MOXA®

Sustainability Report
2023

Contents

Sustainability Performance and Recognition

1 Corporate Governance

- **> USD 395+ Million**
  Steady global revenue growth for 3 consecutive years
- **> 9,500+ Training Hours**
  Moxa Code of Conduct Workshop with 48 sessions attended by 1,350 employees.
- **The World's First**
  IEC 62443-4-2 certification for industrial secure routers.

2 Innovation and Service

- **> 4,500 Employees**
  Participated in 27 sessions of R&D sharing events in 2023, encouraging innovative exchanges.
- **68%**
  Growth rate in patents granted, and continued to encourage patent applications to protect R&D achievements.
- **97.9%**
  Technical service satisfaction survey, continuous improvement to enhance customer satisfaction.

3 Green Manufacturing and Design

- **↓ 23%**
  GHG emissions are reduced by 23% compared to 2022.
- **↓ 13.4%**
  Through active waste reduction and recycling management measures, the waste output decreased by 13.4% compared to 2022.
- **↓ 56%**
  Packaging optimization for 27 best-selling products reduced raw material carbon emissions per package by approximately 52-56%.

4 Responsible Procurement

- **4 Subcontractors**
  Assisted and guided 4 subcontractors in conducting greenhouse gas inventories, all of which passed ISO 14064-1 external verification.
- **The First time**
  Conducted a sustainability risk survey and established a collaboration plan to assist medium- and high-risk suppliers in addressing and improving deficiencies.
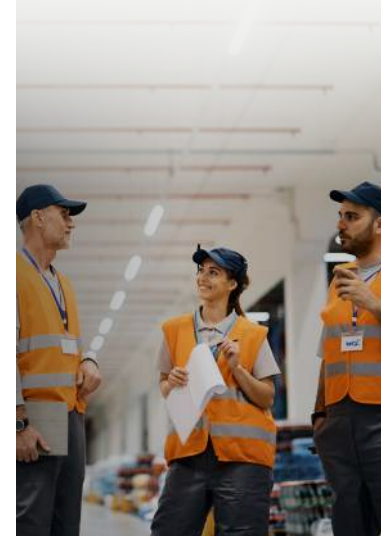
5 Inclusive Workplace and Society

- **0 Occupational Accidents**
  No occupational or safety accidents occurred inside or outside the factory, and no regulations related to occupational safety and health were violated.
- **The First**
  Recognized as a Healthy Workplace, conducted 20 CPR+AED first-aid training sessions, and received the AED Safe Workplace certification in New Taipei City, Taiwan.
- **93%**
  The retention rate for new employees within two years reached 93%, an increase of 5% compared to 2022.
- **>3,800 People Benefited**
  Provided employees with volunteer leaves, facilitating 105 volunteer events in 2023 that benefited over 3,800 individuals.

Featured Stories 1

Carbon Reduction Actions and Move Towards A Net Zero Future

As the impact of climate change has become increasingly severe in recent years, international research consistently points out that human activities are a major driving force behind these changes over the past few centuries. For instance, the Intergovernmental Panel on Climate Change (IPCC) assessment reports highlight that greenhouse gas emissions are a primary driver of climate change. The international community recognizes the need to take action to address this global challenge. International agreements such as the United Nations Framework Convention on Climate Change and the Paris Agreement explicitly require countries to report their greenhouse gas emissions data and set corresponding carbon reduction targets and action plans. Moxa is committed to responding to the global trend of carbon reduction by implementing carbon reduction actions and engaging in collaboration and knowledge sharing across the entire value chain. Through mutual learning and sharing best practices, Moxa aims to contribute to achieving global greenhouse gas reduction goals.

As a leading provider in the Industrial Internet of Things, Moxa is committed not only to delivering high-quality products and continuous innovation but also to responsible management and minimizing environmental impact from operations and products. Therefore, Moxa plans two major approaches: "Promoting Low-Carbon Operations" and "Providing Low-Carbon Products", to drive and implement carbon reduction actions and track carbon reduction results.

Promoting Low-Carbon Operations

As an important hub of the value chain, Moxa not only manages its own operations, but also collaborates in areas such as raw material procurement, product design, supply production, and transportation management to promote low-carbon operations together with supply chain partners. Moxa takes the following three major measures: Step by step, we will gradually move towards the goal of net-zero emissions.

STEP 1. GHG Inventory Check

GHG inventory is an important foundation for understanding, monitoring, and reducing greenhouse gas emissions. In 2023, Moxa officially followed ISO 14064-1 to promote GHG inventory operations. In addition to focusing on Category 1 and Category 2 greenhouse gas emissions in Moxa's offices and production plants Gas emissions have been extended to the upstream and downstream supply chain Categories 3 to 6 inventory checks, including the carbon footprint investigation of raw material production, transportation route tracking, and emissions derived from outsourced production processes. For the results of Moxa's 2023 greenhouse gas inventory, please refer to 3.1.1 GHG and Energy Management.

ISO 14064 Certificate

Moxa's 2023 greenhouse gas inventory results show that 98.07% of greenhouse gas emissions come from Scope 3 (other indirect emissions). Moxa also leverages its influence by inviting its four major subcontractors to complete greenhouse gas inventory processes and assist them in obtaining third-party verification statements in 2023. We look forward to promoting mutual learning and sharing carbon reduction potential and carbon reduction measures through cooperation and knowledge sharing. In the future, Moxa will gradually promote carbon reduction awareness throughout the supply chain. This includes promoting the GHG inventory of raw material suppliers and communicating carbon reduction goals and actions. By increasing raw material suppliers' understanding of climate change and greenhouse gas emissions, we can also promote the implementation of carbon reduction actions in the overall supply chain and work together with supply chain partners to move towards net zero emissions.

STEP 2. Setting Science-Based Target (SBT) In Carbon Reduction

To demonstrate its commitment to net-zero emissions, Moxa pledged to the Science-Based Targets initiative (SBTi) in December 2023. Following SBTi's methodology for setting carbon reduction targets, Moxa completed the process of establishing these targets. Using 2022 as the base year, Moxa has set science-based targets (SBTs) for near-term (2034) and net-zero emissions (2050) that align with the global warming limit of 1.5° C. These targets are planned to be submitted to the Science-Based Targets initiative (SBTi) for review in 2024, ensuring Moxa's carbon reduction path is consistent with international trends and achieving the 2050 net-zero emissions goal.

Moxa SBT Goal Setting

The Base Year (2022) → Near-Term Target (by 2034) → Net-Zero Target (by 2050)

| Scope 1 and 2 | Reduce absolute emissions by **60%** | Reduce absolute emissions by **90%** |
| Scope 3 | Reduce emissions by **65%** per million NT dollars of gross profit | Reduce emissions by **97%** per million NT dollars of gross profit |
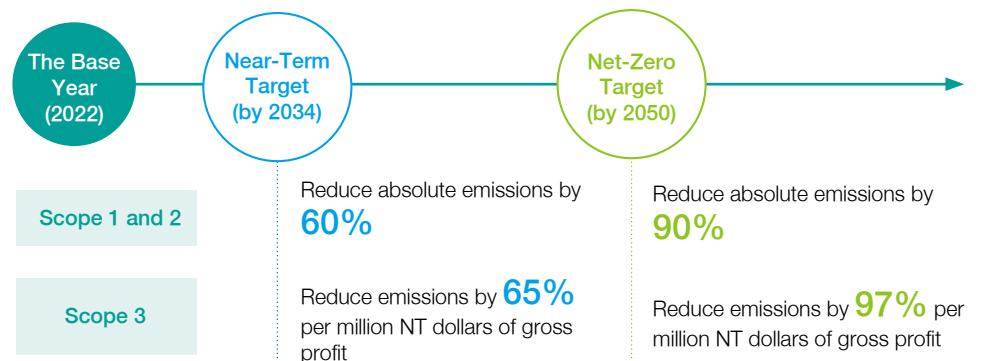
STEP 3. Carbon Reduction Strategy Setting and Implementation

To achieve the goal of net-zero emissions by 2050, Moxa identified three major sources of emissions based on the results of greenhouse gas emissions, including " purchased goods and services", "use of sold products ", and " electricity consumption ". Moxa has proposed three key strategies and nine low-carbon actions to move towards net-zero emissions. Moxa is committed to gradually achieving the goal of net-zero emissions by 2050 through the following three key strategies: " Low-Carbon Operation Practices ", " Low-carbon product design", and " Low-Carbon Value Chain Promotion ".

Key Strategies	Low-Carbon Actions	Description
Low Carbon Operation Practices	Energy Efficiency Improvement	Monitoring the energy-consuming equipment in the manufacturing plant, conduct regular energy efficiency assessments and analysis for the characteristics and energy consumption of high-energy-consuming equipment, implement energy efficiency adjustment and improvement accordingly, and replace outdated low-efficiency equipment with new, high-efficiency models.
	Energy Usage Management Optimization	Examine the energy usage behaviors of manufacturing plants and office areas, such as the operation behavior of equipment and processes, energy efficiency of office lighting and air conditioners, etc., to optimize energy use management and improvement, to reduce equipment operating time, frequent switching of equipment, etc. status, and ineffective use of lighting and air conditioning.
	Using Renewable Energy	Assess Moxa's future electricity demand, set renewable energy goals, and plan renewable energy procurement operations.
Low-Carbon Product Design	Develop Low Energy-Consumption Products	Analyze product energy consumption distribution, establish product energy consumption design criteria, incorporate energy saving considerations when developing new products, and evaluate old products for low energy consumption to enhance the energy efficiency of products.
	Develop Low-Carbon Material	Based on the product material composition, examine the feasibility of product lightweighting and the use of recycled or recyclable materials. Additionally, assess the possibility of replacing high carbon emission raw materials with lower carbon emission alternatives.
	Green Packaging Design	We select environmentally friendly packaging materials and buffering materials according to the product packaging design parameters, reduce the amount of packaging materials or buffering materials, and optimize the packaging volume to reduce the burden of product packaging on the environment.
	Product Modular Design	Promote the modular design of products, reduce the types of materials and the number of parts, and make parts and components easier to recycle and reuse to increase the proportion of product waste recycling, and reduce the carbon emissions from product waste disposal.
Low-Carbon Value Chain Promotion	Promoting Carbon Reduction in Supply Chain	By collaborating with subcontractors and high carbon emission suppliers to provide guidance for them in carbon reduction goal setting and GHG inventory, assist in the promotion of carbon reduction actions, and regularly track the carbon reduction performance of the supply chain.
	Reducing Logistics Carbon Emissions	Through the improvement of packaging efficiency, unnecessary space in packaging is reduced to enhance transportation efficiency. We also inventory the vehicles and fuels used by logistics operators and select logistics operators with carbon reduction plans or carbon emissions reduction plans.

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Providing Low-Carbon Products

As the awareness of sustainable consumption rises around the world, it symbolizes the changes in consumer needs and the carbon reduction transformation of international trade. This trend has brought attention to the carbon emissions of products. The support of relevant policies and laws, such as the EU carbon border tax adjustment mechanism, will promote low-carbon emissions to gradually become an important consideration for customers when purchasing products. Providing low-carbon products is crucial for Moxa to enhance its competitive edge and assist customers in reducing their carbon footprint. Understanding the carbon footprint of products is the initial step in this effort. By calculating and analyzing the carbon emissions generated throughout the entire product lifecycle, Moxa can identify high-carbon activities and influencing factors. This information is used to plan carbon reduction actions, ultimately lowering the overall carbon footprint of the products.

Product carbon footprint refers to the total amount of greenhouse gas emissions generated during the entire life cycle of a product, including raw material procurement, manufacturing, transportation, use, and disposal or recycling. However, quantifying and disclosing product carbon footprint is a difficult task. Difficult and tedious tasks, including the carbon emission data collection and availability of the supply chain, as well as the cost and resource investment. Therefore, in 2023, Moxa established a Product Carbon Footprint Assessment Task Force, following the ISO 14067 standard to create a product carbon footprint assessment model. The task force selected the EDS-4000/G4000 series managed switches (hereafter referred to as the EDS-4000/G4000 series) to initiate the quantification of the product carbon footprint. This process involved tracking emissions from the purchase and transportation of each raw material listed in the product bill of materials, conducting greenhouse gas inventories at Moxa and subcontractors, and tracking emissions for each product's transportation to ports and countries. Additionally, the task force collected actual product energy consumption data and local electricity emission factors in sales countries, as well as information on the final product's disposal and recycling. With internal cross-departmental communication and cooperation with the supply chain and subcontractors, Moxa successfully established the product carbon footprint assessment model and completed the associated database.

The EDS-4000/G4000 series, one of Moxa's core products in recent years, serves the primary function of providing data integration and exchange in OT/IT fields. It meets the operational stability requirements of industrial control equipment and is adaptable to external environmental temperatures. The series includes a total of 68 models, differentiated by working voltage, number and type of network ports, transmission speed, and temperature tolerance.

Each model features its own unique bill of materials and functional modules, resulting in differences in energy consumption, weight, and hardware composition, all of which impact the carbon footprint at various stages. Despite these challenges, Moxa successfully calculated the carbon footprint for all 68 product models, grouping them into 17 specifications based on product characteristics and voltage ranges. These calculations were further verified by an external third party.

ISO 14067-EDS-4000/G4000 series product certificates

Based on the results of this product carbon footprint assessment, the "EDS-4012 series HS-Multi-Function_LV" from the "EDS-4000/G4000 series" has a lifecycle emission of 561.86 kg CO2e The "product using stage" phase is the primary source of emissions, accounting for 90.86% of the total product carbon footprint. This is followed by the "raw material procurement" and "production manufacturing" phases, which account for 7.31% and 1.07% of the total product carbon footprint, respectively. Therefore, promoting low-carbon product design and reducing emissions in the supply chain are critical directions for Moxa's carbon reduction efforts.

EDS-4012 Series HS-Multi-Function_LV Products Carbon Footprint

Product Carbon Footprint 561.86kg CO₂e

Manufacturing 1.07%
Downstream Transportation 0.57%
Product Using 90.86%
Raw Material Procurement 7.31%
Upstream Transportation 0.02%
Product Disposal 0.16%
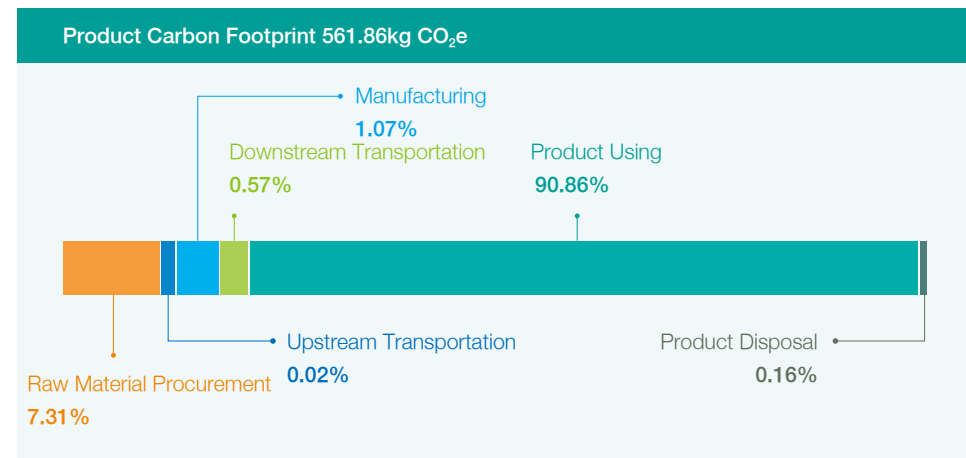
The challenge of climate change requires collective effort and cooperation from the international community. As a leading brand in industrial communication equipment, Moxa aims to align with the expectations of the international community and its customers, serving as a crucial hub in the value chain. Moxa is committed to promoting three key low-carbon strategies, encouraging and integrating carbon reduction actions among its supply chain partners. By disclosing environmental information about its products, Moxa enables customers and consumers to better understand its practical carbon reduction efforts. Working together with the value chain towards net-zero, Moxa enhances its brand value and market competitiveness.

Featured Stories 2

Implementation of Moxa Reliability Engineering

In today's industrial automation sector, characterized by diverse applications, ongoing developments, and harsh external environmental challenges, customer demands for industrial control networking equipment have evolved beyond just technical specifications. The primary challenge now lies in ensuring long-term product reliability. As a leading provider in industrial IoT, Moxa understands the critical importance of its products in this sector. Moxa's vision for product reliability engineering is to "provide long-term, reliable networking equipment designed for the harsh environments of our customers industrial control applications." Through the application of reliability engineering and scientific reliability management methods, Moxa aims to enhance the reliability of its products, thereby increasing customer satisfaction and brand loyalty. The goal is to make product reliability a core competitive advantage for Moxa.

In 2020, Moxa established the Reliability Management Department, launching a series of reliability engineering activities. In 2021, the company recruited analysis engineers with backgrounds in materials and electrical engineering to enhance Moxa's expertise in reliability engineering. In 2022, Moxa established the "Reliability and Failure Analysis Laboratory," developing professional analysis capabilities aimed at improving product reliability through expert failure analysis. That same year, Moxa introduced the Design for Reliability (DfR) framework, providing a structured process for the continued development of long-lasting, reliable products.

Moxa 's Design for Reliability Framework

Telcordia MTBF database Component reliability report

| Reliability requirement (Design life) | → | Top event selection | → | Function Block Diagram (FBD) | → | Fault Tree Analysis (FTA) | → | Reliability Block Diagram (RBD) | → | System reliability calculation (1st version) |

| Reliability Component of Importance (RCI) | → | Failure Modes and Effect Analysis (FMEA) (from RCI) | → | Reliability planning | → | Reliability testing | → | System reliability calculation (Final version) |

Standard, Paper, Experience and Stress Boundary by Simulation

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In addition to announcing the DfR framework, Moxa has further defined the five major actions for Moxa's reliability engineering:

Cultivating Reliability Engineering	Failure Analysis	System Reliability Prediction	Reliability Management of Key Component Suppliers	Component Reliability Engineering and Validation
Externally, continue to publish professional technical documents on reliability engineering in international journals and conferences. Internally, release a quarterly reliability journal to showcase Moxa's expertise in reliability engineering.	Utilize scientific failure analysis methods to obtain evidence and identify the root causes of failures. This approach helps in detecting potential product failure modes and issues, allowing for the implementation of preventive maintenance before they significantly impact system performance.	When conducting product reliability predictions, Moxa utilizes relevant international standards for computing failure rates and evaluating the expected lifespan of products, specifically referring to IEC 61709. This approach provides a deeper understanding of system reliability levels. Additionally, by developing failure physics methods and modeling the failure mechanisms of components, Moxa assesses system reliability and lifespan based on the actual reliability and lifespan of the components.	Collaborate with key component suppliers to define component reliability specifications and assist them in establishing a component reliability management system.	Moxa uses high-standard components and adheres to relevant industrial standards and certification requirements. The company gains in-depth knowledge of the components and their applications, understanding their reliability and lifespan across different scenarios.

In 2023, Moxa established a project team to draft Moxa's Reliability White Paper, which is scheduled for public release in the fourth quarter of 2024. This initiative aims to enhance understanding among employees and customers of Moxa's commitment to practical applications of reliability engineering. Simultaneously, Moxa has collaborated with academic institutions such as Chang Gung University, Tunghai University, and National Changhua University of Education, as well as other corporate partners, to establish the Taiwan Reliability Technology Development Association. This association integrates theory and practice to promote the development and application of reliability technology, foster domestic and international community exchanges, and cultivate professional talent to benefit society.

Moxa is dedicated to continuously improving its expertise and capabilities in reliability engineering. By fostering a strong internal culture of reliability engineering, Moxa aims to enhance product reliability and meet customer expectations and trust in Moxa products. This commitment underpins Moxa's sustainable development and ongoing pursuit of excellence in reliability engineering.

2023 Moxa Reliability Science Forum

2023 Moxa Global Distributor Summit - Reliability Lab Tour

2022 Establishment of the Reliability and Failure Analysis Laboratory

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Featured Stories 3

Award and Recognition: Achievers 50 / HR Asia

Moxa GEB Members and the Achiever 50 Award Trophy

From its inception, Moxa Inc. has been driven by the determination of its five founders to establish a "truly employee-owned company." This vision entailed creating an organization that prioritizes long-term value, originates from its employees, and fosters an environment of participation, shared ownership, and belonging. For the past 36 years, Moxa has been steadfast in its commitment to building a people-centric workplace culture. In 2023, Moxa has been received the Global 50 Most Engaged Workplaces Award from Achiever and Best Companies to Work For from HR Asia.

Achievers 50 Award

For the 11th consecutive year, Achievers has been honoring companies globally through 50 Most Engaged Workplaces Award, selected through a blind judging process by a panel of 11 professionals from diverse backgrounds in a rigorous evaluation. Moreover, among the 50 final winners, only 8 will be chosen as 'Elite' award winners for outstanding recognition in a specific category. In 2023, Moxa stood out among global enterprises and was recognized not only as one of the 50 Most Engaged Workplaces winner, but also received one of the Elite 8 Awards that recognizes outstanding Corporate Responsibility and Performance Excellence Award. This distinction makes Moxa stand out as the only Asia-headquartered multinational company among the winners.These awards recognize Moxa's results-oriented approach and the collective efforts of its employees in promoting employee engagement, building consensus, and fostering a strong sense of identity and solid organizational governance.

HR Asia Awards

In 2023, a total of 366 companies in Taiwan competed for the HR Asia Best Companies to Work for in Asia - Taiwan awards, with more than 30,000 employees from participating companies completing the survey. After a rigorous selection process involving employee questionnaires, fact-checking, and interviews, Moxa emerged from the highly competitive field and was recognized as one of the HR Asia Best Companies to Work for in Asia. Additionally, Moxa received the HR Asia Diversity, Equity, and Inclusion Award, underscoring the company's exceptional efforts in creating a great workplace that promotes diversity, equality, and inclusion.

Putting People First and Emphasizing Employee Growth

Flexible Working Hours, the 3-2 Campaign

Moxa's flexible work system helps employees manage unexpected personal situations, fostering work-life coordination and a healthier workplace. In 2022, the company expanded its flexible working hours from 8-10 am to 7-11 am to better accommodate employees' daily needs. During the COVID-19 pandemic in 2020, Moxa immediately implemented a "Work from Home" policy, prioritizing the physical and mental well-being of its employees. As the pandemic situation has eased, Moxa has aligned with the "3-2 Campaign" to promote a hybrid work model. Under this approach, employees work in the office three days a week and have the autonomy to work from a location of their choice two days per week. This hybrid arrangement demonstrates Moxa's high level of trust in its employees while preserving opportunities for face-to-face communication. It also allows employees to maintain effective team collaboration and communication.

Diverse Career Development Approaches

Moxa offers a range of diverse career development opportunities, including professional and management positions, to help employees find roles that align with their personal characteristics and aspirations. In 2023, the Company introduced a new Career Framework that covers 8 different career fields, enabling each employee to clearly define their responsibilities and adaptively develop with expectations to achieve shared goals between the individual and the Company.

Encourage Participation, Listen to Employees' Voices, and Create a Sense of Belonging

Global People Voice Survey

Moxa regularly engages third-party research agencies to conduct anonymous global surveys, providing employees with a platform to voice their opinions sincerely. The company discloses the survey results transparently and proactively implements improvements based on the feedback. In 2022, the global People Voice Survey achieved a 90% participation rate, reflecting the true state of affairs across Moxa's locations and demonstrating employees' strong trust in the company. By openly sharing the survey results with employees and committing to take corrective measures, Moxa's open communication approach gives employees the right and opportunity to participate in shaping the company's future development. This process also provides the management team with valuable insights to build a better working environment.

