator and does not have its own manufacturing facilities.

Appendix III: TCFD Index


Aspect/Disclosures	Major issue	Chapter	Page
Governance			29
			74
The board's oversight of climate-related risks and opportunities	Corporate Governance Climate Strategy	Corporate Governance: A. Governance Structure Environment Protection: A. Climate Change	16 40 74
Management's role in assessing and managing climate-related risks and opportunities	Corporate Governance Climate Strategy	Sustainable Management: B. Sustainable Committee Corporate Governance: D. Risk Management Environment Protection: A. Climate Change	
Strategy			40
			74
The climate-related risks and opportunities the organization has identified over the short, medium, and long term	Climate Strategy	Corporate Governance: D. Risk Management Environment Protection: A. Climate Change	40 74
The impact of climate related risks and opportunities on the organization's businesses, strategy, and financial planning.	Climate Strategy	Corporate Governance: D. Risk Management Environment Protection: A. Climate Change	40 74
The resilience of the organization's strategy, taking into consideration different climate-related scenarios	Climate Strategy	Corporate Governance: D. Risk Management Environment Protection: A. Climate Change	
Risk Management			40
			74
The organization's processes for identifying and assessing climate-related risks.	Climate Strategy	Corporate Governance: D. Risk Management Environment Protection: A. Climate Change	40 74
The organization's processes for managing climate-related risks.	Climate Strategy	Corporate Governance: D. Risk Management Environment Protection: A. Climate Change	40 74
How processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	Climate Strategy	Corporate Governance: D. Risk Management Environment Protection: A. Climate Change	
Metrics and Targets			74
Metrics used by the organization to assess climate related risks and opportunities in line with its strategy and risk management process.	Climate Strategy	Environment Protection: A. Climate Change	74 85
Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	Climate Strategy Energy Management	Environment Protection: A. Climate Change Environment Protection: B. Energy Management	87
Targets used by the organization to manage climate-related risks and opportunities and performance against targets.	Climate Strategy Energy Management	Environment Protection: C. Water Management	29 74

Appendix IV: Taiwan Stock Exchange (TWSE) Sustainability Disclosure Indicators – Telecommunications and Networking Industry

No.	Indicator	Indicator Category	Annual Disclosure Status	Unit	Remarks
1	Total energy consumption, share of purchased electricity, and proportion of renewable energy used.	Quantitative	Total energy consumption: 107,008 GJ Percentage of purchased electricity: 100% Renewable energy usage rate: 0%	Gigajoules (GJ) Percentage (%)	The company plans to start using renewable energy in 2025
2	Total water withdrawal and total water consumption	Quantitative	Total water withdrawal: 151.98 m ³ Total water consumption: 40.88 m ³	Cubic meters (m ³)	
3	Weight of hazardous waste generated and recycling rate	Quantitative	0.37 metric tons Recycling rate: 99.81%	Metric tons (t) Percentage (%)	
4	Disclosure of the types, number of cases, and rates of occupational injuries.	Quantitative	Type of occupational injuries: Lost-time injuries + Recordable work-related injuries Number of cases: 7 Rate: 0.3%	Rate (%) Quantity	Occupational injury rate (%) = (Number of occupational injuries ÷ Total employees) × 100
5	Disclosure of product life cycle management, including the weight of scrapped products and electronic waste, as well as the recycling rate.	Quantitative	Total weight of scrapped products recycled: 813.56 metric tons; Recycling rate: 24%.	Metric tons (t) Percentage (%)	
6	Disclosure of risk management practices associated with the use of critical materials.	Qualitative description	Report p.99: Sustainable Raw Materials	Not applicable (N/A)	
7	Total monetary value of legal actions resulting from anti-competitive behavior.	Quantitative	0	NT\$	
8	Production output of major products, by product category.	Quantitative	Broadband equipment: 12,530 (thousand units)	Varies by product type	

Appendix V: Third Party Assurance Statement

GRI Standards & AA1000, SASB, TCFD Standard



Independent Assurance Statement

ZYXEL GROUP CORPORATION 2024 SUSTAINABILITY REPORT

The AFNOR GROUP was established in 1926. We are the National Standardization Body of France, a permanent council member in ISO and one of the leading certification bodies in the world. This assurance work was carried out by AFNOR ASIA LTD., a subsidiary of AFNOR GROUP. All the members of the verification team have professional backgrounds and have accepted AA1000 AS, AFAQ 26000, ISO 9001, ISO 14001, ISO 14064, ISO 45001, ISO 50001, and other sustainability-related international standard trainings. All assigned verifiers have been approved as the lead auditors or verifiers. AFNOR ASIA LTD. (hereinafter referred to as AFNOR ASIA) and ZYXEL GROUP CORPORATION (hereinafter referred to as ZYXEL GROUP) are independent entities. Except for the contents described in this independent assurance statement, AFNOR ASIA is not involved in the preparation process of the sustainability report of ZYXEL GROUP.

RESPONSIBILITIES



ZYXEL GROUP is responsible for reporting its economic, environmental, and social operating activities and performance in Taiwan and overseas operating locations in its sustainability report (hereinafter referred to as "the Report") in accordance with the declared sustainability reporting standards.

AFNOR ASIA is responsible for providing an independent assurance statement to ZYXEL GROUP and its stakeholders in accordance with the described scope and method. This statement is for ZYXEL GROUP use only and is not responsible for any other purpose.