Corporate Culture Activities

Moxa has established a dedicated department responsible for planning and executing a diverse platform of company activities to foster a strong sense of community and belonging among its employees. This specialized team organizes five different types of sports events, family days, and year-end parties annually to promote continuous engagement and camaraderie in the work environment. By inviting employees to bring their family members to these events, Moxa provides an opportunity for family members to directly experience the company's vibrant culture. This helps to further encourage employee engagement, as they see their loved ones immersed in and appreciating the positive work environment.

In addition, employees have independently established dozens of clubs covering a wide range of interests, including but not limited to badminton, basketball, swimming, yoga, flower arrangement, painting, meditation, and so on. These cross-departmental clubs encourage employees to connect, exchange ideas, and enhance collaboration beyond their day-to-day work.

Diversified, Inclusive and Friendly Workplace

Mutual respect is one of Moxa's core values. The company encourages employees to respect their differences, learn from their experiences, and embrace mistakes as opportunities for trial and innovation. In addition, Moxa actively promotes a welcoming workplace culture founded on principles of diversity, equality, and inclusiveness. This commitment extends to accepting the diverse identities of employee family members in corporate cultural activities. Moxa expanded its definition of "spouse" to include "close partners," reflecting a more inclusive understanding of family relationships. Moxa's efforts to foster a diverse, equitable, and inclusive work environment were recognized in 2023 when the company received the HR Asia Diversity, Equity, and Inclusion Award. This accolade demonstrates Moxa's successful implementation of policies and practices in diversity, equality and inclusion.

Building Influence and Fulfilling Corporate Responsibility

Moxa Talent Farming System

The world is grappling with talent shortages and the need for sustainable development. Recognizing the importance of talent development since its early days, Moxa has proactively addressed this challenge. In 2023, the company further integrated its resources to launch a comprehensive young talent development program, Farming Program, modeled after the Major League Baseball (MLB) recruitment system. This initiative expanded the program beyond business departments to encompass 8 additional job categories across the Moxa Group. With Taiwan as the foundation, Moxa's talent development efforts focus on cultivating outstanding industrial expertise and enabling the company's continued growth in international markets. This strategic approach not only helps Moxa maintain a competitive talent pool within the industry, but also injects new energy into Taiwan's industrial communication sector.

Volunteerism Culture

In 2003, Moxa established the "Moxa Foundation" to embody the company's core value of "putting people first, from the bottom of heart" to support employee volunteerism as a key pillar of its corporate responsibility efforts. The company encourages employees to participate in volunteer services that contribute to community development, with a particular focus on education, environmental protection, and supporting children in remote areas. Moxa provides participants with 4 days of paid leave per year and free transportation to volunteer activities. Employees who actively engage in volunteer work are also given special praise and recognition. By harnessing the collective strengths of its workforce, Moxa aims to drive positive change in the environment and society. Through education and knowledge sharing, Moxa seeks to inspire more people to be good stewards of the environment and contribute to the greater good of society.

Featured Stories 4

Moxa Talent Farming System: Cultivating Taiwan's Industrial Automation Professionals for Talent Sustainability

In view of the OT industrial nature and the long product life cycle, development of related professionals and demand for skills is relatively scarce in the labor market. To support the medium and long-term talent needs of the group, Moxa has established the "Moxa Farming System," hereafter referred to as Moxa Farming. Based on the capabilities required now and in the future, this system systematically recruits and trains young potential talents to become professionals capable of stepping into the "major leagues" in the future. The program focuses on identifying young potential talents of exceptional learning willingness and abilities, with less than 3 years of work experience (including recent graduates). Moxa adopts rigorous assessment system and process in qualifying suitable candidates to join Moxa. Moxa Farming trainees receive comprehensive general and professional technical trainings.

In 2023, we launched a total of eight Moxa Farming programs, recruited 40 potential talents to join Moxa, in the functions of global marketing, product management, manufacturing engineering, supply chain management, technical service, IT, and product marketing. The program achieved 90% of its original recruitment target, with a 100% on-boarding rate and a 100% retention rate for the year. Currently, the training passing rate stands at 100%.

A photo of Moxa Farming trainees and GEBs in 2023

Integrate Internal and External Resources and Design Modular Training Base on Positions

Moxa integrates the knowledge of internal experts and external consultants resources to provide systematic training for talents of different positions, including solid technical skills development, business expertise training, customer service mindset training, and career supporting mechanism. Through virtual and physical training, hands-on practice, visits, and workshops, we accelerate trainees' learning. This enables them to grow with professional knowledge and practical application skills in industrial automation, providing integrated and secure solutions for customers. At the same time, they are prepared to stand on the international stage and become key influencers in the next generation of communication standards.

Training capability module of Moxa Farming System

Professional technical skills
Comprehensive professional technical training through effective step-by-step design

Customer service skills
Customer service mindset and skills, with simulation and exercises

Business skill expertise
Focus on essential business skills to ensure seamless application in the workplace

Career supporting mechanism
Provide a friendly and caring environment that supports employee growth

Moxa Farming Program employs diverse training methods, including on-site simulations, weekly knowledge tests, and monthly presentation evaluations. By combining theory with practical exercises, it rapidly enhances trainees' mastery of product expertise and business skills, preparing them for real-world applications in their respective roles.

Multiple training methods used in Moxa Farming program

LIVE Simulations

Weekly Knowledge exams

Monthly Presentation

Hands-on exercises

Study group

Tech-coach

In-field observation

Rotational learning

During the training period, trainees are also taken to the annual "Taipei International Industrial Automation Exhibition" to understand the latest trends in the industrial control industry and to observe first-hand the applications and solutions of Moxa's products.

Moxa Farming trainees visited Automation Taipei 2023

Deepening engagement on Moxa culture with "People-centric" spirit, and fostering the sense of belonging for newcomers

From planning to executing Moxa Farming Program, people leaders have played crucial roles in people development. In addition to co-planning during the initial stages, they follow up on newcomers' learning progress through regular 1-on-1 mentoring, providing feedback and necessary training resources needed. Executives also get together with newcomers to offer perspectives and insights, accelerating their integration to Moxa culture where we foster a sound environment for learning and growth.

Moreover, each newcomer has a designated mentor who offers support in work, learning, and life. Newcomers are also invited to participate in company cultural activities, strengthening their connections with colleagues from other departments. This process helps instill Moxa's "people-centric" corporate values in newcomers, enhancing their sense of belonging to Moxa.

Moxa Farming Program sharpens new trainees' hard and soft skills, and serve as a platform for growth, learning, and application. This demonstrates Moxa's commitment to the sustainable development of talent alongside Taiwan and international markets.

Featured Stories 5

Spirit of Environmental Care: Moxa Forest and Natural Forests Education and Training Program

MOXA Foundation (hearafter the Foundation) has been concerned about Taiwan's ecological environment for a long time. Since 2003, it has been conducting butterfly ecology education by sponsoring 49 elementary schools in five major cities to build on-campus butterfly gardens and create butterfly-friendly environments. The program also includes butterfly observation and caterpillar rearing courses to spark students' interest in nature. In addition, the Foundation provides training for participating teachers, equipping them with the skills to continue teaching butterfly ecology in schools.

After completing the butterfly ecology education promotion program in 2018, the foundation began to consider how to sustain its commitment to ecological care and contribute to the next generation's ecological education. Inspired by a visit to Nature Valley in 2022, the idea of establishing a forest education base to promote ecological education and forest conservation was conceived. In 2023, an ideal location was found in Hsinchu, and through a vote by Moxa employees, it was named "Moxa Forest."

The Foundation will launch a forests education teacher training program and outdoor nature exploration courses for students. The aim is to develop Moxa Forest into a suitable venue for outdoor nature education while preserving its diverse and rich ecological resources, thereby sowing and rooting the seeds of conservation for Taiwan's land.

Moxa Forest Nature Education Base

Cherish and Utilize Diverse and Rich Ecological Resources

Moxa Forest is located in Nankeng Village, Beipu Township, Hsinchu County. It is a valley and mountain forest connected to a state-owned forest. Despite evident signs of land development, such as boundary fences, a goose-rearing greenhouse, a dried artificial pond, and fruit tree plantations, the absence of major roads or towns between this forest and the vast contiguous native forest makes it a crucial ecological corridor for animal migration. The vitality of the valley's ecosystem remains palpable as one traverses its forest paths. After successfully leasing the land, the Foundation removed barriers that hindered wildlife movement, allowing animals to freely access and share this forested area. Additionally, the foundation redirected stream water to the previously dry pond, creating a diverse habitat for various species. To effectively utilize the area's biological resources for educational purposes, the foundation enlisted biologists to conduct field surveys and consultations. Ecological monitoring efforts, including vegetation surveys and the installation of infrared cameras, were initiated. During the reporting period, 334 plant species from 109 families have been identified within the forests. Among the diverse native plant communities, notable endemic species such as Taiwan Cibotium Barometz, Heterostemma Brownii, and Turpinia have been documented. Furthermore, the presence of rare and protected animal species, including the Formosan clouded Leopard Cat, Crab-Eating Mongoose, and Bamboo Partridge, has been recorded, underscoring the ecological significance of Moxa Forest.

With such rich and diverse biological resources, the Foundation can effectively enhance ecological education experiences for teachers and students. The Foundation plans to restore native plant communities to create natural habitats favored by wildlife, while also integrating local ecological and cultural features to foster collaboration with the local community. To facilitate educational activities, the Foundation is improving basic infrastructure with minimal ecological impact. This includes building outdoor activity platforms, upgrading sanitary facilities, and resolving uneven and waterlogged pathways. Once the environmental restoration work was completed, the foundation organized one ecological work vacation and two forest volunteer planting activities in 2023, involving 34 volunteers in the creation and planting efforts at Moxa Forest. In 2024, the Foundation will continue utilizing volunteer support to develop suitable forest trails for educational purposes.

Remove the invasive plant species, Mikania micrantha

Volunteers planting plants together

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Promotion and Outlook of Nature Forests Education

The 12-year national education curriculum emphasizes the cultivation of student literacies, focusing on developing practical and inquiry skills. Outdoor nature education is the best way to achieve this. If teachers can guide students through well-designed outdoor exploration courses, it will leave a lasting impression and foster a deep appreciation for forests. To help teachers acquire the skills needed for outdoor nature education, the Foundation plans to offer a free, two-year, 168-hour nature forest education training program starting in July 2024. This program is aimed at elementary school teachers interested in promoting outdoor nature education, using Moxa Forest as the training site. The curriculum includes biological observation and identification, resource investigation, guided interpretation, and forest trail exploration to enhance teachers' field knowledge. After teachers become familiar with field biological resources and exploration methods, the second year of the course will focus on instructional discussions, helping teachers transform field materials into course designs. This process culminates in practical teaching validation and the creation of lesson plans. With two years of rigorous training, the program aims to equip teachers with the confidence and ability to lead students outside the classroom. Additionally, the Foundation will use the biennial teacher training program to develop exploration courses suitable for Moxa Forest and build a pool of forest education instructors. This effort will lay the groundwork for offering student outdoor nature exploration courses at Moxa Forest in the future.

Moxa Nature Forests Education Program

Short-term goals
With a focus on a four-year, two-cohort forest education teacher training and course development program, the goal is to both accumulate sufficient lesson plans and instructors and continuously optimize the teaching environment. This will prepare the site for future open use.

Medium-term goals
In addition to ongoing teacher training, the program will initially allow classes of elementary school students, taught by the trained teachers, to enter Moxa Forest for educational purposes.

Long-term goals
Open applications to all elementary schools nationwide for conducting outdoor nature exploration education at Moxa Forest.

Sustainable and Beautiful Taiwan

The Foundation envisions Moxa Forest becoming an excellent site for teacher training and nationwide student forest exploration. By promoting nature forest education, the Foundation aims to instill a love of nature and ecological conservation in every child's heart, planting more seeds of environmental stewardship. Additionally, the Foundation hopes to extend ecological education efforts to the surrounding communities, working together to promote local ecological sustainability and sparking broader environmental care initiatives. Through long-term and sustained investment in forest nature education, the Foundation is committed to contributing to the ecological education of Taiwan and future generations.

Volunteers collaboratively contribute to the environmental development of Moxa Forest

Volunteer parent-child outdoor ecological observation activity

1 Corporate Governance

> USD 395+ Million

Steady global revenue growth for 3 consecutive years

> 9,500+ Training Hours

Moxa Code of Conduct Workshop with 48 sessions attended by 1,350 employees

The World's First

IEC 62443-4-2 certification for industrial secure routers

1.1 About Moxa

1.1.1 Company Profile

Brand Introduction

Moxa is a leading provider of edge connectivity, industrial computing, and network infrastructure solutions for enabling connectivity for the Industrial Internet of Things. With over 35 years of industry experience, Moxa has connected more than 102 million devices worldwide and has a distribution and service network that reaches customers in more than 85 countries. Moxa offers a full spectrum of innovative, high-quality solutions that have been deployed in a wide variety of industries, including smart manufacturing, smart rail, smart grid, intelligent transportation, oil and gas, and marine. Moxa's expertise gives industry partners the tools they need to harness the power of automation network convergence and make their operations smarter, safer, and more efficient. Moxa delivers lasting business value by empowering industry with reliable networks and sincere service for industrial communications infrastructures.

Since its inception, Moxa has not only continued to realize the power of connection in various industries, but also adopted a "people-oriented" approach to create impact through connections between people, between people and society, and between people and the environment. Moxa has established a clear code of conduct to guide our decision-making and actions. The four cornerstones of this code are our core values, which lead us to achieve our goals and earn the esteem of our partners, customers, and employees. Moxa is committed to having a positive impact across the globe. Our commitment extends to all aspects of our business, including employees, products, and supply chain. We encourage our employees to participate in community development and incorporate green supply-chain management into our product development process to prioritize quality and sustainability. To learn more about Moxa, please visit our corporate website and watch the Moxa introduction video.

Corporate website

Moxa's Vision

To be a world-class leader and trusted partner in automation.

Moxa's Mission Statement

- We gain customer loyalty by the continual innovation and improvement of high quality products and services that provide the best value.
- We promote educational growth in a safe and healthy working environment, and create opportunities for advancement based on both ability and ambition, so that everyone can have an enjoyable work experience and contribute to their fullest potential.
- We provide fair and equitable performance-based compensation, and share the company's success with eligible employees.
- We acknowledge that distributors and suppliers form an integral part of our corporate value chain, and establish mutually beneficial business relationships based on the principles of trust and integrity.
- We use the collective force of the company for the betterment of the community by encouraging employees to participate in regular educational programs that emphasize the humanities and environmental protection.

Moxa's Core Values

Integrity

We pledge to operate our business with the highest professional integrity, and serve as a model corporation for our community.

- We treat our customers, colleagues, shareholders, and suppliers with sincerity, trust, fairness, and impartiality.
- We insist on frank and open-minded discussion, with decisions made objectively and based on facts and sound reasoning.
- We do not tolerate illegal behavior, and never accept kickbacks or bribes.

Mutual respect

We believe that people are the key to Moxa's success.

- We believe that each one of us should be willing to do the utmost in our professional field, and display the highest enthusiasm for our profession.
- We recognize each other's strengths and contributions, but at the same time, respect and appreciate individual differences.
- We tolerate the missteps that come from implementing new ideas, and endeavor to learn from our mistakes.
- We listen carefully to each other's ideas, and respond appropriately. We encourage frequent, rational, open, and honest communication.
- Teamwork should transcend organizational and geographic boundaries.

Customer Focus

We are committed to meeting customers' needs and exceeding customers' expectations.

- We provide products and services of the highest quality to our customers, thereby gaining their respect and trust.
- We think from the customer's point of view in order to arrive at mutually beneficial outcomes.
- We make promises cautiously, and do our utmost to meet our commitments.
- We encourage the creation of value, to exceed customer expectations.

Execution

We persist in finding the truth, getting things done, and delivering on our commitments.

- Ideas, strategies, objectives, and plans must be carefully scheduled and carried out in a quantifiable manner. Actions must be well implemented. Targets must be met.
- We continue to enhance our decision-making efficiency and speed of execution to achieve the best possible performance.
- We confront and overcome difficulties and take full responsibility for our jobs and assignments.

Basic Company Information

Moxa Inc.is a privately held company with MOXA as its registered trademark and is committed to providing reliable links for the Industrial Internet.

Year established	1987
Corporate headquarters	Taipei, Taiwan
Global employees	Over 1,900 employees

Moxa has a solid financial foundation and enhances the value of its core business by optimizing resource allocation and strengthening its research and development capabilities. This excellent operational performance forms an important basis for Moxa's sustainable corporate development. In 2023, Moxa's consolidated revenue was approximately USD 396 million, maintaining revenue over USD 395 million for three consecutive years.

	2021	2022	2023
Consolidated Revenue (USD Million[1])	402	444	396

Note 1. The above financial figures are calculated based on the TWD to USD average exchange rate as respective year.

Industrial Communication Expert

Moxa's products are used for communications equipment according to the Global Industry Classification Standard (GICS®), covering industrial network infrastructure, Industrial Edge Connectivity, and Industrial Computing. As industrial networking and communications, we understand that critical connectivity for industrial automation goes beyond speed. The priority lies in creating a safer and better quality of life for people. This critical connectivity includes all the stages in automation transformation, ranging from reliable serial device connections to secure industrial Ethernet and edge-to-cloud integration.

Industrial Network Infrastructure

Industrial Edge Connectivity

Industrial Computing

Focus on Industrial Solutions

Moxa is dedicated to delivering reliable connectivity for industrial automation and has connected more than 102 million devices worldwide. Moxa offers a full spectrum of innovative, high-quality solutions that have been deployed in a wide variety of industries, including smart manufacturing, smart rail, smart grid, intelligent transportation, oil and gas, and marine. Moxa delivers lasting business value by empowering industry with reliable networks and sincere service for industrial communications infrastructures in the era of industry digital transformation and energy transition.

Rails

Intelligent Transportation Systems

Marine

Smart Grid & Renewables

Smart Factory

Oil & Gas

Global Presence

Moxa has a distribution and service network that reaches customers in more than 85 countries, which keeps us close to our customers.

Moxa Korea
Seoul

Moxa Europe
Munich, Germany
France
UK

Moxa China
Shanghai
Beijing
Shenzhen

Moxa Japan
Tokyo

Moxa Americas
Brea, USA
Brazil

Moxa India
Bangalore

Moxa Headquarters
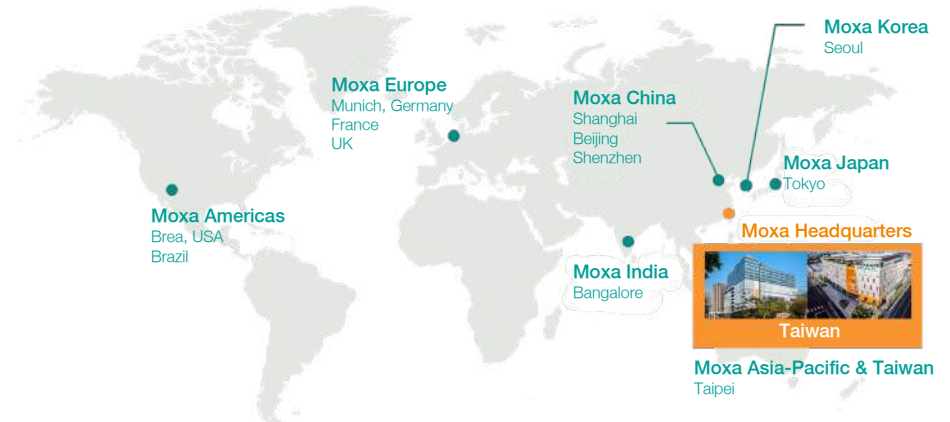
Taiwan

Moxa Asia-Pacific & Taiwan
Taipei

External Participation and Initiatives

Moxa not only helps global customers build industrial communications infrastructure and enhances industrial applications, but also continue to push industrial connectivity to new heights through strategic partnerships and collaborative industry alliances, propelling innovation in communication standards. By driving an entire generation (3.0) of connectivity in industrial systems and working with industry leaders, we have established ourselves as a leading proponent of industrial automation.

Moxa actively participates in international associations and organizations, with more than 40 international and regional organizations as of 2023.

Moxa's International Organizations and Initiatives

Category	Name of Organization	Moxa's Role
International	BACnet International	Gold Members
	CC-Link Partner Association	Partners
	Council on Large Electric Systems, CIGRE	CIGRE WG
	Civil Infrastructure Platform, CIP	Silver Members
	DNP Users Group	Members
	EtherCAT Technology Group	Members
	IEC TC57 WG10 Working Group	Observer
	Intel® IoT Solutions Alliance	Gold Partner
	The Linux Foundation	LF Members – Silver
	Modbus-IDA	Members
	ODVA	Members
	OPC Foundation	Members
	OpenChain	Platinum Members
	Open Invention Network, OIN	Members
	5G-ACIA	Board Members
	IEEE 802.1 TSN Task Group	Members
	PROFIBUS & PROFINET International, PI	Members

Category	Name of Organization	Moxa's Role
International	Avnu Alliance	Promoter Member
	UCAIug	Members
	ITxPT	Principal members
	IEC TC9 WG43/WG46	SGT4 Leader, Observer
	SEMI	Members
Asia Pacific - Taiwan	Taiwan Electrical and Electronic Manufacturers' Association	Members
	Cloud Computing & IoT Association in Taiwan	Members
	Taiwan Smart Grid Industry Association	Members
	Taiwan Wind Energy Association	Members
	Taiwan Association of Information and Communication Standards	Members
	Intelligent Transportation Society of TAIWAN, ITS Taiwan	Members
	Chung-Hua Railway Industry Development Association	Members
	Armed Forces Communications and Electronics Association	Members
	Industry cooperation association	Members
	CommonWealth Sustainability	Members
	TALENT, in Taiwan Talent Sustainability Action Alliance	Responsive Enterprise
Asia Pacific - Korea	The Korea Railway Association, KORASS	Members
	The Korean Society for Railway	Members
	Korea Marine Equipment Association, KOMEA	Members
	Korea Smart Grid Association, KSGA	Members
	Korean e-Factory Alliance	Members

Category	Name of Organization	Moxa's Role
Asia Pacific - Japan	CLPA Security Working Group, CC-Link Partner Association	Leader
	Mitsubishi Electric e-F@ctory Alliance	Members
	Secure IoT Platform Consortium	Members
Asia Pacific - China	Shanghai Tongji Urban Mass Transit	Director
	Automatic Tolling System Professional Committee, China Chamber of Information Industry, AFC	Members
	Alliance of Industrial Internet	Members
Americas	Control Systems Integrator Association, CSIA	Members
	National Rural Electric Coop	Members
	American Petroleum Institute, API	Members
	International Association of Drilling Contractors, IADC	Members
Europe	Verband Deutscher Maschinen- und Anlagenbau, VDMA	Members
	German Electro and Digital Industry Associatio, ZVEI	Members

Moxa is working closely with global industry leaders to shape international standards. We prioritize the use of advanced technology interoperability test beds to guarantee stable and reliable solutions and to expedite cross-vendor interoperability of automation components. Moxa demonstrates its excellence in the following four domains. Highly influential, promoting industrial reform and creating future industrial applications.