SCOPE AND CRITERIA

The assurance scope of the agreement between ZYXEL GROUP and AFNOR ASIA includes:

- The scope of assurance operation is consistent with the scope disclosed in the "ZYXEL GROUP CORPORATION 2024 SUSTAINABILITY REPORT".
- AFNOR ASIA performs assurance operation according to the Type 2 assurance of the AA1000 assurance standard (v3), reviewing and evaluating ZYXEL GROUP's compliance with the AA1000 AccountAbility Principles (2018), and presenting findings and conclusions on the reliability and quality of specific performance information.
- The assurance operation includes reviewing and evaluating ZYXEL GROUP's materiality assessment and relevant processes, systems and controls and available performance information, as well as compliance with the following reporting criteria:
 - GRI Standards
 - Task Force on Climate-related Financial Disclosures
 - Sustainability Accounting Standards Board Standards



METHODOLOGY

- The Report is reported in accordance with the GRI Standards, and the content of the Report is reviewed for compliance with the GRI Standards for general disclosure and specific topic disclosure.
- The verification team interviewed relevant personnel to confirm the communication and response mechanism for stakeholders, the materiality assessment and the decision-making process for material topics, but did not directly contact external stakeholders.
- All documents, data and information related to the preparation of the Report were verified by the verification team through interviews with relevant personnel.
- The process of reviewing organizational outputs, collecting and managing qualitative and quantitative data disclosed in reports based on a sampling plan.
- By interviewing the responsible personnel of each group, examining and reviewing the relevant documents, materials and information, the verification team evaluated the reasonableness of the sources of supporting materials and evidence for the contents of the Report.

CONCLUSION

- AA1000 Accountability Principles**

Inclusivity



ZYXEL GROUP has identified and maintained communication channels for stakeholders to participate in various material topics. Through various channels, the organization holds regular and irregular meetings to understand stakeholders' concerns about the organization's sustainable development issues and demonstrate the organization's concrete practice of the inclusivity principle.

Materiality

ZYXEL GROUP has established a materiality decision-making process based on the Double Materiality Analysis principle and enterprise risk management risk assessment mechanism. Through questionnaires and incorporating opinions from internal and external experts, 13 material topics were identified. The Report discloses the strategies, management plans, and goals developed for each materiality topic, demonstrating the organization's concrete implementation of the materiality principle.

Responsiveness

ZYXEL GROUP has disclosed economic, governance, environmental, and social information through Report and its official website, allowing stakeholders to understand the company's governance and management performance. In the future, the organization can continue to integrate relevant reporting requirements, regularly monitoring, measuring, and compiling information through internal management system to disclose comprehensive and valuable information to respond to stakeholder and reporting requirements.



Impact

ZYXEL GROUP has disclosed the results and quantified performance of numerous sustainability initiatives in the Report, demonstrating its management of the economic, environmental, and social impacts of its operations. In the future, the organization can continue to provide resources to measure, monitor and set targets for impacts in a quantitative or monetized manner to enhance the awareness and understanding of internal and external stakeholders and assist in corporate management and improvement.

Findings and conclusions concerning the reliability and quality of specified performance information

Based on the review results, a sample verification was conducted on key performance information in the Report, including greenhouse gas emissions, energy usage, water resource management, waste management, employee structure data, supplier management performance, R&D investment amounts, sustainable products and other specific performance information. After verification, it was confirmed that the data sources were reliable, the calculation methods were appropriate, and they were consistent with the relevant supporting documents.

- Global Reporting Initiative Sustainability Reporting Standards**



Based on the results of the review, it is confirmed that the general disclosures, specific topic disclosures, and material topics management disclosures in the Report have complied with the requirements of the GRI Standards. In the future, the organization can continue to compile and disclose the performance of each operating location in accordance with reporting requirements, and provide sufficient and complete sustainability information to stakeholders.

- Task Force on Climate-related Financial Disclosures**

Based on the review results, the Report discloses four major aspects: governance, strategy, risk management, and metrics and targets, based on the TCFD framework. It explains the impact of climate change on operations and the response measures, and overall meets the TCFD's basic requirements. In the future, the organization can continue to update climate scenario analysis to assess and develop response strategies and reveal the potential financial impact of response actions.

- Sustainability Accounting Standards Board Standards**

Based on the results of the review, the Report has disclosed relevant information based on the Sustainability disclosure topics & metrics and activity metrics of the SASB Standards. In the future, the organization can continue to collect and report information by across departments and levels within the organization in accordance with the SASB Standards that providing valuable information to investors.




ASSURANCE OPINION

AFNOR ASIA has developed a complete sustainability reporting assurance standard based on the verification guidelines of the AA1000 Assurance Standard (v3) and the GRI Standards. Based on the sufficient evidence provided by ZYXEL GROUP and the facts seen during on-site verification, we adhere to the principle of fairness and issue a statement on the global sustainability reporting standards followed by the organization. In our opinion, the information and data presented in the Report by ZYXEL GROUP provides a fair and balanced representation. We believe the focuses on economic, social, and environmental indicators in ZYXEL GROUP in 2024 are well represented.

ASSURANCE LEVEL

In accordance with the AA1000 Assurance Standard (v3), we verified this assurance statement corresponding to a moderate level. The scope and methods are as described in this statement.


For and on behalf of AFNOR :




Dr. August Tsai
The Director for Certification and Assessment
Aug 04 2025

Verification team: Chi Huang Chen (Lead Verifier), Chung Pen Chen (Verifier), Ming Tsai Hsiao (Verifier), Chia Ling Wang (Verifier).

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