Disrupting Next-Generation Industrial Ethernet

TSN solutions address the demands of future industrial operations. Our dedication to developing TSN standards has made us pioneers in this field, and we are committed to optimizing these technologies for future industrial automation systems, based on a truly unified infrastructure.

Enabling Next-generation TCMS for Rail

Moxa, the sole Asian participant, joined the project in 2018 to develop the EU's Next Generation Train Communication Network (NG-TCN). By leveraging our knowledge and experience in fiber-optic Ethernet networks, we have partnered with leading global train builders to establish the protocols and standards for the EU's future Train Control and Management System (TCMS).

Defining Next-generation Industrial Secure Networks

To guarantee dependable connectivity in industrial settings, we have bolstered our network security offerings with the Industrial Cybersecurity Solution to mitigate cyberthreats to industrial networks. By combining our industrial networking and cybersecurity expertise, we provide layered protection for your industrial networks. Our goal is to bridge the divide between the OT and IT worlds, enabling smooth connections for improved operational efficiency.

Boldstering Edge-to-Cloud Connectivity

In response to rapid globalization and digital transformation, industrial operators have turned to IIoT applications to optimize operations and boost revenue. By providing fast, stable, secure, and uninterrupted data connectivity, we have become an indispensable partner to major cloud service providers and system integrators in meeting the communication needs of IIoT applications.

Keeping pace with market needs and industrial advancements, Moxa actively engage in industrial automation projects worldwide. By actively participating in global industry associations, we have formed partnerships with key players in the industry. Our joint efforts are defining standards for the next-generation networking and communication, driving industrial transformation and unlocking various industrial applications through innovative data connectivity technologies. These developments open up immense opportunities for future industrial operations.

1.2 Governance Management

1.2.1 Governance and the Board of Directors

Governance Structure

Moxa has established a Board of Directors as the highest governing authority, primarily overseeing and supporting the overall operations management of the company. The Board of Directors also exercises its authority through the annual general meeting of shareholders. To uphold Moxa's core value of integrity in business operations, the Board has established the Moxa Code of Conduct Committee (MCCC) under its supervision. This committee is responsible for planning and implementing the Moxa Code of Conduct at global locations.

Moxa believes that collective wisdom surpasses individual capability. Therefore, the Board of Directors has authorized and established the Group Executive Board (GEB) as the main governing body under the concept of "collective leadership." The GEB conducts regular weekly meetings to make business decisions and practices core values in operations management: integrity, mutual respect, customer focus, and execution. To expedite the promotion of key strategic issues, the GEB has set up the Group Executive Board Office, which includes specific strategic issue offices such as the Product Office, Vertical Market Incubation Office, Global Business Office, and Product Security Center. For cross-departmental communication and collaboration, Moxa has established functional committees and project teams that report directly to the GEB. During the reporting period, these include the Occupational Safety and Health Committee, Cybersecurity Steering Committee, ESG Committee, and Risk Management Task Force, which provide regular progress reports and action plans. The GEB is organized into global operations, R&D, strategic markets, product businesses, and functional units to support the successful implementation of overall business strategies. Refer to the Moxa organizational structure chart below.

Organizational Structure

```
                          Shareholder
                            Meeting
                               |
         Board of Directors  ———  Moxa Code of Conduct
                               |        Committee
    GEB Office  ———  Group Executive
                       Board (GEB)
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Global Business	R&D	Strategic Vertical Market	Product Business	Functional Unit
• Moxa Asia & Taiwan • Moxa China • Moxa Europe • Moxa Americas	• R&D Center	• Transportation Business Group • Energy Business Group	• IEI Business • DC Business • IW Business • DAC Business • INS Business • IPC Business	• Finance • Global Technical Service • Global Marketing • Information Technology • Manufacturing • Quality Management • Supply Chain Management • Administration Management • Human Resources • ESG Development & Legal

Board of Directors Composition

Moxa's Board of Directors consists of three to nine directors and one supervisor in accordance with the Articles of Incorporation. The supervisor system enhances the transparency of corporate governance and enables the Board of Directors to comply with regulatory requirements, review business operations, and supervise financial responsibilities. In addition, professional accountants and lawyers conduct a thorough review of auditing and internal control to help them gain a comprehensive understanding of the Company's operation status and challenges, and make timely recommendations to solve the problems.

In 2023, Moxa held a shareholders' meeting to elect the Board of Directors, with the Chairman serving as the Chair of the Board. Since 2023 coincided with the re-election of directors and supervisors, the current Board consists of 8 directors and 1 supervisor, with a term of 3 years (from May 2023 to May 2026). The average attendance rate is approximately 97.06% (excluding the supervisor's attendance rate). The "Moxa Code of Conduct" mandates that all Board members adhere to principles of conflict of interest. The Chairman and Vice Chairman do not hold positions as the company's CEO or General Manager, and there are no familial relationships within the second degree of kinship among the current Board members. The current directors and supervisors have diverse backgrounds, with a gender distribution of 78% male and 22% female, all holding at least a university degree. Their expertise spans various fields, including R&D, business, finance, products, human resources, and marketing.

Moxa's Board of Directors

Job Title	Name	Description
Chairman	JE Hsu	
Vice Chairman	Emily Wu	• Gender of Directors and Supervisors: 7 are male and 2 are female • Age Range of Directors and Supervisors: • 60 - 65 years old: 7 • 65 - 70 years old: 2 • The term of office of directors and supervisors is from May 2023 to May 2026 • Number of directors and legal representative: 8
Director	Clark Ke	
Director	Herry Liu	
Director	Michael Lin	
Director	Wen Wen	
Director	Ben Chen	
Director	Steve Weng	
Supervisor	Jackson Ou	

Operations of Board of Directors

Moxa has established a Board of Directors in accordance with the Company Act, which meets at least once per quarter. The Board's primary responsibilities include overseeing legal compliance, guiding management direction, reviewing and approving significant matters, and financial supervision. Additionally, the Board has established the Moxa Code of Conduct Committee to assist employees in internalizing the Moxa Code of Conduct and implementing it in their daily work. For more information about Moxa's Code of Conduct, please refer to 1.3.1 The value of integrity Sections.

In 2023, the Board held 17 meetings, regularly reviewing execution status through management reports, making timely adjustments, and ensuring effective operation of the Board. The Board also monitors operational performance and strategic results. To enhance Board management, Moxa plans to establish "Board Meeting Rules" in 2024, which will strengthen and implement corporate governance capabilities, including meeting procedures, decision-making processes, and information disclosure requirements, to ensure efficient operation and full accountability of the Board.

1.2.2 Sustainability Development

Moxa's Sustainability Journey

Since the establishment of Moxa, we have built a sustainable future step by step by building "reliable quality", "a Company that belongs to our employees", and "giving back to society". By complying with various industry certification standards and introducing international management systems, we constantly improve our products, services, and processes, provide global partners and customers with reliable solutions, and create long-term value. Moxa also adheres to the business philosophy of "building a company that is truly employees". Moxa believes that talents are the force that drives business forward. By recruiting talents with different backgrounds and expertise, Moxa will continue to make an impact in the industry and create an engaging force for its employees. The perfect venue for self-realization and growth. In addition to our deep talent roots and giving back to society, Moxa has adhered to the philosophy of "people-oriented and starting from the heart" and established the MOXA Foundation to promote the "Campus Butterfly Ecological Restoration Project" and support employee-sponsored education and environmental protection. The volunteer service team gives back to society for common good in society and builds a road to sustainable business.

Moxa's Sustainability Journey

1987 — Moxa Inc.was founded in Taiwan

2003 — MOXA Foundation was established

2003 — ISO 9001 Quality management system verification

2008 — Voted as "Happy Company to Work for" by Taiwan 104.com Labor Banking Network

2012 — • ISO 14001 Environmental Management System Validation • OHSAS 18001 Occupational Health and Safety Management Validation

2013 — Moxa Americas named as a "Top Workplace in Orange County" (Orange County Register)

2014 — Release Green Product Management Procedure

2016 — Granted with the "Best Employers Taiwan 2016 Awards" from Aon Hewitt

2019 — Taiwan Bade Plant Obtained Gold Label from Taiwan Green Building Council.

2020 — • Establishment of Sustainability Management Center

2021 — • ISO 27001 Information Security Management System Validation • ISO 45001 OH&S for Occupational Safety and Health Management Validation

2023 — • Establishment of the Sustainable Development Committee • ISO 14064-1:2018 Greenhouse Gases Verification • ISO 14067 Product Carbon Footprint Verification

2024 — • Release of the first Sustainability Report • Submitted the Carbon Reduction Target to Science-Based Targets Initiative (SBTi)
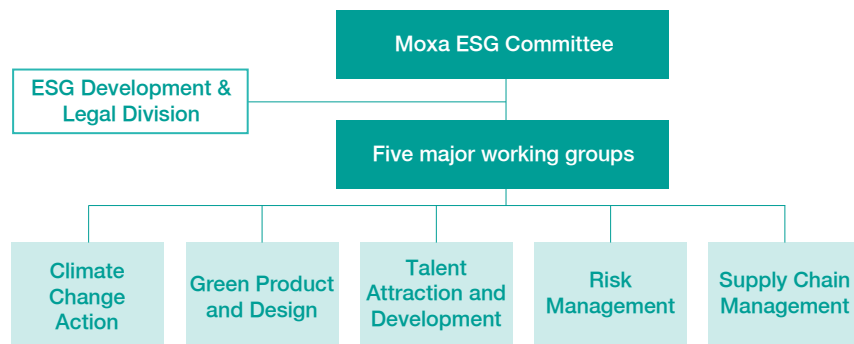
Sustainability Vision and Governance

In 2022, Moxa organized a sustainability vision workshop. The workshop was attended by representatives of the Board of Directors, GEB, and the officers responsible for sustainability and related issues. The workshops engaged in group sustainability vision-based workshops and discussions. Together, these workshops contributed to Moxa's sustainability vision. vision to lay a clear direction for a sustainable future. In addition to exerting its own influence, Moxa is also expected to work with partners in the value chain to steadily sail towards a sustainable future.

Moxa's Sustainability Vision

"By working seamlessly with our supply chain to co-create in a diverse and friendly environment, we integrate knowledge into design to enable our products to be the driving force behind industries' green digital transformation for a more sustainable future for all".

In 2020, Moxa established the Sustainability Center to integrate workplace safety and health as well as quality and assurance management. In response to the emphasis on sustainable development in Moxa's growth strategy, in 2023, the former "Sustainability Management Center" was integrated with the Legal Affairs to form the " ESG Development and Legal Division ", which is responsible for the promotion and implementation of sustainable practices. To enhance strategic sustainability management, in the same year, Moxa established the "Moxa ESG Development Committee" consisting of GEB, representatives of directors, and sustainability and related department managers. The Committee established five working groups under the committee to carry out related tasks. Moxa's ESG Development Committee is chaired by GEB and held seven meetings, discussing issues including sustainable development and external assessments.

Moxa's Sustainability Governance Framework

```
                    ┌──────────────────────────┐
                    │   Moxa ESG Committee     │
ESG Development &   └──────────────────────────┘
Legal Division              │
                    ┌──────────────────────────┐
                    │  Five major working groups│
                    └──────────────────────────┘
```

| Climate Change Action | Green Product and Design | Talent Attraction and Development | Risk Management | Supply Chain Management |

Stakeholder Communications

Moxa believes that people are the most important cornerstone to success, and accordingly emphasizes stakeholder engagement. In 2022, Moxa considered its private own operations and impact assessments. Moxa identified "employees" and "customers" as key stakeholders. The table below illustrates the meaning and negotiation of stakeholders to Moxa.

Stakeholders	Significance to Moxa	Communication channel and frequency	Communication Achievements in 2023	Corresponding Chapters of the Report
Employees	Moxa's philosophy is to build an "employee-owned company" and uphold the "people-oriented" philosophy. Therefore, we create a good working environment, learning program, and development stage for our employees to shape Moxa's corporate culture and achieve sustainable development.	• Moxa group corporate update/ quarterly • Corporate culture event/ irregular • Labor-management meeting/quarterly • Employee Welfare Committee/ irregularly • Global GPS survey/ periodic • Internal communication mailbox/irregularly	• 4 online meetings • Over 5 corporate culture events • 4 labor-management meetings • Over 10 meetings	5.2 Human Rights Protection and Employee Communication
Customers	Moxa is a leading provider in the Industrial Internet of Things. Moxa builds reliable Industrial Networks for customers around the world and empowers equipment to connect, communicate, and collaborate.Therefore, Moxa continues to gain the trust of its customers by providing high-quality products and services.	• Email and online meeting/ irregularly • Customer visits and meetings/irregularly • Customer audit/ irregularly • Partner area on the official website, feedback/irregularly • Technical support system feedback/irregular • Seminars, exhibitions, official social media/ irregularly	• The pass rate of new product training for channel customers exceeds 88% • Customer satisfaction with technical services up to 97.15%	2.3 Customer Relationship Management

In addition, Moxa has established multiple channels to respond to the needs of stakeholders. In 2024, a dedicated sustainability section will be established on its official website to provide information on Moxa's sustainable development progress, and strengthen communication with stakeholders.

Moxa Official Website Contact Us

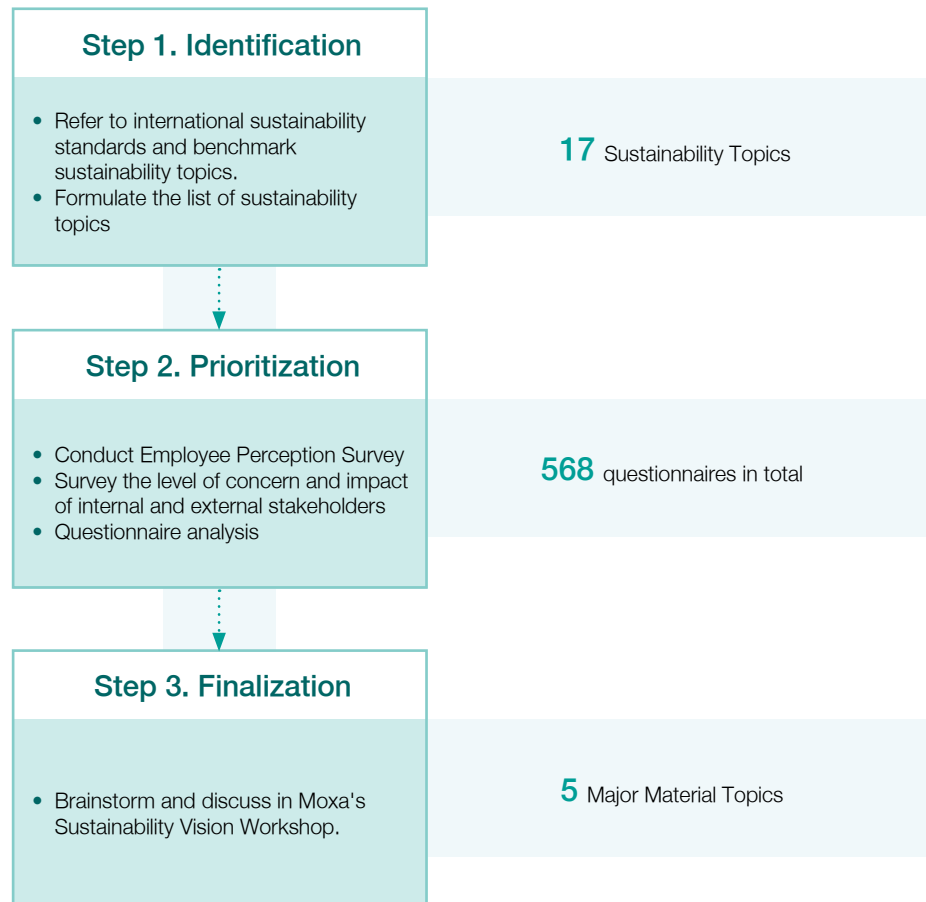Moxa Partner Zone

Moxa Communities - Linkedin

Moxa Communities - Youtube

Material Topic Process

In 2022, Moxa referenced the guidelines provided by the Global Reporting Initiative (GRI) for addressing significant topics. The assessment process unfolded in three main steps: "identification," "prioritization," and "finalization." This process involved incorporating international sustainability standards and industry benchmarks, as well as conducting surveys to gauge the level of interest and impact from internal and external stakeholders. Finally, in workshops attended by representatives from the board of directors, the Global Executive Board (GEB), ESG and relevant department managers, five material topics were finalized based on the sustainability vision.

Moxa Material Topic Process

Step 1. Identification

- Refer to international sustainability standards and benchmark sustainability topics.
- Formulate the list of sustainability topics

17 Sustainability Topics

Step 2. Prioritization

- Conduct Employee Perception Survey
- Survey the level of concern and impact of internal and external stakeholders
- Questionnaire analysis

568 questionnaires in total

Step 3. Finalization

- Brainstorm and discuss in Moxa's Sustainability Vision Workshop.

5 Major Material Topics

Step 1. Identification

Moxa has referenced international standards, including the GRI Standards on Economic, Environmental, and Social Topics, as well as the Sustainability Accounting Standards Board (SASB) standards for the hardware and internet media & services sectors. Additionally, Moxa also benched the global companies for reference. For sustainability topics, comprehensive assessment and collection are conducted. After discussion and summarization, we compiled a list of 17 sustainability topics, including 5 environmental topics, 5 social topics, and 7 governance topics.

Moxa's sustainability issue list

Environmental Topics	Social Topics	Governance Topics	
• Cleaner Production	• Occupational Health and Safety	• Economic Performances	• Innovation and Market Deployment
• Green Design and Products	• Talent Attraction and Development	• Ethical Corporate Management	• Risk Management
• Sustainable Procurement	• Human Rights, Diversity and Equal Opportunity	• Regulatory Compliance	• Product and IT Cybersecurity
• Climate Change Actions	• Labor Relations	• Supply Chain Management	
• Green Solutions	• Social Participation		

Step 2. Prioritization

Moxa held briefings for employees at the headquarters and branch offices, and distributed questionnaires to investigate the "employee perception survey", "level of stakeholder concern", and "level of impact on Moxa's operations". Moxa investigates and ranks sustainability issues, consolidates the results of internal and external surveys through the third step, and identifies material topics.

Survey of Sustainable Issues	Survey Subjects and Results	Survey feedback
1. Employee Perception Survey	Employees at the headquarters and branch offices received a total of 554 questionnaires.	Colleagues at the headquarters and branch offices unanimously believe that social issues are the best to promote, while environmental issues need to be strengthened.
2. Level of Stakeholder Concern	568 questionnaires were received from employees of headquarter and branch offices and select criteria from 14 key account customers' contract.	Talent attraction and development, ethical corporate management, and occupational health and safety receive the most attention
3. Level of Impact on Moxa's Operations	Assessed by 16 designated managers.	Green design and products, climate change actions, and talent attraction and development are considered to have higher impacts on operations.

Step 3. Finalization

In the sustainability vision workshop, Moxa not only established the direction for sustainable development but also incorporated the results of the sustainability issue survey and external market sustainability requirements based on the core spirit of the sustainability vision. Among the 17 sustainability topics, Moxa identified 'Actions on Climate Change,' 'Green Design and Products,' 'Talent Attraction and Development,' 'Supply Chain Management,' and 'Risk Management' as the five material topics.

Moxa Material Topics

Environmental Topics
- Actions on Climate Change
- Green Design and Products

Social Topics
- Talent Attraction and Development

Governance Topics
- Supply Chain Management
- Risk Management
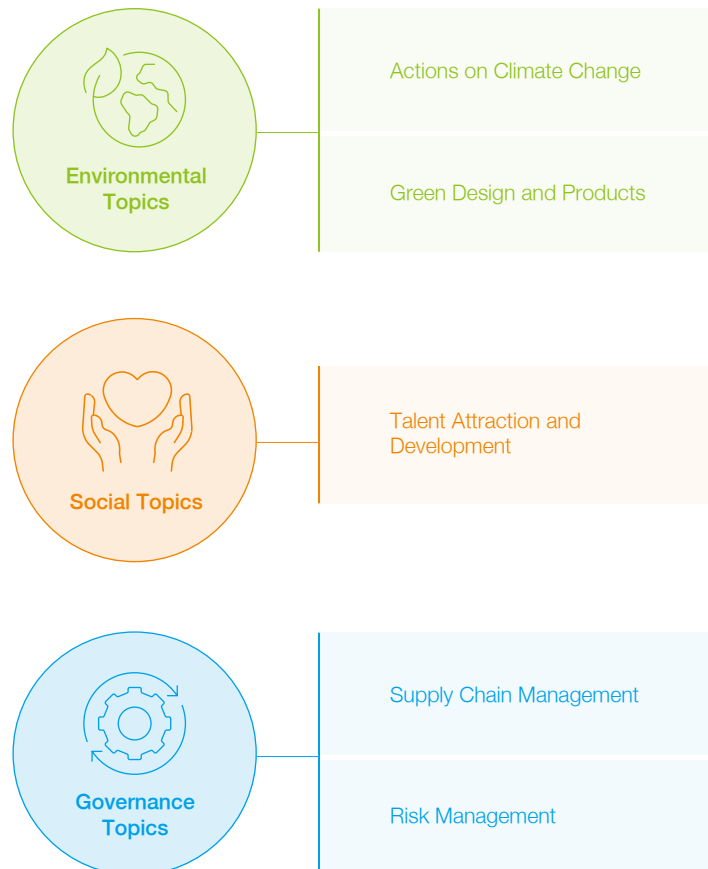
Progress of Material Topics

In response to the five material topics, Moxa formed 5 working groups under the ESG Committee in 2023. The initial goal is to build consensus and establish a direction for development. In the future, each group will further promote goal setting and action plans. Their progress and results will be reported to ESG Committee. The following table summarizes the five material topics based on their related activities, products, and services, their corresponding value chain, GRI and SASB index.

Moxa's Material Topics

Targeted	Material Topics	Value Chain			GRI Index	SASB Index	Management Results in 2023
		Moxa	Suppliers	Customers			
Environmental Topics	Actions on Climate Change	✓	✓	✓	305 Emissions	n/a	Featured Stories 1: Carbon Reduction Actions and Move towards Net Zero Future 3.1 Green Manufacturing
	Green Design and Products	✓	✓	✓	301 Materials 305 Emissions	Product Life Cycle	3.2 Eco-Friendly Product Design
Social Topics	Talent Attraction and Development	✓			202 Market Presence 401 Employment 404 Training and Education 405 Diversity and Equal Opportunity	Employee Diversity and Inclusion	Featured Stories 4: Moxa Talent Farming System 5.1 Talent Attraction and Retention 5.3 Talent Development and Cultivation
Governance Topics	Supply Chain Management	✓	✓	✓	204 Procurement Practice 308 Supplier Environmental Assessment 414 Supplier Social Assessment	Supply Chain Management	4.1 Supply Chain Management
	Risk management	✓	✓	✓	General Disclosures	n/a	1.4 Risk Management

1.3 Integrity and Legal Compliance
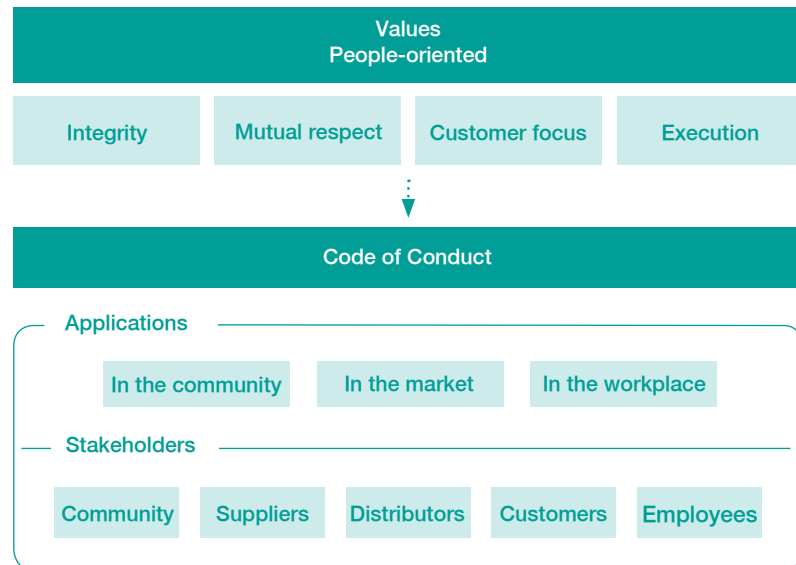
1.3.1 Integrity Value

Moxa's Code of Conduct

Moxa firmly believes that the foundation of its success lies in its employees and its people-oriented core values: Integrity, Mutual Respect, Customer Focus, and Execution. Moxa's Code of Conduct is a concrete manifestation of our four core values. The Code applies to all Moxa employees, Group Executive Board and Board of Directors members. It covers the workplace, marketplace, community and social media. It not only provides a channel for asking questions and clarifying concerns, but also includes an anti-retaliation policy and helps Moxa make decisions in compliance with the law and upholding core values.

Moxa's code of conduct encompasses four market principles: Do not give or accept bribes or kickbacks; Provide and accept gifts and entertainment only when appropriate; Engage in fair competition; and Recognize and avoid conflicts of interest.

To help employees integrate Moxa's Code of Conduct into daily work and personal life, Moxa established the Code of Conduct Committee (MCCC) in 2020. The committee's main responsibilities include providing consultation on the Code, establishing reporting mechanisms and protecting whistleblowers, and developing, revising, explaining, and interpreting the "Moxa Code of Conduct." MCCC reports directly to the Board of Directors, which appoints a member of the Group Executive Board to be the chairperson of the committee. Other members are appointed by the chairperson and approved by the Board of Directors. The MCCC holds quarterly meetings to report on the implementation of the Code of Conduct, review management effectiveness, and continuously improve to ensure adherence to Moxa's standards. In 2023, under the leadership of MCCC, the project team continued to promote the Code of Conduct and deepened employees' awareness through online platforms, course promotion, and value tip cards. Meanwhile, Moxa is committed to publicly disclosing the summaries of the Code of Conduct and continuously handling complaints effectively, embodying the principles of integrity and ethical business practices, and giving back to employees and customers. To help external partners gain a deeper understanding of Moxa's Code of Conduct, the summary has also been made available on the official website in four different languages.

Moxa Code of Conduct Framework

Values People-oriented			
Integrity	Mutual respect	Customer focus	Execution

Code of Conduct

Applications

In the community	In the market	In the workplace

Stakeholders

Community	Suppliers	Distributors	Customers	Employees

Official Websites of Moxa Code of Conduct

Global/English website

Taiwan/Traditional Chinese Website

China/Simplified Chinese website

Japan/Japanese website

Code of Conduct Advocacy and Training

To raise employees' awareness of Moxa's Code of Conduct and to implement Moxa's Code of Conduct, Moxa adopts the 3B (building platform, awareness, and sustaining approach) strategy to promote:

1. Building Platform

In addition to disclosing the Code of Conduct on its official website, Moxa has also created an internal Code of Conduct website for its employees. The content of this website includes the original intention and reason of the Code of Conduct, an introduction to the clauses, practical case studies, and the problem-solving process. By 2023, Moxa has established an internal website in Traditional Chinese, Simplified Chinese, and English, so that Moxa employees around the world can access the knowledge of the Code of Conduct in real-time at any time. Meanwhile, internal case studies are shared for employees to learn from experience and understand that the Code of Conduct is not only a theory, which actually happens and is practiced in Moxa's daily life.

2. Building Awareness

Moxa values adherence to its Code of Conduct. In employee employment contracts, it is clearly stated that employees must strictly abide by Moxa's Code of Conduct. 100% of employees sign the contract. From 2020 onwards, Moxa has incorporated the "Moxa Code of Conduct" as a mandatory course for all employees worldwide. This required course is primarily delivered through online classes complemented by tests to ensure employees possess the foundational knowledge. The completion rate has reached 100%.

Additionally, to further the goal of "Actualizing Moxa's Core Values & Code of Conduct," Moxa has designed a one-day, in-person Code of Conduct workshop. Since 2022, all employees have been invited to participate in these small group sessions, which focus on real-world market scenarios and actual Moxa case studies. This workshop aims to foster employees' ability to make decisions that align with legal requirements and core values in diverse workplace environments. By the end of 2023, the Code of Conduct workshops have completed 48 sessions, training over 1,350 employees, with a total training time exceeding 9,500 person-hours. The initiative continues to progress towards the goal of full employee participation.

Moxa Code of Conduct Signing and Training Completion Rate

Code of Conduct Signing and Training	2023			
	Headquarters (Taiwan)	APAC	Americas	Europe
Signing Rate of Newcomers	100%	100%	100%	100%
Online Course Complete Rate of Newcomers	100%	100%	100%	100%

Specially designed Moxa Code of Conduct portable value tip cards (in English, Traditional Chinese, and Simplified Chinese) are distributed to all employees to carry with them

3. Building Sustaining Approach

To enhance employees' understanding of the Moxa Code of Conduct in their respective work areas, Moxa began developing " Divisional Code of Conduct Guidelines" in 2023. The guidelines for the R&D department, which has the largest number of employees, have been completed and issued, along with online orientation courses. These guidelines have also been integrated into the mandatory training process for new hires. Future plans include completing guidelines for the sales, purchasing, and infrastructure divisions.

Moxa Code of Conduct Workshop for Headquarters

Moxa Code of Conduct Workshop for Oversea Employees

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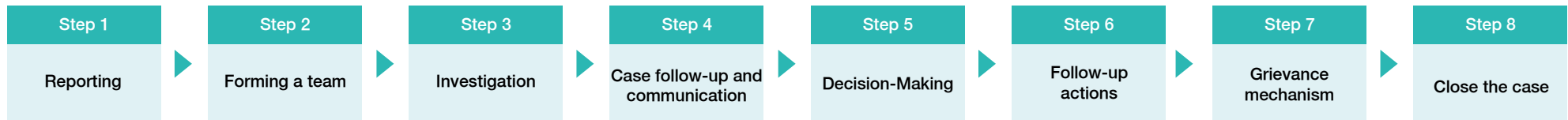
Whistleblower Communication Channels and Protection

Moxa's Code of Conduct encourages employees to ask questions and clarify concerns. Multiple channels for clarification or reporting are provided, including through department supervisors, unit HR managers, the highest HR executive of the group, the highest executive of the ESG development and Legal division, the Group Executive Board, or directly via email to the Moxa Code of Conduct Committee (mccc@moxa.com). Upon receiving a report, Moxa will follow the " Moxa Code of Conduct Case Procedure " (hereinafter referred to as the procedure) and initiate the whistleblower mechanism. The process adheres to key principles such as protecting human rights, objectivity and truthfulness, collaboration, and checks and balances.
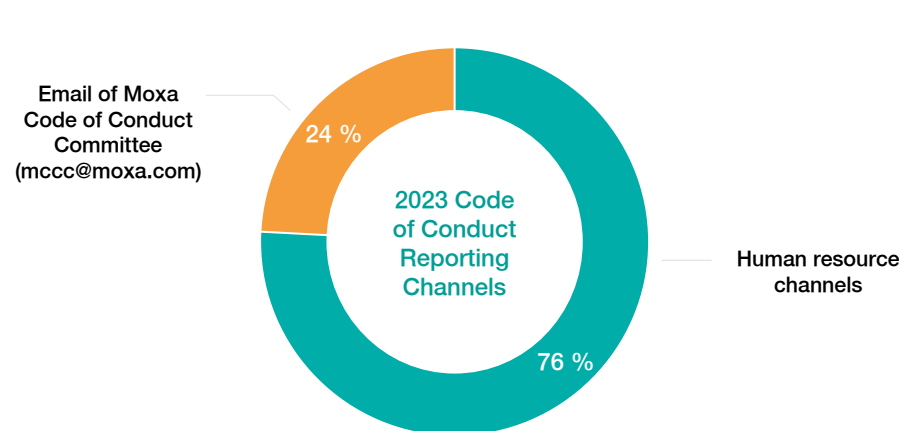
Additionally, the Code of Conduct explicitly states that employees, members of the executive management, or board members of Moxa shall not retaliate or engage in any hostile behavior against whistleblowers, individuals raising concerns about potential or actual breaches of the code, or those assisting in investigations.

In 2023, Moxa received a total of 19 reported cases and 2 consultation requests. Of these, 24% were submitted through MCCC email for reporting cases related to the code of conduct, while 76% were reported through the human resources reporting channel. Analyzing the types of cases, the majority (57%) were related to workplace issues. All reported cases were thoroughly investigated by the relevant departments in accordance with internal rules and regulations, and the final investigation results indicated that approximately 95% of the cases were valid. Moxa is actively addressing the issues raised by employees and making adjustments to existing measures based on feedbacks. The MCCC will continue to enhance supervisor training in 2024 and review and revise key policies as necessary.

Moxa's Whistleblower Mechanism

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Reporting	Forming a team	Investigation	Case follow-up and communication	Decision-Making	Follow-up actions	Grievance mechanism	Close the case

2023 Code of Conduct Reporting Channels

Email of Moxa Code of Conduct Committee (mccc@moxa.com) — 24 %

2023 Code of Conduct Reporting Channels

Human resource channels — 76 %

2023 Code of Conduct Reporting Cases

Conflicts of interest — 5 %

Protecting company and others' assets — 5 %

Request for consultation — 9 %

Business integrity — 24 %

2023 Code of Conduct Reporting Cases

Workplace issues — 57 %

1.3.2 Legal Compliance

Compliance Management

Moxa ESG & Legal Division consists of the Legal Enablement Department and the Legal Advancement Department (collectively, "Legal Department"). Legal Department is responsible for contract review, legal consultation, and handling legal disputes for Moxa headquarters and regional subsidiaries.

Currently, each department is responsible for managing compliance with laws and regulations relevant to its functions. When a question of law arises, it will be discussed and resolved in collaboration with the Legal Department.

For cross-function compliance issues such as export control, data security, and personal data protection, Moxa has various compliance task forces for each topic of law to devise and implement compliance programs. In the future, Moxa will closely monitor regulatory changes that are critical to Moxa's business development, and establish a change monitoring mechanism and compliance risk assessment system to ensure that regulatory requirements are implemented throughout Moxa's business operation. In 2023, Moxa did not violate any civil, penal or administrative laws that implicated more than NTD 1 million of fine or penalty.

Moxa's compliance overview

Corporate governance	Company Act, Business Entity Accounting Act, competition law, and export control-related laws and regulations
Products and services	Trademark Act, Copyright Act, Patent Act, Trade Secrets Act, and Personal Data Protection Act
Human resources	Labor Standards Act, Act of Gender Equality in Employment, Employment Service Act, Labor Insurance Act, etc.

Legal Education

Compliance Training and Introduction to Contract Basics

Moxa also provides employees with themed training courses on key international and regional regulations. In 2023, training topics include competition law, trade secrets law, the German Whistleblower Protection Act, the California Consumer Privacy Act and California Privacy Rights Act, and the U.S. Export Administration Regulations. These initiatives aimed to enhance employees' understanding and application of the legal concepts, with a total of 1,118 attendees participating in the training sessions throughout 2023.

Moxa's 2023 Legal Training Statistics

Course	Content	Number of Trainees
Competition Law	Online course of Moxa Competition Compliance Policy was launched to introduce principles of antitrust laws to employees in the U.S., APAC, and Europe.	137
Trade Secrets Act	Basics of the Trade Secrets Act were taught to members of the task force for them to devise appropriate measures for protecting Moxa's trade secrets.	30
German Whistleblower Protection Act	Define the gap between Moxa Code of Conduct and the German Whistleblower Protection Act, and design a procedure for filing complaints.	5
GDPR Introduction	Introduce the scope of the EU General Protection Regulation (GDPR) and the six principles with respect to personal data processing to employees handling personal data of EU residents at Moxa headquarters.	7
Safeguarding Confidential Information	Employees at Moxa headquarters are required to learn what confidential information is and what level of protection it deserves in order to safeguard the information of Moxa and/or its customers.	368
Introduction to the California Consumer Privacy Protection Act (CCPA) and the California Privacy Rights Act (CPRA)	In response to recent updates to California's privacy laws, an online course was provided to all employees at Moxa's U.S. subsidiary as well as employees who have access to personal data of California residents at Moxa headquarters.	42
Export Administration Regulations (EAR)	Principles of the U.S. Export Administration Regulations were taught to the Operations, Distribution, Procurement, and R&D to cultivate their compliance awareness.	47
General Concept of Contract	Introduce the basic structure of different types of contracts, considerations during negotiations, and the design of terms to mitigate risks.	45
Distributor Contract		102
License Contract		11
Act of Gender Equality in Employment	Educated employees at Moxa headquarters on how and when to apply this Act, consequences of violations, remedial measures and procedure for filing complaints.	324
Total		1,118

Note: Statistics from Moxa headquarters in Taiwan as well as regional offices in Asia-Pacific, Americas and Europe.

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In addition, to strengthen external partners' awareness of professional integrity, Moxa has included ethics-related clauses in existing supplier and authorized distributor contracts since 2023.

• " Integrity and Professional Ethics Standards" in Supplier Contracts

Moxa has included a clause of "integrity and professional ethics standards" in its supplier contracts for raw materials and equipment, prohibiting unethical, anti-competitive, or dishonest business practices. By the end of 2023, 85% of suppliers for indirect procurement have signed the "Supplier Code of Conduct." Among the top 10 suppliers for direct procurement, the rate of signing Moxa template contract reached 90%. Moxa will strive to achieve a 100% rate for supplier's commitment to business integrity.

• Authorized Distributor Agreements

Moxa's authorized distributors in the Americas, Europe, and Asia-Pacific (including Taiwan but excluding China) have committed to compliance with anti-corruption and export control laws in each relevant countries. In 2023, the signing rate of Moxa Authorized Selective Distributor Agreement was 100%.

Legal Journal

To build employees' sensitivity to common contract terms and enhance their compliance awareness, Moxa Legal Department periodically issued themed e-newsletters in both Chinese and English from 2022 to 2023. These newsletters covered topics including dispute resolution mechanisms, employment contracts, prevention of workplace misconduct, principle of proportionality, and choice of governing law, totaling 5 themes and 27 articles. They were rolled out to over 1,900 employees worldwide.
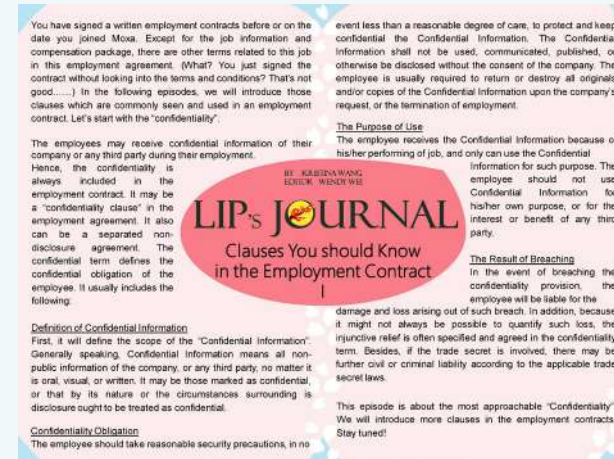
Moxa Legal Journal - Employment Contract
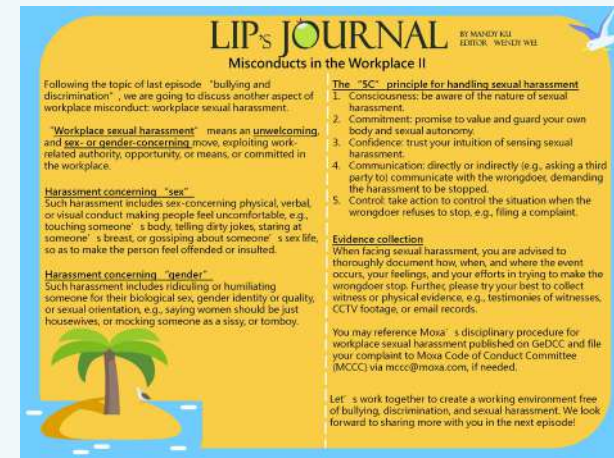
Moxa Legal Journal - Prohibition of Workplace Misconduct

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1.4 Risk Management

1.4.1 Risk Management

Risk Management Process and Organization

In recent years, issues such as the pandemic, wars, and geopolitical tensions have potentially fragmented supply chains. Additionally, trends like trade compliance and carbon reduction requirements have incre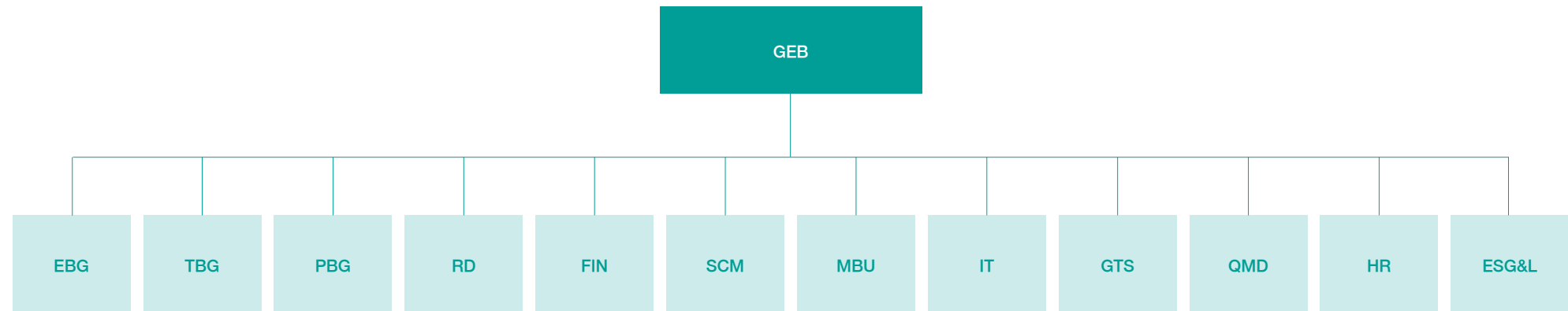ased operational costs and presented greater challenges to corporate sustainability. Moxa is committed to excellence and sustainable development. To maintain operational and business continuity in a rapidly changing business environment, Moxa has adopted the risk management framework and processes recommended by COSO (The Committee of Sponsoring Organizations of the Treadway Commission). This framework helps identify and integrate various risks that could impact Moxa's goal achievement into operational activities and daily management processes, establishing a comprehensive risk management system for tracking and managing risks. This system supports Moxa's sustainable operations and enables the company to address external and internal challenges effectively.

Moxa utilizes risk, industry, and economic trend reports from domestic and international think tanks, along with important internal tasks, to create a risk radar chart. Potential internal and external risks are categorized into four dimensions: Finance, Strategy, Hazard & Compliance, and Operations. To ensure that significant risks affecting Moxa are adequately addressed, Moxa has established a Risk Management Team (RM Team). This team, appointed by the Co-CEOs, is responsible for identifying, assessing, mitigating, monitoring, and reporting risks related to the company's and functional units' strategic objectives. The RM Team implements comprehensive risk management practices.Through thorough risk identification, assessment, and management, Moxa can better understand potential threats and opportunities and their impact on business objectives. This enables Moxa to remain adaptable under changing market conditions and make timely, informed decisions.

Moxa Risk Management Team

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Risk Identification

Moxa Risk Identification Process

Risk Identification

Identify the potential internal and external risk issues that could impact the company's operational objectives.

Risk Assessment

Assess the identified risks in terms of potential impact and likelihood of occurrence, and determine risk level into low, medium, or high.

Risk Disposal

Formulate and coordinate risk management response measures for integration.

Risk Monitoring and Reporting

Review and assess the effectiveness of risk management measures quarterly.

To ensure that RM team members have a consistent understanding of risk management concepts and assessment methods, Moxa provides initial training through courses for a general overview. This is followed by workshops where RM Team members practice assessment techniques. Additionally, one-on-one interviews are conducted to identify and evaluate company risks.

During risk identification, Moxa reviews the work assessment forms from various functional units to identify potential risk issues that may impact the company. These risks may be strategic, financial, hazard and compliance, or operational. The findings are consolidated into Moxa's risk radar chart. When implementing the company's operational plans, the risk radar chart is used to identify potential risks and manage them to control operational disruptions.

Moxa categorizes risks into low, medium and high risk categories based on their likelihood and severity. Considering the company's current operational objectives, the appropriate risk response measures and resource allocation are determined. By implementing risk control measures, the severity or likelihood of risk events is reduced, keeping risks within an acceptable range to support the company's operational goals.

In 2023, the RM Team selected the following key risk issues based on Moxa's operational objectives, formulated management measures, and conducted regular tracking.

Risk Topic	Potential Impact	Management Measures
Trade and Technology Control	Loss of key customers or market share decline due to trade or technology controls.	• Implement a systematic approach to regulatory compliance to control trade risks and maintain competitiveness. Design and manage products and their import/export processes, stay updated on regulatory trends, and meet customer needs. • Understand the technology solutions and technology ecosystems of specific regions. • Collaborate with strategic partners to formulate product technology requirements and develop corresponding product development roadmaps.
Geopolitics	Changes in trade policies due to geopolitical issues, leading to restrictions on products and business expansion.	• Continuously coordinate with the sales team and key customers the specific political and technical requirements of critical countries and governments, and strengthen the partnership with distributors. • Pursue customers and opportunities from different countries to expand the key customer base and diversify risk.
Supply Chain Fragmentation	Disruption in raw material supply and inability to ship products, affecting customer orders and revenue.	• Raw material inventory management to reduce the risk of interruption of raw material supply. • Build a diversified supply chain based on technical capabilities and regional distribution. • Strengthen supplier relations and communication, and improve supply priority. • Multi-source material supply contingency plan. • Require suppliers to have Business Continuity Planning (BCP) capabilities for upstream operations.
Information Security and Cybersecurity	Cyber attacks or equipment failures impacting daily operations, such as production interruptions, communication disruptions, and inability to access critical data.	• Formulate the information security management policy by promoting ISO 27001 and formulate corresponding key performance indicators (KPIs) to track the implementation results. • Conduct internal and external audits every year to maintain the validity of the ISO certifications. • Upgrade to ISO 27001 2022 to strengthen cybersecurity defenses.
Regulatory Compliance	Failure to fully understand and implement applicable laws and regulations may result in claims, fines, or damage to the company's reputation.	• Collect industry-related applicable regulations, identify and benchmark Moxa-related regulations, and design corresponding compliance mechanisms. • Collaborate with international compliance partners to stay ahead of new regulatory developments and updates in international regions or industries, accelerating the internal professional team's response time.

1.5 Cybersecurity and Privacy Protection

1.5.1 Sustainable Cybersecurity Strategy

Cybersecurity As The New Reliability DNA

Moxa is committed to providing high-quality and reliable industrial communication and computing equipment. Industry 4.0 and the Internet of Things not only bring huge opportunities for development, but the increasingly interconnected industrial networks also pose a new and unreliable variable to the industrial automation environment - information security threats. Unreliable industrial automation environments will lead to unstable infrastructure operations. As a result, governments around the world are paying more and more attention to the social damage and costs that may be caused by cybersecurity threats, and the requirements for cybersecurity regulations are also increasing. The cybersecurity incidents in the energy and manufacturing industries in recent years have further confirmed that industrial cybersecurity has become a substantial risk that must be managed for business operations.

Moxa has long been committed to the reliability of industrial automation applications, accumulating numerous use cases that demonstrate product stability under harsh physical conditions. Facing cybersecurity threats to connected devices, Moxa maintains its commitment to reliability by integrating " cybersecurity " as a new element to enhance overall reliability. This is implemented through two main areas: "Product Security" and "Information Security." By advancing its own "Information Security" capabilities to build a solid infrastructure and simultaneously strengthening "Product Security," Moxa provides customers with secure, reliable, and stable industrial network communication and remote automation solutions.
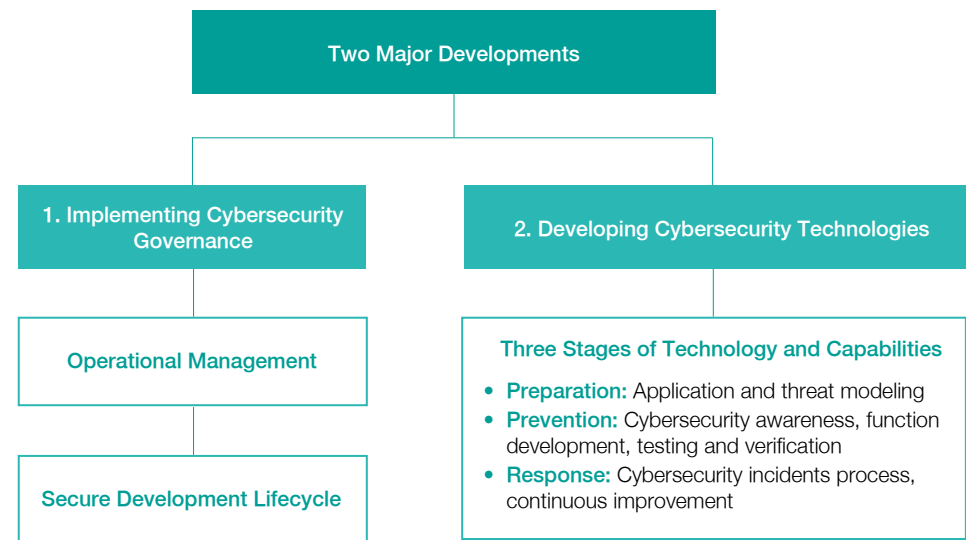
Sustainable Cybersecurity Strategy Focus

Moxa's goal is for all its products to effectively help customers reduce cybersecurity risks, particularly the next-generation industrial network protection solutions and products for remote automation. Cybersecurity is not a one-time technical fix but should be integrated into the product lifecycle from the design stage, incorporating cybersecurity capabilities that meet the needs of automation applications. As cybersecurity threats continue to evolve, these capabilities must be updated to maintain protection throughout the service lifecycle. At the same time, Moxa's own operations and services must achieve the lowest possible cybersecurity risk to ensure the sustainable delivery of products and services.

To achieve this goal, continuously strengthening Moxa Cybersecurity DNA is an important long-term mission for Moxa.

Building Core Competencies in Cybersecurity

To build core cybersecurity capabilities, Moxa focuses on two major areas: "Product Cybersecurity" and "Information Security." These areas are further divided into "Implementing Cybersecurity Governance" and "Developing Cybersecurity Technologies." The structure is as follows:

Two Major Developments

1. Implementing Cybersecurity Governance
   - Operational Management
   - Secure Development Lifecycle

2. Developing Cybersecurity Technologies

Three Stages of Technology and Capabilities
- **Preparation:** Application and threat modeling
- **Prevention:** Cybersecurity awareness, function development, testing and verification
- **Response:** Cybersecurity incidents process, continuous improvement

Implementing Cybersecurity Governance

Cybersecurity governance focuses on two main areas: "Operational Management" and "Security Development Lifecycle." The key to achieving these areas is through "Processes" and "Organization."
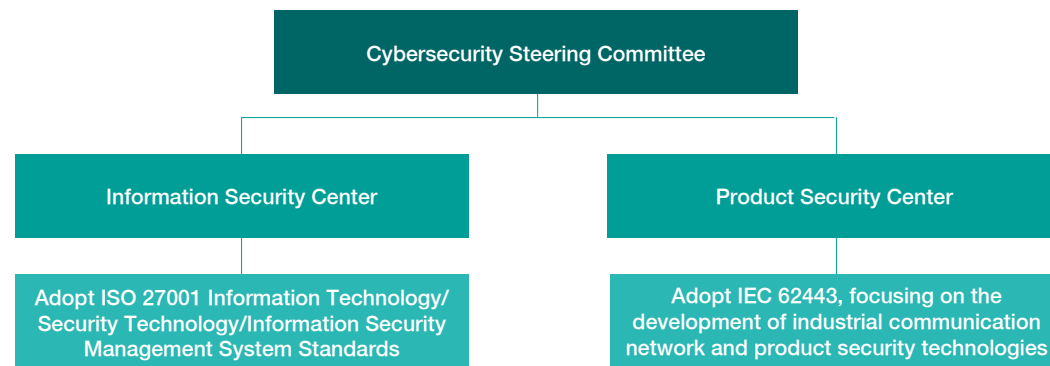
Process

- Cross-departmental common information security policy: Establish a comprehensive information security policy to cover all departments and business areas.
- Set specific standards for information security and product security: Define concrete security standards and guidelines based on different requirements.
- Provide guidelines for information security and product security: Provide operational guidelines and procedures to ensure compliance with security requirements.

Organization

- Establish a Cybersecurity Steering Committee (Cybersecurity SC) and its subordinate management organizations, with the Chair appointed and authorized by the GEB. This committee serves as Moxa's highest cybersecurity leadership organization.
- The Cybersecurity Steering Committee is composed of Moxa's co-CEOs, the heads of the sales, information, and product units, as well as information security experts. The committee is responsible for formulating and overseeing the implementation of cybersecurity policies.
- Under the Cybersecurity Steering Committee, the "Information Security Center" and the "Product Security Center" have been established. These centers are responsible for promoting cybersecurity affairs within the scope of information environments and product development and production.
- Currently, the "Information Security Center" and the "Product Security Center" have both passed certifications for ISO 27001 Information Security Management Systems and IEC 62443 Industrial Automation and Control Systems. These certifications ensure comprehensive cybersecurity protection from enterprise information systems to product cybersecurity, establishing a trusted, long-term partnership with customers.

Moxa Cybersecurity Governance Structure

Cybersecurity Steering Committee

Information Security Center

Adopt ISO 27001 Information Technology/ Security Technology/Information Security Management System Standards

Product Security Center

Adopt IEC 62443, focusing on the development of industrial communication network and product security technologies

Developing Cybersecurity Technologies

Cybersecurity technology broadly refers to management processes and solutions related to cybersecurity, encompassing both "Enterprise Cybersecurity Governance" and "Product Development." The cybersecurity technology development for "Product Development" focuses on the Security Development Lifecycle. This involves developing the necessary professional capabilities and technologies for the three stages of the cybersecurity framework: "Preparation," "Prevention," and "Response."

- **Preparation:** Establish backup and incident recovery plans to ensure rapid recovery of operations in the event of a cybersecurity incident.
- **Prevention:** Implement robust defense measures, including intrusion detection systems, vulnerability scanning, and patching, to prevent the occurrence of cybersecurity threats.
- **Response:** Develop contingency plans and emergency response procedures to address and manage cybersecurity incidents, including investigation, evidence preservation, and reporting.

External Cybersecurity Management

In addition to developing "Information Security" and "Product Cybersecurity," Moxa established cybersecurity management procedures for core subcontractors in 2023 to enhance the cybersecurity resilience of its key subcontractors. As a result, no major cybersecurity incidents occurred at any core subcontractors in 2023.

Moxa is committed to assisting its core subcontractors to complete the following cybersecurity management initiatives, including:

- Form an information security organization
- Inventory information assets
- Strengthen access procedures
- Implementation of physical and environmental security
- Manage Operational Computers
- Monitor network channels
- Establish a backup mechanism
- Define the incident reporting process
- Production sites risk analysis

In 2023, Moxa assisted all core subcontractors in initiating information security management efforts and completed risk analysis for 25% of core subcontractors' manufacturing sites. The goal is to expand the scope of risk analysis to more manufacturing sites in the future. The medium- and long-term objective is to help 100% of core subcontractors implement information security management procedures and conduct risk analysis for manufacturing sites. By mitigating and continuously monitoring risks at these sites, Moxa aims to support core subcontractors in maintaining a secure and reliable information security quality. Moxa will continue to interact with core subcontractors to ensure the manufacturing environment meets international information security standards and to uphold the information security reliability of Moxa products.

1.5.2 Information Security

Information Security Center

Organizational Structure

```
            ┌─────────────────────────────────────┐
            │  Cybersecurity Steering Committee   │
            └─────────────────────────────────────┘
                            │
            ┌─────────────────────────────────────┐
            │    Information Security Center      │
            └─────────────────────────────────────┘
                            │
           ┌────────────────┴────────────────┐
┌──────────────────────────┐    ┌──────────────────────────┐
│ Information Security      │    │ Information Security Task │
│ Decision Making Group     │    │ Force                     │
└──────────────────────────┘    └──────────────────────────┘
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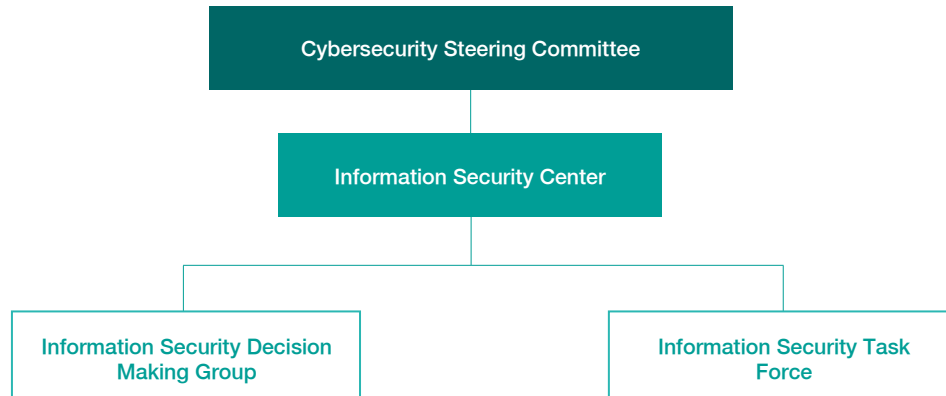
The Moxa Information Security Center (ISC), reported to Cybersecurity SC, operates based on ISO 27001 standards and is responsible for managing and maintaining the security of the enterprise's information systems. The ISC includes the "Information Security Decision-Making Group" and the "Information Security Working Group." The chair of the Information Security Decision-Making Group is the Chief Information Officer (CIO), and its members include department heads from the IT and administrative management departments. This group is responsible for formulating and managing policies related to Moxa's information system security.
The Information Security Working Group is led by the heads of IT infrastructure and information security departments and consists of experts in information security. This group is responsible for executing the following information security tasks:

- **Information security operations:** The team responsible for implementing technical control, security monitoring, and incident response tasks.
- **Information security risk management:** The department responsible for identifying, assessing, and managing the information security risks facing the organization.
- **Compliance and regulatory adherence:** Ensures that the organization's information security policies and measures comply with relevant regulations and compliance requirements.
- **Security awareness training:** Provide information security training and education to raise employees' awareness and vigilance in information security.

The ISC was established in 2021 and obtained ISO 27001:2013 certification in that same year. Over the past three years, ISC has successfully implemented ISO 27001 external audits and has had no non-conformities.

Moxa ISO 27001: 2013 External Audit Results

	Nonconformities	Observations	Improvement Opportunity
2021	0	8	5
2022[1]	0	5	0
2023	0	5[2]	1[3]

Note1: Expand the scope of verification to include systems related to development, manufacturing, and after-sales service processes.
Note2: The main reason is that the time required for upgrading the operating system is close to that of the manufacturer's non-disclosure agreement.
Note3: Some internal systems use LDAPS encryption for authentication. It is recommended to upgrade to a multi-factor authentication (MFA) login method.

In 2023, in addition to the day-to-day business of information security, SC has continued to develop drafts for data security-related policies, which include the data governance framework, information classification and grading system, management processes, changes in systems and personnel work practices. It is expected that after obtaining the new ISO 27001:2022 certification in 2024, the policies will be confirmed and implemented.

Information Security Incident Reporting and Management

Over the past few years, Moxa has been committed to improving information security to ensure the safety and reliability of its products and services. In 2019, Moxa fully embraced information security and incorporated it into the core of its product strategy to address the increasing security challenges and threats. As a commitment to information security, Moxa obtained ISO 27001 in October 2021: 2013 Information security management system certification. The adoption of international standards demonstrates Moxa's emphasis on establishing and maintaining a high-quality information security management system and enables it to effectively address various information security threats. Over time, Moxa continues to strive to improve its security standards. In 2022, Moxa expanded the scope of its ISO 27001:2013 certification to include systems related to development, manufacturing, and after-sales service processes.

In the face of the constantly changing information security environment, Moxa is constantly striving to improve its information security capabilities. Actively preparing for the upgrade to ISO 27001 in 2023: to ensure that its information security management system is consistent with the latest international standards, and to continuously improve its information security standards and capabilities. In 2024, Moxa's primary information security goal is to obtain certification for the ISO 27001:2022.

Moxa's operational strategy will continue to advance in the field of information security. By maintaining and updating the ISO 27001 certification, Moxa ensures the security of its information system environment, thereby enhancing the protection of customer information and boosting the company's competitive edge.

Improving Protection and Monitoring Mechanisms

Moxa implements information security awareness across all employees through a combination of social engineering drills and online education training courses, which complement and reinforce each other. At the beginning of 2023, the social engineering drill was provided in Traditional Chinese, Simplified Chinese, and English. The tests were conducted for employees around the world. About 1,660 employees participated in the exercises, and the percentage of clicks on the links in the email was 16.93%. To reduce the risk of employees falling victim to phishing emails during social engineering drills, ISC provided two online courses to remind employees to remain highly alert to unknown email sources and sensational subject lines. The pass rate for both courses was 100%. In 2024, we will continue to hold at least two social engineering drills and training to ensure employees remain vigilant at all times to maintain the company's information security.

In terms of information system security protection, in addition to focusing on 100% real-time tracking and cleaning of incident monitoring, key protection measures include the following four:

- **Vulnerability Scanning and Penetration Testing:** Regularly perform vulnerability scanning and penetration testing on information systems to discover potential security gaps and weaknesses, and implement appropriate remediation measures.
- **Regular Review of Firewall Rules:** Regularly review and update of firewall rules to ensure that they are consistent with the latest security requirements and business requirements.
- **Periodic System Account Inventory:** Regularly audit and clean up system accounts, promptly disabling or deleting unnecessary or unused accounts to reduce security risks.
- **Tracking and Urgent Updates for Common Vulnerabilities and Exposures (CVE):** Closely monitor the latest information from the cybersecurity intelligence center on CVEs, promptly addressing public vulnerabilities and installing emergency updates to safeguard system security.

In addition, to ensure the effective implementation of security updates, Moxa has established the following goals and timelines:

- Within 30 days of a security update release, aim to achieve a 90% installation coverage rate.
- Within 60 days, strive to increase the installation rate to 95%.
- The ultimate goal is to achieve a 100% installation rate within 90 days to ensure the overall security of the system.

These measures will help Moxa effectively strengthen the security protection of its IT systems and protect corporate IT assets from unauthorized access and malicious attacks.

Moxa actively implements a comprehensive information security scoring mechanism. This system continuously reviews Moxa's digital footprint, analyzes risk factors according to the latest cybersecurity scoring standards, and performs overall assessments. The ISC team addresses newly discovered issues to ensure that the overall information security score remains above the industry average. In 2023, Moxa received a B rating due to the need for significant modifications to older system designs to meet high cybersecurity inspection standards. The long-term goal is to achieve an A rating by 2024.

Information Security Incident Reporting and Management

Moxa has established an IT reporting mailbox, 911, for employees to directly send information about cybersecurity-related incidents. All reported incidents are addressed and resolved within the stipulated timeframe. Over the past three years, Moxa has received an average of about 61 cybersecurity-related reports annually from employees worldwide. The majority of these reports involve two main types: 'suspected phishing emails' and 'suspicious attachments.'

In 2022, the number of reported incidents increased compared to 2021. This rise is attributed to Moxa's ongoing efforts to educate both domestic and international employees, enhancing their sensitivity and awareness regarding cybersecurity incidents. Following the active promotion of social engineering drills and cybersecurity awareness training in 2022, the number of reported incidents decreased to 54 in 2023, primarily involving 'suspected phishing emails.' Moxa will continue to strengthen its email filtering tools and further educate employees on this matter.

Moxa Cybersecurity 911 Incident Statistics

	2021	2022	2023
Number of 911 incidents reported	32	96	54

In addition, for suspected information security incidents detected by each monitoring system, the monitoring team will open a case for follow-up action, and 100% of these cases are resolved. In 2023, Moxa had no operational disruptions, data damage, or breaches caused by security incidents .

To ensure that information systems can quickly recover and minimize operational impact in the event of a disaster, Moxa has been categorizing its information systems by importance since 2019. Each system is assigned corresponding Recovery Time Objectives (RTO) and Recovery Point Objectives (RPO). Systems are evaluated and improved based on their RTO and RPO targets, including their current operational structure and backup processes. Each system is required to conduct incident recovery drills annually in accordance with ISO 27001 standards to ensure that it can be restored within the specified time.

Information Security Training

Moxa enhances information security awareness through a combination of internal promotions and external training. In 2023, social engineering drills were planned for global employees, with a total of 2,644 person-times of participants. Employees at the Taiwan headquarters, as the frontline of corporate cybersecurity, were particularly targeted for increased awareness, including sessions with external speakers.

With the rise in cybersecurity awareness and network threats, Moxa aims to continuously improve its cybersecurity skills. Internally, information security-related courses are offered, and employees are also sent for external training. After completing external training, employees share their knowledge internally, helping the team stay updated on information security trends and operational priorities.

In total, there were 1,448 person-times of internal and external training in 2023. Moving forward, Moxa will continue to invest in information security awareness and strengthen internal technical capabilities.

2023 Information Security Training Statistics

Title	Number of Participants (person-times)
Internal Trainings	
Moxa Corporate Cybersecurity Training	29
Enterprise Cybersecurity Awareness and Advocacy Training 1.	106
Enterprise Cybersecurity Awareness and Advocacy Training 2.	22
Social Engineering and Cybersecurity Awareness Training	145
Social Engineering Training (Headquarters and Regional Offices)	915
CVSS Evaluation Training - Beginner	67
CVSS Evaluation Training - Advanced	28
IEC 62443-4-1 Practice Guidelines - Basic	58
IEC 62443-4-1 Practice Guidelines -Workshop	8
Fundamentals of Open Source Code Application and Licensing	66
External Trainings	
National Institute of Cyber Security - Elite Cybersecurity Talent Training Course, Phase 1, Taipei Session	1
National Institute of Cyber Security - Cyber Threat Defense Competition	1
Introduction to the Dark Web, Anonymity, and Cryptocurrencies	1
Establishment of a Cybersecurity Monitoring Center	1
Total	1,448

1.5.3 Product Cybersecurity

Product Security Center

To effectively advance product security management and support the company's "Product Security Policy," Moxa has established the "Product Security Center" under the Cybersecurity Steering Committee. This center is responsible for developing product security strategies and directions, ensuring the ongoing robust operation of the product security management system. The organizational structure is as follows:

```
Cybersecurity Steering Committee
(Cybersecurity SC)
           |
           +--------------------------------+
           |                                |
Product Security Center            Cybersecurity Business
(PSC)                              Strategy Council
           |                       (Cybersecurity BSC)
     +-----+-----+
     |           |                           |
Product Security   Technology PSO      BG/RBU PSO WG
Incident Response  WG
Team (PSIRT)
```
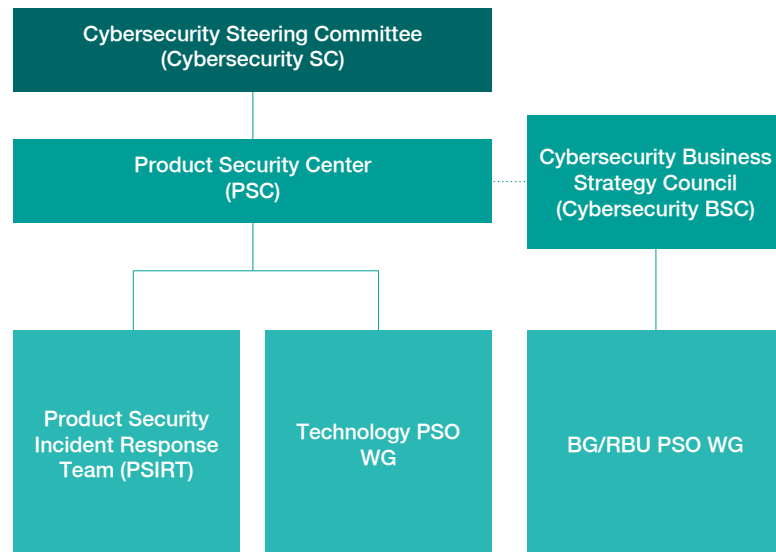
Moxa SDLC Product Security Policy

To enhance the overall cybersecurity quality of Moxa's products in industrial applications and ensure that the developed industrial products can effectively resist cybersecurity threats and operate normally while meeting industry-related security standards, Moxa has established the "Product Security Development Control Mechanism and Process Policy." With the establishment of the Product Security Center, this policy has been updated to the "Product Security Policy," which incorporates the Secure Development Lifecycle (Moxa SDLC) to lay the foundation for product security during development. The Moxa SDLC aims to integrate cybersecurity elements into the product development process, including threat modeling for potential cybersecurity attacks, planning security requirements based on different industrial applications, performing testing and validation, handling product security incidents, and ongoing product improvements, to ensure that the product's cybersecurity performance meets the required standards.

This policy is based on the requirements of the international cybersecurity standard IEC 62443-4-1 for Industrial Automation and Control Systems (IACS). It establishes the cybersecurity guidelines, task organization, and corresponding product security and cybersecurity responsibilities required for product development. The policy applies to all products developed by Moxa, mandating that product lifecycle development activities—including requirement specification, functional design, verification, and addressing vulnerabilities and updates post-launch—be conducted in accordance with this policy, until the product is discontinued.

Moxa's Secure Development Lifecycle (Moxa SDLC) program received ISASecure certification in 2021, making it one of the few companies in the market to achieve this level of cybersecurity capability certification. In 2023, the flagship EDR-G9010 series and the TN-4900 series industrial security routers, compliant with EN 50155 railway standards, both received IEC 62443-4-2 Security Level 2 (SL2) certification. These are the first products globally to receive this certification, enhancing the protection of critical infrastructure and delivering optimal benefits to customers.
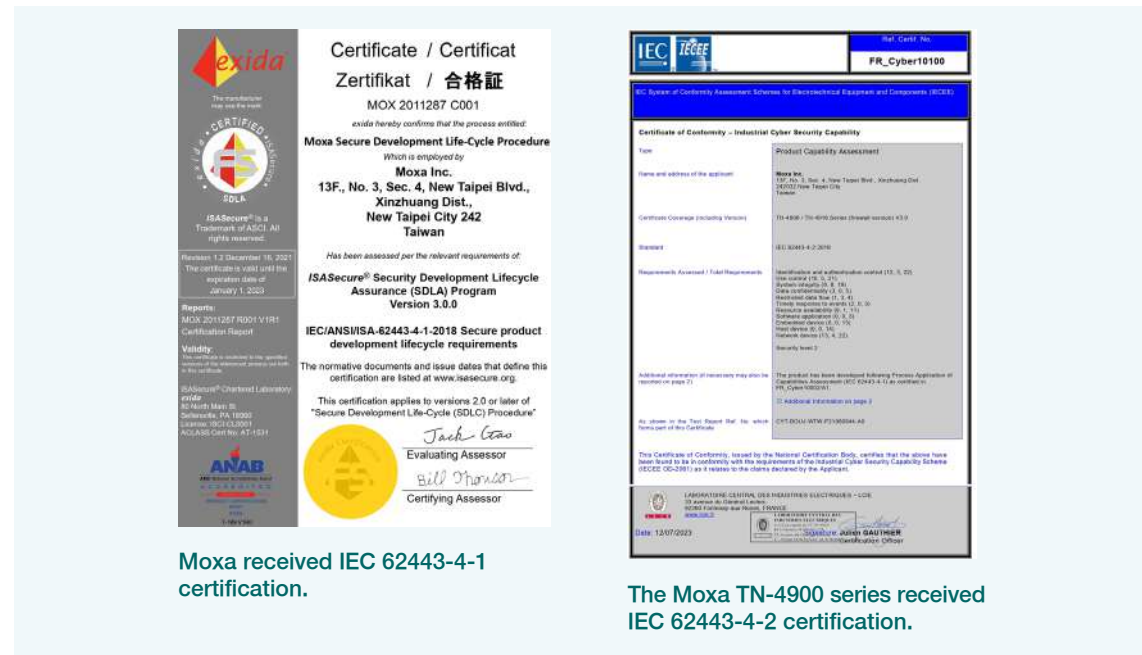
Moxa received IEC 62443-4-1 certification.

The Moxa TN-4900 series received IEC 62443-4-2 certification.

Strengthening Product Cybersecurity Resilience

To ensure that product security is comprehensively considered throughout the entire product development process, the product team follows the Moxa Product Security Policy specifications and requirements. During the development stage, the team gradually implements measures such as product threat modeling, security risk analysis, and defining mitigation measures. They also develop a security design framework, review the security risks of third-party components used, and proactively perform static and dynamic vulnerability scanning and tracking of the source code. According to product security requirement specifications, they formulate a comprehensive security product testing plan, which includes activities such as cyber attack analysis, known vulnerability scanning, and penetration testing.
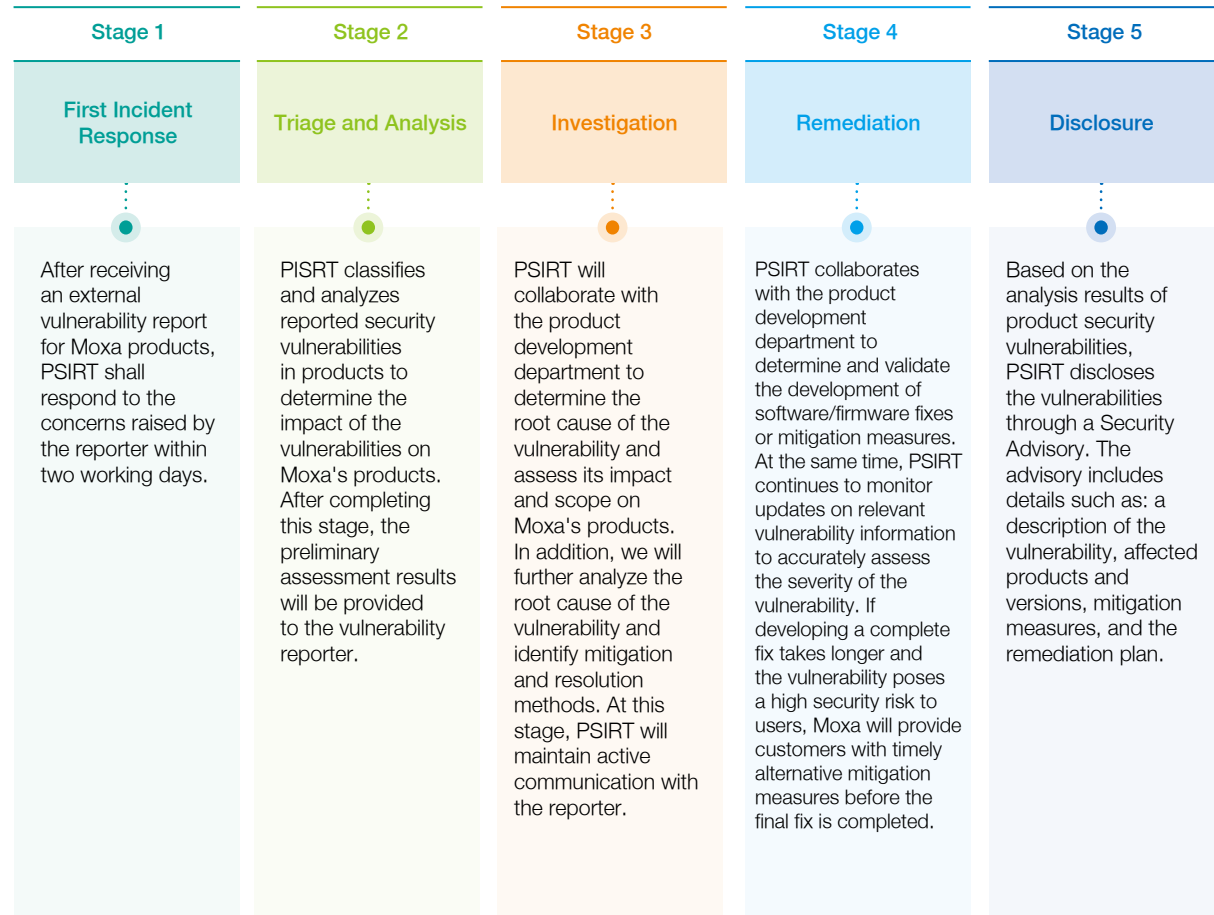
Furthermore, in 2023, Moxa officially received authorization from the U.S. Cybersecurity and Infrastructure Security Agency (CISA) to become a recognized CVE (Common Vulnerabilities and Exposures) Numbering Authority (CNA) partner. This makes Moxa the eighth CVE numbering manager in Taiwan and one of the few recognized enterprises in the industrial networking industry, demonstrating Moxa's high level of commitment and investment in product security.

As a CNA authorized partner, Moxa not only needs to have a mature product security vulnerability management policy and process but also must pass interviews and tests conducted by CISA to demonstrate security expertise and good conduct. After joining CNA, Moxa's Product Security Incident Response Team (PSIRT) will be able to more quickly identify and fix security vulnerabilities in real-time, embodying Moxa's strategy of integrating cybersecurity as DNA of reliability.

Product Security Incident Reporting and Management

Once the product is launched, the Product Security Incident Response Team (PSIRT) must continuously monitor known security vulnerabilities disclosed in the market and track and manage related security incidents to eliminate or mitigate the threats that pose to the product. Therefore, Moxa integrates vulnerability management actions and defines its related workflows, which include actions such as vulnerability reporting verification and initial risk assessment, vulnerability reproduction, establishing vulnerability remediation planning, and releasing security updates. Moxa's product security vulnerability management process is divided into five stages, each with rigorous processing procedures and operations.

Cybersecurity Vulnerability Management Process

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
First Incident Response	Triage and Analysis	Investigation	Remediation	Disclosure
After receiving an external vulnerability report for Moxa products, PSIRT shall respond to the concerns raised by the reporter within two working days.	PISRT classifies and analyzes reported security vulnerabilities in products to determine the impact of the vulnerabilities on Moxa's products. After completing this stage, the preliminary assessment results will be provided to the vulnerability reporter.	PSIRT will collaborate with the product development department to determine the root cause of the vulnerability and assess its impact and scope on Moxa's products. In addition, we will further analyze the root cause of the vulnerability and identify mitigation and resolution methods. At this stage, PSIRT will maintain active communication with the reporter.	PSIRT collaborates with the product development department to determine and validate the development of software/firmware fixes or mitigation measures. At the same time, PSIRT continues to monitor updates on relevant vulnerability information to accurately assess the severity of the vulnerability. If developing a complete fix takes longer and the vulnerability poses a high security risk to users, Moxa will provide customers with timely alternative mitigation measures before the final fix is completed.	Based on the analysis results of product security vulnerabilities, PSIRT discloses the vulnerabilities through a Security Advisory. The advisory includes details such as: a description of the vulnerability, affected products and versions, mitigation measures, and the remediation plan.

Promoting Cybersecurity Awareness and Training

To implement cybersecurity concepts, Moxa has planned a series of cybersecurity-related publicity and training initiatives, tailored to different types of employees. In 2023, four topics were promoted, with a total of 2,879 person-times of participation and completion.

2023 Cybersecurity Training Results

Cybersecurity Topics	Employee type under training	Number of Participants and Completed Training (person-times)
The Top of Cybersecurity Event	All employees at the Taiwan headquarters	2,468
PISRT Process	PSIRT member in product management	37
Security Dojo	R&D and IT	330
Common Vulnerability Scoring System (CVSS) Online Course	R&D and product management	44
Total		2,879

To raise the awareness of cybersecurity of all Moxa employees in 2023, the "Product Security Center" planned and organized the "The Top of Cybersecurity" promotional and contest event to send out e-newsletter to the employees at the Taiwan headquarters. The topics include explanations of common cybersecurity knowledge, definitions of cybersecurity terms, and sharing of cybersecurity case studies. To enhance participation, quizzes are conducted based on the content of the newsletters. Employees are encouraged to participate through monthly raffles and an annual accumulation system. A total of 12 newsletters were published, with a cumulative participation of 2,468 person-times.

Moxa plans to organize and compile every piece of cybersecurity knowledge, questions, and answer explanations into the company's internal sharing platform. This will allow all employees to read and review the content at any time. Additionally, Moxa plans to regularly conduct training courses on the PSIRT vulnerability handling process, aiming to ensure that all members of the product development team have the necessary knowledge to respond to product vulnerabilities and to comprehensively improve product reliability.

The Top of Cybersecurity E-newsletter

1.5.4 Privacy Protection

Privacy Statement and Promotion

With the continuous increase in data use and the circulation of personal information, personal data protection has received increasing attention. The implementation of the EU's General Data Protection Regulation (GDPR) establishes higher data protection standards for global enterprises. Moxa has been committed to complying with the relevant regulations of various countries to protect the personal information security of customers and users.

To ensure that Moxa's online platform complies adheres to relevant regulations in various countries, Moxa follows three key principles to update and strengthen the privacy policy and related contents on its official website.

- Provide a clearer and more specific privacy policy to explain to users how Moxa collects, uses, and protects their personal data.
- Add user control functions, such as setting personal data access permissions and preferences, to enhance users' sense of control over their data.
- Strengthen website security, including encryption technology and authentication measures, to protect users' personal information from unauthorized access.

Moxa Privacy Policy

Personal Data Protection Training

To improve employees' awareness and knowledge of personal data protection, Moxa regularly organizes personal data training activities, including online training courses, workshops, and quizzes. Through these trainings, employees learn how to identify personal data, ensure its correct use and handling, and learn how to respond to potential cybersecurity risks. According to statistics, since the implementation of personal data protection training, employees' understanding and level of importance regarding personal data protection have significantly increased, and their awareness of personal data protection has been effectively strengthened.

2 Innovation and Service

> 4,500 Employees

Participated in 27 sessions of R&D sharing events in 2023, encouraging innovative exchanges.

68%

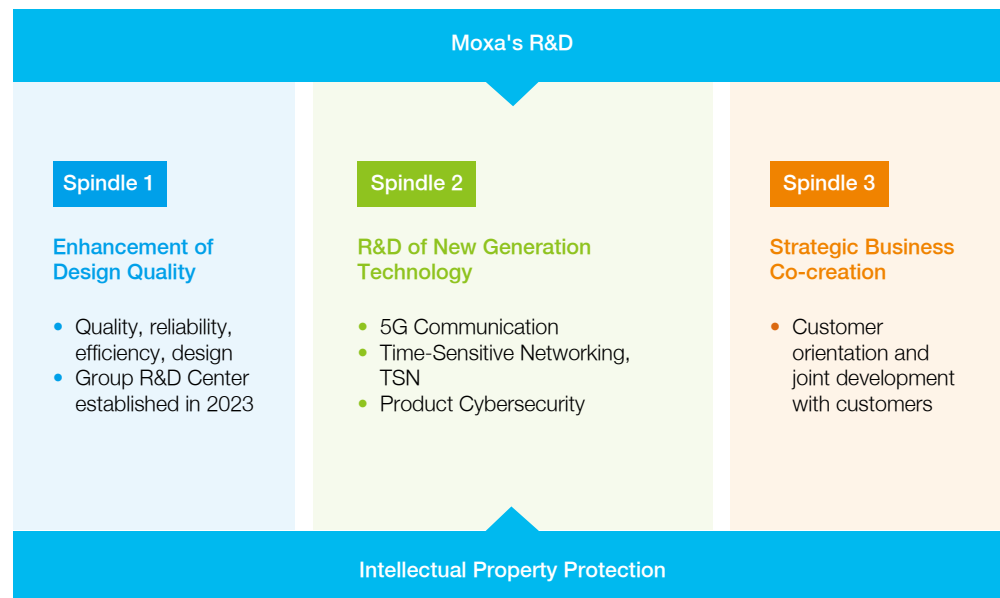Growth rate in patents granted, and continued to encourage patent applications to protect R&D achievements.

97.9%

Technical service satisfaction survey, continuous improvement to enhance customer satisfaction.

2.1 Innovation Management

2.1.1 Innovation-Driven Development

Moxa is a leading brand of industrial automation. For more than 30 years, Moxa has been providing customers with highly reliable technical solutions based on innovation. For industrial automation applications that demand high stability and reliability, Moxa not only invests R&D energy in the development of new-generation technical standards and products, but also focuses on the continuous deepening of fundamental technologies and engineering methods, and explores applications and technical solutions together with leading customers. of innovation and breakthroughs, fostering a culture of long-term organizational innovation and R&D.

Moxa's Innovative R&D Framework

Moxa's R&D		
Spindle 1	**Spindle 2**	**Spindle 3**
Enhancement of Design Quality	**R&D of New Generation Technology**	**Strategic Business Co-creation**
• Quality, reliability, efficiency, design • Group R&D Center established in 2023	• 5G Communication • Time-Sensitive Networking, TSN • Product Cybersecurity	• Customer orientation and joint development with customers
Intellectual Property Protection		

Moxa's R&D involves three major frameworks:

1. Enhancement of Design Quality

- Moxa does not limit itself to the existing quality achievements. In addition to continuous investment and upgrading of equipment and technology, Moxa also engages in industry-academia cooperation. Through in-depth theoretical knowledge and innovative engineering thinking, Moxa continues to deepen and improve engineering methods, drive quality, Continuous improvement of R&D competitiveness in terms of reliability and efficiency

2. R&D of New Generation Technology: Focusing on 5G, Time-Sensitive Networking, and Product Cybersecurity

- Moxa actively participates in technical standards organizations and industry associations, working with participants to formulate standards and promote the realization of new technologies in automation applications.
- "Mastery of core technologies" is the foundation for whether Moxa can continuously innovate in new technologies and bring unique application value to customers. Moxa actively invests in technical solutions for technical standards, or establishes in-depth technical cooperation with the ecosystem. Cultivating innovative capital robust enough to sustain continuous development.

3. Strategic Business Co-creation

- Moxa is customer-oriented. Through solid innovation and R&D capabilities, we can respond to customer expectations and needs, and jointly create innovative and high-value technical solutions for industrial applications.

Spindle 1. Enhancement of Design Quality

Comprehensively Improve Design Quality

In order to provide products that create higher value for customers, Moxa continues to deepen and improve its product design technology to improve product design quality. It includes the following four categories:

- **Strengthen design collaboration:** Increase the ability to predict actual results, accelerate product design timelines, and reduce back-end debugging and testing costs. The computer-aided engineering (CAE) environment will be completed in 2023. Introduce CAE into the planning of product design process and assist in completing forward-looking technology research with CAE.

- **Strengthening of design risk management:** We plan to introduce a new version of the Design Quality Analysis and Management System, and complete the entry-level training for core personnel in 2023.

- **Improve reliability assessment capabilities:** Including the development of lifespan analysis capabilities of components and power modules. In 2023, Moxa will invest in reliability experiments to ensure that Moxa provides customers with products of stable quality. For more details, refer to Sustainability Special – Moxa Reliability Engineering Implementation.

- **Reinforce product information security:** In 2023, we will introduce a series of agile project management, collaboration, and tracking systems, and integrate the product software and hardware development management procedures with the R&D information system. At the same time, we will continue to increase the test automation ratio to continuously improve the quality of R&D activities. and efficacy. In addition, the Company has introduced information system management open-source software and third-party software to ensure information security throughout the product life cycle. See the report for details. 1.5.3 Product Information Security.

Establishment of Group R&D Center

Moxa understands that an open R&D perspective and organizational culture are the power of innovation. This foundation is based on Moxa's core people-oriented philosophy. Through the restructuring of the R&D organization and the management of the R&D culture, we support the continuous occurrence of innovation. Through organizational transformation, Moxa integrated its R&D teams to form the Group R&D Center in 2023. The R&D Council, composed of R&D managers, serves as the governing body reporting directly to GEB. This allows short-, medium- and long-term investment and development in products and technology to be carried out simultaneously and provides an environment for the R&D team to think outside the product framework. Moxa actively fosters a culture of R&D innovation within the Company. In addition to providing various venues for internal sharing and exchange, it also consciously integrates daily tasks for R&D colleagues to lead the internal planning and execution of cross-departmental technical issues to expand technical horizons and perspectives. Relevant R&D results are protected through intellectual property rights applications. Moxa's R&D center will continue to ensure the competitiveness of the Group's technology development and the operational efficiency of its R&D organization. It will also serve as an important strategic and execution unit for Moxa in the global technology and industrial ecosystem to build Moxa's innovation value.

Strategic Actions and Achievements of the Group R&D Center in 2023

Strategic Actions	Key outcome
- Form a cross-product technology research and development management team to establish a comprehensive technology decision-making point of view. - Ensured the evolution of Moxa's core technologies, and made organizational plans and resource allocations to accommodate the development of next-generation technologies. - On the basis of R&D specialization, promote the integration of professional technologies and modular design, reduce repeated investment in technology, and propose plans for further engineering improvement or technology investment.	- By effectively integrating the development infrastructure, a single engineering unit can support a large-scale daily development and operational needs of the R&D organization, and effectively link product verification and certification workflow activities to significantly optimize the execution cost of engineering activities. - There is an effective division of labor in the allocation of organizational resources. The group's new product development, mass production, and launch schedule corresponding to the Group's strategic goals has been improved by more than 50% compared to the past. - For the new-generation technical standard products, we will continue to launch products or core technology updates in 2024 to effectively meet customer needs for the introduction of new technology solutions. - The number of patents granted within the group increased by 68% compared to 2022. In addition to the planned layout of technology theme patents, it also includes the promotion of design patents that can directly prevent competitors from copying.

Spindle 2. R&D of New Generation Technology Standards

5G Communication

Creating a smart manufacturing industry that integrates virtual and physical products is the focus of Industry 4.0. The 5th generation (5G) mobile communication technology is one of the keys to the development of Internet of Things and digital chemical factories. As an important promoter of networking, 5G was listed as a key development direction in the future in 2020.

Development focus 1: Establish a professional wireless function team, and through the participation of industry standards organizations and industry-academia technology cooperation, to further develop the R&D capacity of 5G-related industrial field technologies. The achievements in recent years are as follows.

(1) Since 2021, Moxa has actively participated in various activities of the 5G Alliance for Intelligent Factories (5G-ACIA) to grasp the development trend of industrial 5G and the requirements for related technologies and functions. In 2023, Moxa joined the Technical Working Committee of the Taiwan Association for Information and Communication Standards (TAICS) to learn about the 5G-related development direction of Taiwan's industries, and to propose constructive opinions during the process to jointly participate in the formulation and development of 5G communication standards.

Moxa actively participates in 5G-ACIA and TAICS activities

(2) In terms of industry-academia collaboration, Moxa entered into a long-term partnership with the Graduate Institute of Telecommunications Engineering, National Taiwan University in 2020 to select specific topics for 5G vertical applications to define key problems, and conduct related solution research and technology output. Moxa also places great emphasis on talent cultivation. Regularly arrange for R&D engineers to share their field application experience and hold technical discussions with school laboratory students. Furthermore, engaging in technical discussions together, transforming traditional industry-academia collaboration into a cooperative model that combines innovation with the sustainable development of technical talent.

(3) Moxa has selected important vertical farms to target vertical 5G applications. To date, Moxa has completed multiple 5G proofs-of-concept and commercialization projects, enabling Moxa's R&D team to continuously improve its R&D capabilities.

Development focus 2: Considering that a 5G end-to-end network consists of terminal equipment, base stations, and core network-related equipment, as a leading industrial automation brand, Moxa 5G is introduced into the industrial field to achieve the goal of industrial upgrading. In addition, Moxa has built a 5G experiment environment to effectively solve connection problems in complex fields to accelerate the promotion of industrial 5G.
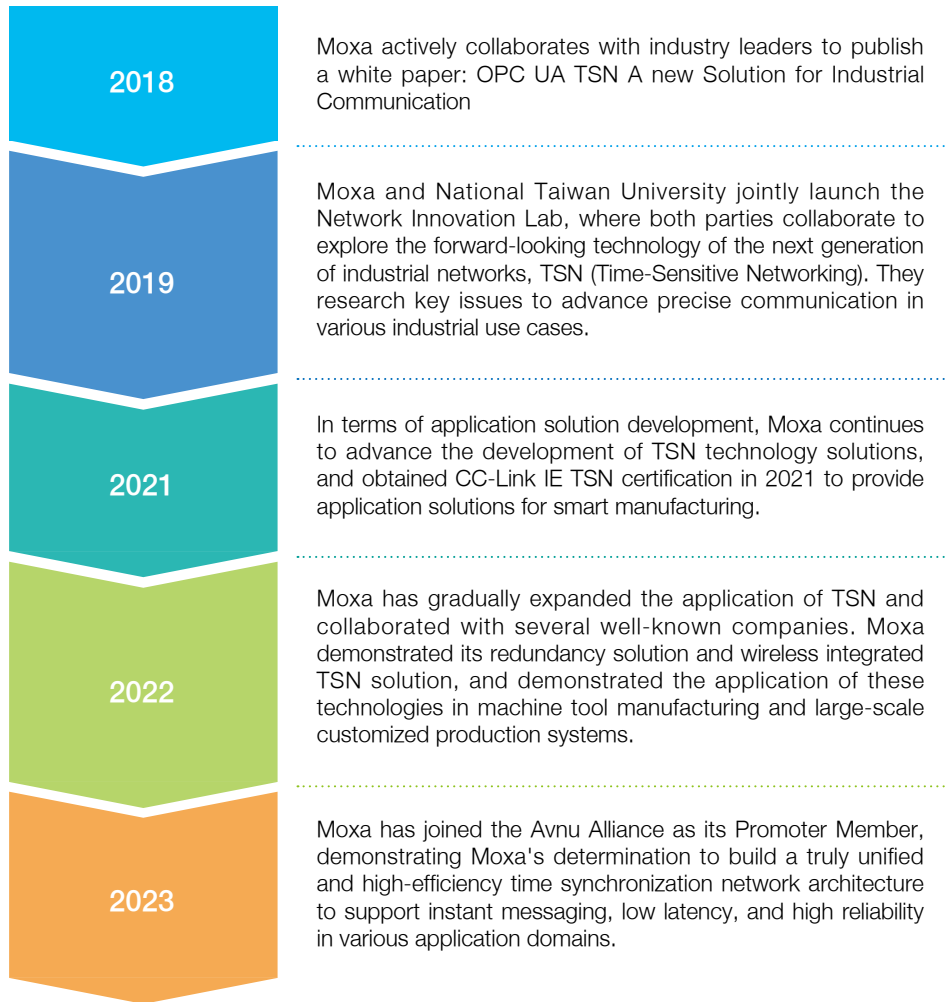
From the 5G standard to industrial applications, Moxa's technology development focus is providing reliable, stable, and secure industrial communication. The professional function team understands the 5G system architecture and functional features, and explores it based on industrial application scenarios. The key technology required for industrial 5G communication provides more wireless possibilities for existing wired networking products in existing industrial fields. Moxa's expertise in wireless has nurtured new capabilities that can keep up with the times and become Moxa's next-generation core technologies.

Time-Sensitive Networking

Time-Sensitive Networking (TSN) is one of Moxa's key developing technologies. It includes the ability to use standard Ethernet technology in time-sensitive industrial networks to send the right information at the right time to the right place. Achieve the four core goals of "bounded low latency", "time synchronization", "ultra-high reliability", and "resource management" with TSN, a series of open standards, and help customers build converged OT and IT networks with a unified architecture that provides accurate and consistent data for in-depth insights into the details of industrial operations.

Moxa actively participates in various international TSN organizations to ensure that TSN technology can keep pace with the times. Organizations in which Moxa has participated include the Institute of Electrical and Electronics Engineers (IEEE) working groups, the OPC Foundation, Avnu Alliance, and the six key global TSN test beds.

Moxa's TSN Technology Development History

2018
Moxa actively collaborates with industry leaders to publish a white paper: OPC UA TSN A new Solution for Industrial Communication

2019
Moxa and National Taiwan University jointly launch the Network Innovation Lab, where both parties collaborate to explore the forward-looking technology of the next generation of industrial networks, TSN (Time-Sensitive Networking). They research key issues to advance precise communication in various industrial use cases.

2021
In terms of application solution development, Moxa continues to advance the development of TSN technology solutions, and obtained CC-Link IE TSN certification in 2021 to provide application solutions for smart manufacturing.

2022
Moxa has gradually expanded the application of TSN and collaborated with several well-known companies. Moxa demonstrated its redundancy solution and wireless integrated TSN solution, and demonstrated the application of these technologies in machine tool manufacturing and large-scale customized production systems.

2023
Moxa has joined the Avnu Alliance as its Promoter Member, demonstrating Moxa's determination to build a truly unified and high-efficiency time synchronization network architecture to support instant messaging, low latency, and high reliability in various application domains.

Product Information Security

Moxa builds product information security based on the Secure Development Life Cycle (SDLC) process and defines the process of product development based on the process requirements of the international industrial automation standard IEC 62443-4-1. Criteria, task group, and corresponding product information security, and information security responsibilities. To implement product information security in daily operations, Moxa has established a "Product Security Center" to facilitate the robust operation of its overall strategy and management system. Please refer to the report for more details. 1.5.3 Product Information Security.

Spindle 3. Strategic Business Co-Creation

Moxa adheres to the core value of focusing on customers. In addition to engaging with customers at the procurement stage in general business models, Moxa has also engaged in joint development with strategic customers in recent years to closely discuss the needs of field applications and industry development trends. Commercialize technology with a high degree of mutual trust to achieve co-learning and co-creation.

Moxa and Saudi Aramco signed a global commercialization agreement in 2023, Introduce the Intelligent Integrated Node (IIN) solution into product applications. The two companies have jointly developed IIN technology to replace complex equipment provided by multiple suppliers, resulting in faster computing, lower capital and operating expenses, and improved overall efficiency and safety in equipment-intensive factories.

Moxa and Saudi Aramco sign global commercialization agreement

Moxa was invited to participate in the annual Saudi Aramco to demonstrate the IIN technology jointly developed at the Global Industrial Internet of Things Summit (GIITS)

MOXA

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2.1.2 Innovation Sharing

Eager to Share in RD Festival

Moxa's R&D team has proactively organized the R&D Forum at an early stage. The Red Pig Award for R&D and the Hardware Team's presentation are both platforms designed to encourage sharing among R&D. In late 2022, the RD Forum was expanded to host the RD Festival, where employees were invited to register independently. This event showcased their research and innovation achievements, fostering mutual interaction and providing a platform for the R&D team to freely share technical topics.

In 2023, continuing the atmosphere of internal sharing and exchange, the Research Design Sharing (RDS) event was organized. Employees registered to present their own topics, and submissions were also welcomed through recommendations for specific issues. With the lively and playful slogan, "One-day sharer, you're my teacher!", employees were encouraged to participate. Online sharing sessions were held periodically on Friday afternoons, allowing open access for all. A total of 38 participants shared 27 topics, covering areas such as hardware, cybersecurity, AI, testing, signal processing, communications, market technology, and computer simulations. On average, each session attracted over 180 online viewers, with popular sessions drawing up to 260 attendees. In 2023, the event saw over 4,500 total participations in RDS.

The 2023 RD Festival was an all-day event designed as a carnival for R&D team to showcase their technical achievements. The festival featured three different formats for interaction: flash shows, booth displays, and workshop. These various formats facilitated interaction and sharing between presenters and attendees.

1. Flash Show (49 Teams)

On a concert-level stage, presenters are required to share key points within a limited time using the principles of "simplicity, conciseness, and easy to understand," while maintaining a stable stage presence under the spotlight.


Moxa's 2023 RD Festival - Flash Show

2. Booths on Display (32 Teams)

Through physical product demonstrations and exhibitions, we engage in face-to-face discussions and communication with the audience, so that colleagues from different units can learn technical knowledge in different fields, understand the difficulties and challenges faced by each unit, and discuss the R&D process and results.
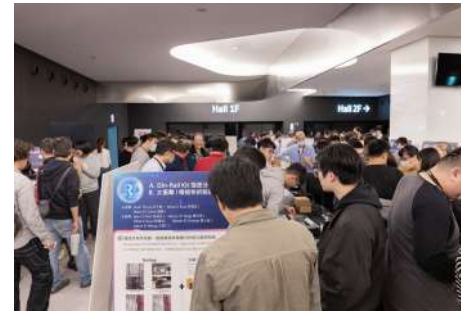
Moxa 2023 RD Festival - Booth Displays

3. Workshop (4 Teams)

The workshops are highly interactive discussions for in-depth topic-based communication or learning through practical exercises. Including the sharing of innovative products with cross-team collaboration, the process from concept idea to verification and implementation; analysis and implementation of system process improvement; in-depth analysis of the user interface and future visual design.

Moxa 2023 RD Festival - Workshop

In 2023, the RD Festival included participants from various departments, including business unit managers and employees from non-R&D groups. The RD Festival helped to unify Moxa's R&D talents, fostered communication, and promoted cross-disciplinary innovation and patent ideas. This concept will continue in the future, creating opportunities for diverse innovative exchanges and sharing.

2.1.3 Intellectual Property Protection

Patent Management

Patent Management Framework

Moxa places great emphasis on its proprietary development technology. Guided by a philosophy of self-directed research and development, patents serve as an important strategy and tool for Moxa to protect the group's intellectual property, establish R&D barriers to competitors, and achieve sustainable operations. Based on the group's technology roadmap, Moxa issues patents in a topic-based approach to focus on emerging technologies such as time-sensitive networks (TSN), 5G communications, IIoT, and new Wi-Fi technologies. The Moxa Group's technologies are widely distributed, and the Company has applied patents in various fields. The Moxa Group balances its R&D strength and invests resources in intellectual property protection. Under the strong support of the R&D Council, Moxa's R&D Center established the Patent Council to formulate the group's patent policies, allocate resources for patent application and maintenance, provide internal patent education and training for R&D teams, and encouragement for inventions. These efforts aim to optimize the group's innovation capabilities and the strategic deployment of its patent assets.
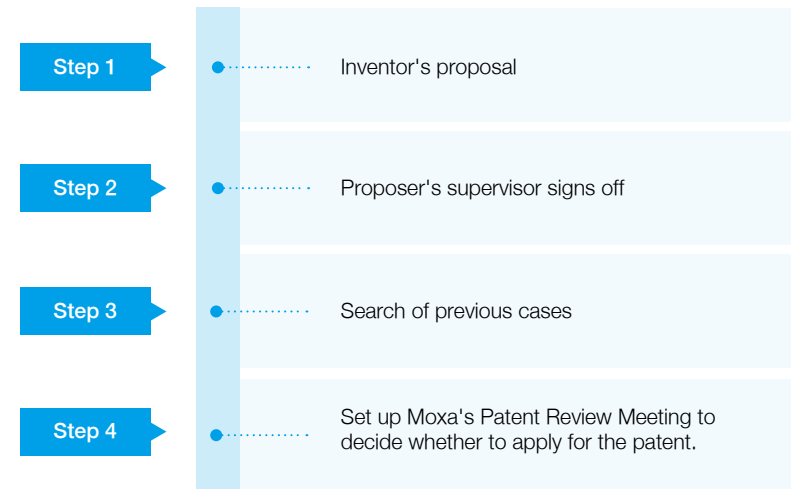
Patent Promotion

In 2023, Moxa conducted several patent-related educational trainings, including courses on design patents and an introduction to patent proposal submission. There were 3 courses and 4 sessions, with a total of 77 participants from the R&D center. Since 2022, Moxa has established 'Everything About Patents in Moxa' on its internal portal, providing patent-related resources. These include company patent searches, explanations of the patent proposal process and key points, patent course materials and related links, as well as patent reward posters with inventors. The content is regularly updated and enriched each year.

Patent Awards and Annual Patent Statistics

To promote and encourage innovation among group employees and the active protection of the company's intellectual property, semi-annual rewards are given for patents applied for and granted during that period. Bonuses are awarded to inventors at both the application and approval stages. Additionally, reward posters and eDMs are created to recognize these achievements across the entire group, and medals are presented to inventors whose patents have been granted. Those who have applied for more than three patent families in the year will be presented with the "Inventor Star" award and a medal, and the award will be presented at the monthly meeting of the R&D Center. 'Moxa Intranet,' also features related information and reward photos to encourage and thank employees for their contributions to protecting the group's intellectual property. In 2023, a total of 25 people have been recognized for their patents, and 47 patents have been granted, an increase of 92% and 68%, respectively, compared to 2022.

### Moxa's Patent Proposal Application Process

Step 1	Inventor's proposal
Step 2	Proposer's supervisor signs off
Step 3	Search of previous cases
Step 4	Set up Moxa's Patent Review Meeting to decide whether to apply for the patent.

Number of people receiving patent awards, applications for patents, and statistics for patents received

	2022	2023
Inventors recognized for granted patents	13	25
Number of patent families applied for	9	36
Number of issued patents	28	47

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Moxa's patents are distributed across the Asia-Pacific region, the United States, and Europe. The countries with the highest proportion of granted patents are Taiwan (36%), Europe (30%), China (17%), the United States (11%), and Japan (6%). Moxa will continue to apply for and develop patents in the future, and encourage employees to apply for patents to protect the R&D achievements of patents.

2023 Number and proportion of patents granted by country

- 17 Taiwan — 36 %
- 14 Europe — 30 %
- 3 Japan — 6 %
- 5 United States — 11 %
- 8 China — 17 %

Total 47
100%
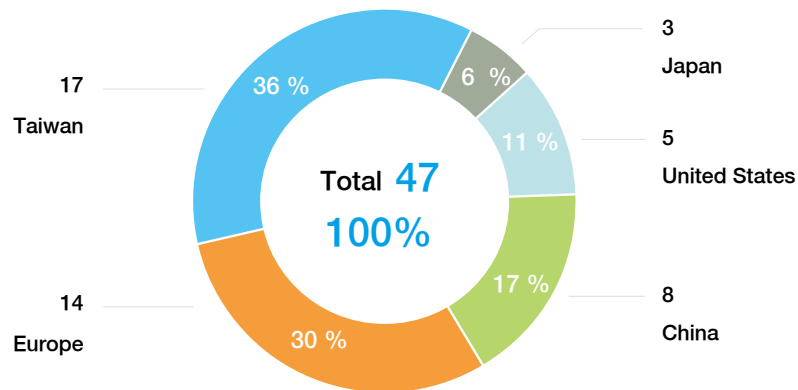
2023 Moxa Patent Medal

Group Photo of 2023 Moxa Patent Award

Trademark and Commercial Secret Protection

In terms of trademark protection, Moxa provides the following protection frameworks for three major aspects. In 2023, there were no trademark infringement lawsuits.

1. Trademark filing: Check and formulate filing strategies based on product business prospects.

2. Trademark maintenance: Verify that the trademark usage is consistent with the content of the registered product to ensure the validity of the trademark after the extension.

3. Trademark protection: Exclude unauthorized use of trademark infringement to protect the Company's interests.

In addition to trademarks, Moxa is also committed to protecting the confidential information or trade secrets of its own and partners. All Moxa employees sign a confidentiality agreement upon joining the company and are required to complete the mandatory 'Protection of Confidential Information' course. Moxa has established different management procedures or regulations to address the nature and use of confidential information or trade secrets. These procedures include the following: Design data management procedures, laboratory data management procedures, product development management procedures, outsourcing management procedures, customer and external supplier property management procedures, document and record control procedures. Moxa employees must go through a corresponding sign-off process according to the confidentiality level of design data before distributing or accessing design data. Data from laboratories must be stored or uploaded to the company's system or database for management, with access provided to relevant personnel according to predefined access permissions based on their work requirements. Employees are required to securely manage all confidential information related to product development, and unauthorized copying is strictly prohibited. In cases where confidential information or trade secrets are disclosed to or received from partners (including customers, distributors, suppliers, contractors, etc.), a confidentiality agreement must be signed in accordance with company procedures. Moxa applies the same or higher standards to protect the intellectual property of its partners as it does for its own confidential information or trade secrets. In 2023, Moxa did not experience any significant trade secret infringement cases.

To strengthen the protection of confidential information during the product development process, Moxa established a Data Security Core Team in 2023, led by the R&D department. This team, involving personnel from R&D, product management, product security, IT, and legal departments, developed strategies for the classification and access control of Moxa's product development data. As this strategy takes shape, Moxa expects to build on the team's achievements in 2024 to further strengthen the protection of confidential product development data in line with the updated ISO 27001 standard. For commercial secrets, all relevant databases have access privilege settings. In the future, Moxa will also evaluate the implementation of a one-stop platform to strengthen data management and control.

2.2 Sustainable Solutions and Applications

2.2.1 Sustainable Applications

Moxa is a leading brand dedicated to the Industrial Internet. Connecting to the edge , Industrial Computing and Network Infrastructure Solutions , helping customers around the world build industrial communication infrastructure and enhance industrial automation and communication applications. In addition, Moxa's products also help customers promote sustainable development in different application fields, including industrial energy transformation, smart manufacturing, transportation and logistics management, and environmental monitoring. Customers can leverage Moxa's IoT technology and comprehensive product solutions to enhance energy and production efficiency, reduce resource waste and greenhouse gas emissions, thereby fostering sustainable development.

The EU Taxonomy, introduced by the European Union in 2020, sets out objective standards for defining sustainable economic activities. This initiative aims to prevent greenwashing by companies and guide financial resources toward economic activities that meet sustainability standards. Although Moxa's activities are not directly within the EU Taxonomy framework, Moxa's product applications align with the environmental objectives of the EU Taxonomy. The table below outlines Moxa's sustainable applications and corresponding to EU Taxonomy.

Product Application Fields	Product Sustainability Applications	EU Taxonomy	
		Environmental Objectives	Detailed Activities
Grid Efficiency Management	• Provide high-availability facility management solutions to help customers control and monitor power systems to ensure uninterrupted power supply and services while optimizing the energy load of the system. • Provide the most advanced substation automation and feeder automation solutions to improve power transmission efficiency and reduce unstable voltage to a minimum during power outages.	Climate Change Mitigation	• Establishment of an energy management system • Enhance energy efficiency
Green Energy and Renewable Energy	• We provide IIoT solutions for customers to generate and distribute renewable energy in a smart way. Our integrated data capture and equipment monitoring solutions can effectively manage remote power assets scattered across multiple sites. • Provide intelligent remote I/O products to assist system integrators in building highly efficient monitoring systems. These systems integrate decentralized energy storage systems (ESS), power conversion systems (PCS), and battery management systems (BMS) into a comprehensive energy management system (EMS). This integration saves time and costs associated with manual inspections, and through data analysis, helps customers enhance the efficiency of renewable energy utilization.	Climate Change Mitigation	• Renewable energy technology development • Enhance energy efficiency
Transportation	• Moxa's industrial computers can perform edge computing on mobile buses by integrating bus, road, and climate data and transmitting them to the central control center for flexible bus scheduling and more accurate bus departures. More and more people are willing to take the bus. • Provide Ethernet road-networked train solutions, including a train control and management system network to provide on-board and train-to-ground communication for drivers, trackside facilities, and train control centers Make logistics operations smoother and reduce energy consumption and waste in transportation. • Provide reliable remote I/O equipment to control and monitor on-board systems to comprehensively monitor the on-board air conditioning system, lighting control system, door control, and fire detectors to ensure the stable running of the train.	Climate Change Mitigation	• Development of low-carbon transportation and logistics
Smart Manufacturing	• We provide enterprises with network and communication solutions and services to enhance operational resilience and move towards net-zero carbon emissions. From industrial network design that meets current and future growth needs to data collection and monitoring for diversified production and plant equipment, help enterprises realize the seamless application of IT/OT multi-network convergence, optimize energy utilization, improve quality yield, and reduce energy and material consumption for heavy industry or factory downtime.	Climate Change Mitigation	• Reduce the negative impact of production on the environment (such as air, water, soil)
Environmental Monitoring	• Provide communication products of stable quality to assist customers in more stable monitoring and pollution prevention (such as air pollution discharge monitoring, water quality and wastewater monitoring, etc.), and backup and upload the monitoring data to the local environmental protection authority.	Pollution Prevention and Control	• Contributions to pollution prevention and control
Petrochemicals	• Providing reliable communication equipment to help oil well operators automatically monitor, adjust the sand removal rate in real time, and remove solids deposited in oil wells, it can reduce the carbon emissions of oil wells with large machines and tools, improve crude oil production efficiency, and extend oil well life. • We provide durable and scalable optical fiber Ethernet networks and integrate them with remote monitoring equipment that can control pipeline operations to help customers quickly detect and find leaks, damage, and ruptures of petrochemical oil and gas pipelines, and take early preventive measures.	Pollution Prevention and Control Protecting Healthy Ecosystems	• Reduce the negative impact of production on the environment (such as air, water, soil) • Reduce the negative impacts of chemicals on human health and the environment

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Highlight Cases

Promoting a Low-Carbon Economy with the Thai Government

In 2015, the Thai government unveiled a long-term national energy strategy aimed at developing a low-carbon economy while ensuring energy security, affordability, sustainability, and the well-being of its people. Thailand′s government launched the "Energy 4.0" platform for electric vehicles, energy storage, renewable energy, energy management systems, and a national control center. Through Energy 4.0, Thailand is aiming to double the use of renewable energy and become a power hub for ASEAN by the year 2036.

The Provincial Electricity Authority (PEA) of Thailand selected the Eastern Economic Corridor as a pilot for smart grid technology, with the goal of testing the technology's suitability and investment feasibility. In this energy transformation, significantly improving power transmission efficiency and minimizing unstable voltage during power outages are crucial. Substations play a pivotal role, and Moxa's IEC 61850 PRP/HSR redundant network is essential for enabling real-time and reliable communication within the substation automation system.

Moxa provided expert assistance in topology design to help PEA transition from a 30-year-old system with a wide variety of equipment brands, models, and types to a system with a simplified and standardized design. Today, when grid issues arise, PEA can quickly and easily identify the root cause, significantly enhancing operational efficiency, preventing unexpected outages, and reducing fault recovery time.
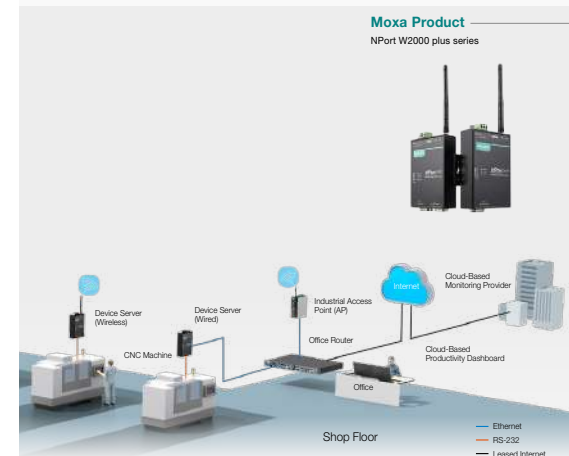
Learn more about case study

Deploying The Cloud Monitoring System To Build A Smart Factory

Tech Manufacturing, a long-time manufacturer of machined metal parts for aerospace clients such as Boeing, Lockheed Martin, and Bombardier, needed to raise production capacity and reduce lead times for their clients′ largest and most urgent orders. With their 5-axis CNC machines already running 24 hours a day up to 7 days a week, Tech Manufacturing, looked towards smarter operation and real-time performance data to increase the productivity and useful life of their existing machines.

Tech Manufacturing selected Shop Floor Automations, one of the most prominent systems integrators in North America specializing in CNC monitoring systems, to assist with cloud-based monitoring. Each CNC machine was connected to the existing local area network, so no additional IT infrastructure was required. For legacy machines that did not have a readily available Ethernet port, Shop Floor Automations provided an easy-to-deploy solution that was developed with Moxa. With the local network connected to the Internet, machine performance data was easily viewed and analyzed by cloud-based software such as Scytec DataXchange or Predator Machine Data Collection. Key performance metrics were organized on a visual dashboard so owners and machine operators were able to see exactly how productive each cell was, down to the machine level.

Moxa Product
NPort W2000 plus series
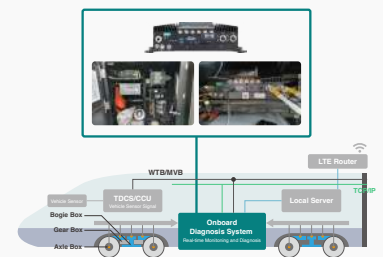
Learn more about case study

Enhancing Railway Safety through Innovative Technologies

South Korea plans to achieve the ambitious goal of reducing the railway accident fatality rate by 50% by 2027. This is one of the important challenges and goals in the field of railway safety. However, railway operation and maintenance operations in the past involved regular inspection of the trains, which was time-consuming, labor-intensive, and costly. It also required the trains to be shut down for inspection, and the statuses of key components could not be monitored and diagnosed in real-time, which was also critical for railway safety and reliability. Serious challenges.

To address these challenges, the Ministry of Land, Infrastructure, Transport and Tourism of the Republic of Korea (MLIT) has launched a campaign to visualize key train components and widely applied advanced railway safety monitoring technology across the country. Condition-based monitoring (CBM) technology plays a key role and is an effective strategy to improve railway safety. CBM technology uses equipment such as sensors to monitor the status of railway assets in real time to identify potential risks in time before problems become worse, and improve maintenance efficiency. Although the value of CBM has been recognized around the world, its applications and standards have not yet fully matured, requiring the joint efforts of regulatory authorities, carriers, and solution providers to explore.

However, the process of building a CBM system is faced with multiple challenges, such as the need to determine which key train components to monitor and properly regulate the key components whose data needs to be collected for each train, or to ensure accurate data acquisition, system developers need to send professionals to the site to install the sensor and ensure the quality and stability of the data. In addition, it is necessary to seek experts with professional knowledge of railway operations and machine learning algorithms to successfully develop accurate predictive models.

To ensure the successful deployment of the CBM system, Moxa has established a virtual team consisting of technical experts from headquarters and local professionals to work closely with customers' technical teams to solve various problems from concept proof to final deployment. According to customer estimates, the CBM system jointly built by Moxa and customer in this project has reduced life cycle costs by 25-30% and component costs by 20-30%, while extending equipment life by up to 40%. This successful case will provide an important reference for the future intelligence and safety of Korean railways and provide valuable experience for the global application of CBM technology.

The onboard diagnostic system powered by Globiz's CBM utilizes Moxa's computer to enable edge computing.

**Learn more about case study**

AI smart image monitoring assists track operation safety and efficiency

In recent years, the demand for and applications of cameras in the railway track industry have gradually evolved to meet the challenges of sustainable development. An important innovation is the use of high-definition cameras outside the vehicle and AI software. This technology not only identifies and analyzes abnormal rail facilities in real time, but also immediately notifies relevant personnel to reduce facility or system risks and thereby improve the safety and sustainability of rail transportation.

In addition, many railway operators have begun to apply cameras to the outside of trains to improve the efficiency of train operation. Moxa began providing services for intercity trains in Sydney, Australia in 2020 by assisting operators in installing external cameras on local shuttles, allowing drivers to observe the boarding and alighting conditions outside the train in a timely manner. This improvement not only reduces the waiting time of trains between platforms and improves operational efficiency, but also reduces the standstill time of trains to further enhance urban transportation efficiency. Moxa also provides operators with front-mounted cameras to record the condition of the track to ensure driving safety, thereby further improving the efficiency and sustainability of urban transportation.

Learn more about Moxa rail solutions
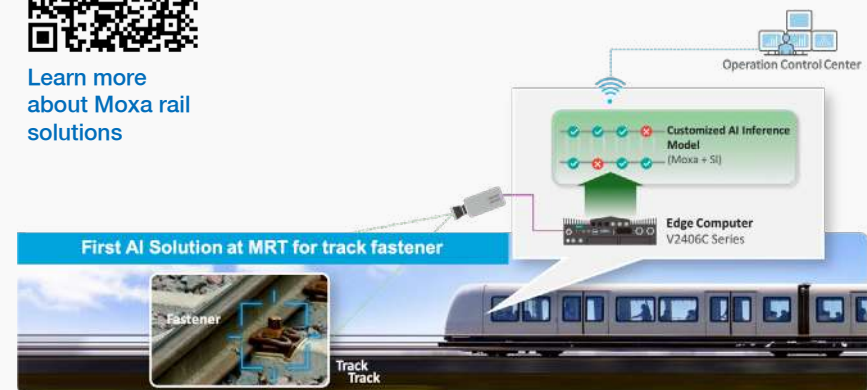
Wi-Fi technology facilitates construction of wireless train control system

In 2023, Moxa assisted an international track signal provider to complete the deployment of Communication-based Train Control (CBTC) in Frankfurt, Germany. In the architecture of the system, the operator must establish reliable train-to-ground wireless network communication and provide in-train equipment with uninterrupted roaming, Wi-Fi redundancy, and sufficient bandwidth to ensure seamless and real-time transmission of video data even on fast-moving trains.

In this case, Moxa used the Wi-Fi technology to provide the operator with wireless access points (APs) and clients on trains and on the ground, as well as the WAC-2004A controller at the control center to support a delivery time of only 50 microseconds. The trackside wireless devices act as wireless access points (APs) and work with built-in fiber Ethernet switches to implement Moxa's exclusive Turbo Chain network topology, properly transmitting data to the fiber backbone network and effectively preventing single points of failure, to help operators improve the network manageability and overall system security.

To date, Moxa has assisted in the deployment of wireless train control systems in more than 15 cities. In the future, Moxa will continue to work on wireless network technology to improve energy efficiency, reduce emissions, and enhance transportation efficiency and safety.

The new trend of railway communication with multi-network convergence

In the past, railway vehicle manufacturers usually deployed the communication equipment of each system on the vehicle on their own physical communication networks to distinguish between different applications. However, such a split architecture not only increases the complexity and cost of the train control and monitoring system, but also increases the payload of the rolling stock.

In recent years, in response to the market trends for energy saving, carbon reduction, and sustainable development, Moxa has collaborated with major rolling stock manufacturers to combine the physical and network applications of various applications onboard. With Ethernet switches with multiple ports and multiple Power over Ethernet (PoE) capabilities, Moxa integrates the Train Control and Monitoring System (TCMS) and CCTV cameras Integrate applications into the same physical network communication architecture. This integrated solution can not only reduce the number of network equipment on rail vehicles to save costs, but also reduce the complexity of system maintenance and improve operating efficiency. In addition, by reducing the weight of the vehicle, this solution can also reduce energy consumption and carbon emissions, thereby achieving the goals of environmental protection and sustainable development.

Moxa's technological solutions not only make significant progress in energy conservation, carbon reduction, and sustainable development, but also play an important role in improving the efficiency and safety of rail transportation. Moxa is committed to providing customers with more competitive solutions through continuous improvement and innovation, and continues to promote the mission of sustainable development in the field of rail transportation.

2.2.2 Future Market Deployment of Products

Future Market of Energy Business

Power Grid Efficiency Management: From Traditional Substations to Digital Substations, to Virtual Services

Climate change is a major challenge facing the world. To achieve net-zero carbon emissions, countries around the world are actively promoting energy transformation from fossil fuels to renewable energy generation. Renewable energy has the advantages of renewability and environmental protection, but it is also characterized by intermittence and uncertainty. Therefore, high renewable energy penetration can have the 3 impacts on the grid: (1) Increased power load fluctuation, (2) Increased difficulty in power grid dispatch and (3) Increased grid security risks.

The operation of traditional substations is manually controlled, where power operators need to monitor equipment and manually operate switchgear to regulate power transmission. This control method is inefficient and poor in safety, and it is difficult to cope with the challenges brought by the high penetration rate of renewable energy. To cope with the challenges brought about by the high penetration rate of renewable energy, power companies need to automate substations again to help them improve the flexibility of their power systems and adjust power transmission more quickly and accurately to cope with power load fluctuations. Improve the security of the power system and help power companies detect and prevent equipment failures earlier, thereby reducing the occurrence of power outages and the operating costs of the power system.

The introduction of virtualization technology is a key technology in substation automation. Virtualization technology can virtualize physical equipment into one or more virtual machines to improve resource utilization and flexibility. The benefits of virtualization technology for substation automation systems include the following:

(1) **Improve efficiency:** Virtualization can help power companies reduce hardware costs and improve hardware utilization.

(2) **Improve reliability:** Virtualization can help power companies improve the reliability of substation automation systems. If one physical equipment fails, the virtual machine can be migrated to another physical equipment to avoid system interruption.

(3) **Improve security:** Virtualization can isolate different types of equipment in different virtual machines to reduce the risk of mutual interference between equipment.

Moxa cooperates with leading power system integrators (such as Siemens, ABB, and Hitachi Energy). Through Moxa, we provide stable and reliable network communication hardware platforms and substation-grade industrial computers to help power companies in various countries achieve substation integration. Automation, improve power dispatch efficiency, strengthen power grid resilience, and help national power grids accommodate more renewable energy connections to accelerate the goal of net-zero carbon emissions.

Green Energy and Renewable Energy: Accelerating Energy Transformation and Building a Strong Power Grid

According to the 28th United Nations Framework Convention on Climate Change (UNFCCC COP28) in 2023, the goal is to halve global greenhouse gas emissions by 2030 and achieve Net Zero by 2050, aiming to keep the global temperature rise within 1.5° C to address the high-risk impacts of the global climate emergency. According to the "Electricity Market Report 2023" released by the International Energy Agency (IEA), renewable energy will surpass coal-fired within three years to become the world's largest source of electricity. The IEA predicts that 98% of new electricity demand in the next three years will be supplied by renewable energy, and the stability of power supply will be greatly affected by the weather. For example, the efficiency of solar power generation is reduced due to inclement weather, or the offshore wind power generation is caused by the small ocean wind speed in summer. This greatly increases the importance of demand-side flexible measures, energy storage, and dispatchable renewable energy.

Moxa continues to work with leading solar and wind power brands around the world and cooperates with governments around the world to build energy storage projects to cope with the increasing proportion of renewable energy. Moxa helps eliminate the intermittency and instability of renewable energy. At the same time, in transportation, various vehicles have shifted from traditional fuel-powered cars to electric cars or even cleaner hydrogen-powered vehicles. Moxa collaborates with leading electric vehicle brands, providing stable and reliable networking hardware platforms and solutions. This assists customers in making their factory production smarter and more efficient. Additionally, Moxa helps in the rapid deployment of charging stations, alleviating customer concerns about electric vehicle range anxiety. This collaboration aids customers and governments in accelerating their attainment of zero carbon emission goals, providing the next generation with a more suitable living environment.

Future Market of Transportation Business

With the acceleration of global climate change and urbanization, the realization of a sustainable transportation system has become an important goal of the industry. The United Nations Sustainable Development Goals (SDGs) mention that the transportation system needs to "provide safe, affordable, accessible, and sustainable transportation systems for all people; improve road safety, especially expand public transportation; transportation", Moxa is committed to building a safer, more efficient, and more environmentally friendly transportation system.

As the digitization of rail transit systems continues to advance, so does the demand for in-vehicle network equipment. In terms of the on-train environment, "multi-network convergence" has become an international norm and practice trend compared to the past when the communication equipment of each system was deployed in its own physical communication network. In the past, the train monitoring system (TCMS) and CCTV system were often set up separately. In recent years, they have been gradually concatenated in the same physical network architecture to reduce the quantity of network equipment on the rolling stock, thereby saving costs and reducing the complexity of system maintenance and improve operational efficiency. Moxa's EN50155 Ethernet switches are designed for use in onboard systems. Besides meeting the stringent product standards of the railroad track industry, these switches also provide Ethernet switches with multiple ports and multiple PoE functions. In addition, the Company has established a partnership with many vehicle manufacturers for the construction of multi-network convergence applications.

The driving safety of public transport has also become a topic of great importance to the authorities around the world. In recent years, some operators have used external cameras combined with AI software to detect railway facilities in real time and analyze abnormal conditions at the same time. Coupled with the network or 5G precise positioning technology, they can confirm the abnormal location of track facilities and notify operational operators for maintenance, which can effectively reduce the likelihood of accidents occurring. Moxa's IP cameras are committed to developing high-resolution images to improve the clarity and recognition rate of objects. The high-performance video coding (HEVC) H.265 image compression technology can also reduce the use of network bandwidth. This reduces the amount of traffic and recording storage space to further improve the efficiency of the system to ensure safer driving for operators and public transport users.

In the era of the booming development of smart transportation and the railway industry, the role of on-board computers has become even more critical. It not only needs to address the challenges of autonomous driving technology but also adapt to the demands of data analysis and predictive maintenance to enhance operational efficiency and safety. Additionally, through the application of IoT and communication technologies, efficient communication with the base system can be achieved, enabling functions such as train position monitoring and fault alerts. In addition, onboard computers also play a role in optimizing the passenger experience and managing energy and environmental protection to make travel more comfortable, environmentally friendly and efficient. However, with the application of 5G vehicle-ground communication technology, network security has become particularly important. Therefore, in recent years, Moxa has actively developed IEC 62443-4-2 Security Level 2 (SL2) compliant International Industrial Control Security Standard technologies, including intrusion detection systems and encryption technologies, to ensure the security and trustworthiness of vehicle systems.

Moxa has been developing wireless solutions for rail transit applications for many years, especially for train-ground communication, such as Communication Based Train Control (CBTC), a train operation control system that manages and monitors the trains in the rail transit system, and realize real-time communication between the train and the control center through wireless communication technology and on-board/ground equipment and provide highly automated train control and monitoring functions to improve the efficiency, safety, and reliability of train operations while reducing pollution. Operating costs. Moxa is committed to creating products with anti-interference capabilities to improve the stability and reliability of vehicle-ground communication and support multi-network convergence for vehicle-ground applications.

In summary, as a leading provider of industrial communication and networking solutions, Moxa is committed to providing safe, efficient, and environmentally friendly solutions and safe and reliable products for rail transit systems. Jointly promote the development of the transportation industry. In the future, Moxa will continue to work hard and innovate to make greater contributions to the sustainable development of the global transportation industry.

2.3 Customer Relationship Management

2.3.1 Customer Relationship Strategy

Channel and key Account Management

Moxa's growth over the past three decades is inseparable from the expansion of its distributors and strategic partners. In 2023, Moxa established a more comprehensive channel management framework to support sustainable business growth. This management framework covers three major directions:

1. Optimization of distribution strategy

Moxa conducts in-depth analysis of market demand and competitive environment to formulate more targeted distribution strategies for different regions and product lines to increase market coverage and increase sales efficiency.

2. Accelerate capability development of dealers and partners

Moxa values the training and support of resellers and partners. By organizing training courses and providing industry information and technical support, Moxa accelerates the professional capabilities of partners and elevates their business standards to better meet customer needs.

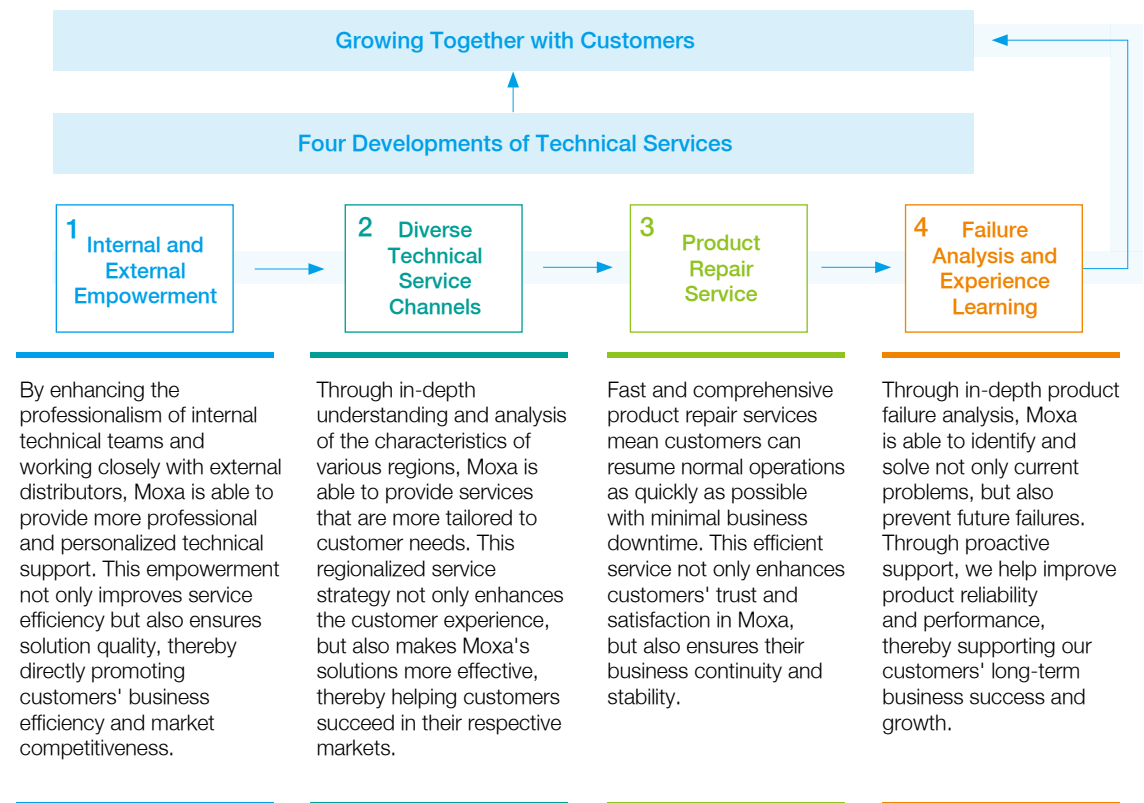**3. Transformed dealer and partner portal**

Moxa provides advanced portal technologies and platforms to help dealers and partners build modern online sales channels and service platforms to improve customer experience and marketing effectiveness.

By implementing the strategy, Moxa not only effectively increases market coverage and sales efficiency, but is also able to provide a more customized service experience for different types of customers, thereby enhancing customer loyalty and satisfaction. In addition to retail customers, Moxa also targets important vertical markets through participating in international associations and alliances to collaborate and communicate with key customers. Moxa adheres to its core values of people-oriented and customer-respect, and is committed to providing customers with quality and comprehensive services by building trustworthy relationships with partners to achieve mutual growth and success.

2.3.2 Technical Services

Four Developments of Technical Services

In today's rapidly changing business environment, the role of technical services has become more important than ever. Moxa believes that by focusing on innovation and customer-oriented technology services, Moxa can provide customers with the critical support to drive business success. Below are the four main axes of Moxa's technical services, each of which is meticulously designed to directly contribute to our customers' success. Moxa's technical service strategy aims to support customers' needs comprehensively, not only to solve today's challenges, but also to lay the foundation for future success.

Growing Together with Customers

Four Developments of Technical Services

1 Internal and External Empowerment

2 Diverse Technical Service Channels

3 Product Repair Service

4 Failure Analysis and Experience Learning

By enhancing the professionalism of internal technical teams and working closely with external distributors, Moxa is able to provide more professional and personalized technical support. This empowerment not only improves service efficiency but also ensures solution quality, thereby directly promoting customers' business efficiency and market competitiveness.

Through in-depth understanding and analysis of the characteristics of various regions, Moxa is able to provide services that are more tailored to customer needs. This regionalized service strategy not only enhances the customer experience, but also makes Moxa's solutions more effective, thereby helping customers succeed in their respective markets.

Fast and comprehensive product repair services mean customers can resume normal operations as quickly as possible with minimal business downtime. This efficient service not only enhances customers' trust and satisfaction in Moxa, but also ensures their business continuity and stability.

Through in-depth product failure analysis, Moxa is able to identify and solve not only current problems, but also prevent future failures. Through proactive support, we help improve product reliability and performance, thereby supporting our customers' long-term business success and growth.

Internal and External Empowerment

As Moxa continues to pursue innovation and excellence, we understand the importance of strong external partners to realize Moxa's vision. To this end, Moxa is committed to ensuring that partners not only understand the products but are also able to effectively apply these products to their respective areas of expertise through comprehensive training and empowerment programs.

Moxa implements a comprehensive education and training program every year to demonstrate its firm commitment to improving the capabilities of its distributors around the world. This program not only covers key areas such as new products, new technologies, and troubleshooting, but also incorporates a series of rigorous evaluation mechanisms to ensure that every participant can achieve the professional standard expected by Moxa.

First, Moxa has set a clear threshold, that is, all partners wishing to participate in the training must first pass a competency exam. This measure ensures that the participants have sufficient basic knowledge and skills to lay a solid foundation for subsequent learning. Furthermore, in the training process, Moxa adopts a comprehensive teaching method that includes theoretical learning, hands-on practices, capability evaluation, and online exams. This comprehensive training model not only helps participants gain a deeper understanding of products and technologies, but also enhances their ability to transform knowledge into practical ability. Partners who complete the training and pass the exam will receive a certificate from Moxa. This not only recognizes their professional ability but also recognizes their ability to provide high-quality technical services.

The statistics of the new product training in 2023 shown in the table below show that, on average, more than 88% of the participants successfully passed the certification in the face of the high standards required in the training. These certified partners provide Moxa with a solid foundation of technical support to serve customers more effectively. Therefore, Moxa can tell its customers with full confidence that choosing Moxa products means receiving fast and professional technical support.

2023 Moxa's new product training statistics

Region	Number of Participants	Course Duration	Pass Rate
Americas	38 distributors with 56 technical engineers	3 days	91%
Europe	56 distributors with a total of 60 technical engineers	4 days	95.71%
China	12 distributors with 33 technical engineers	3 days	81.82%
Asia Pacific	32 distributors with 59 technical engineers	3 days	85%

Moxa offers a series of customized training programs to meet individual training needs to enhance customers' technical expertise and further strengthen Moxa's brand in the market. In 2023, Moxa will provide partners with in-depth customized technical training to meet the specific needs of different regions, from Europe and North America to China and Asia Pacific, successfully training more than 1,000 professionals to become proficient in the operation and application of Moxa products.

Looking forward to 2024, Moxa will continue to enrich the training contents in the fields of wired/wireless network planning, network security, and power market communication system, aiming to continuously improve the technical strength of partners. At the same time, we will launch the online platform in 2024 to make it easier for our channel partners to use the resources provided by Moxa to serve customers. This online education and training platform is designed for channel partners. Courses can be customized according to different needs and training can be provided anytime, anywhere. It also allows Moxa to better understand the partners' learning progress and provide immediate help in the areas that require reinforcement. By providing ongoing training and empowerment programs, we not only enhance the business and technical level of Moxa's partners, but also enhance the competitiveness of the overall ecosystem.

• Complete training courses for technical personnel

Moxa is committed to cultivating industry-leading technical teams. By carefully selecting experienced industry experts and outstanding fresh graduate, we not only focus on the introduction of talents, but also focus on the continuous growth and development of these talents. Moxa's technical training course is a comprehensive development plan for technical personnel. From the introduction of new products and technologies, to the application of products in practical scenarios, to the in-depth grasp of the underlying software and hardware technology, and problem-solving skills are developed. Moxa emphasizes the combination of theoretical learning and practical operation, and regularly communicates with instructors to ensure that each technician can understand and apply the knowledge they have acquired in practice.

In addition, Moxa encourages technical engineers to obtain industry certifications such as IEC 62443, the international standard for industrial automation and cybersecurity, to demonstrate their professional capabilities and ensure that they can effectively support customers' specific challenges. This not only demonstrates the professionalism of Moxa's technical teams, but also demonstrates Moxa's commitment to providing comprehensive customer support.

By passing the training and development plan, we ensure that our technical team is not only proficient in Moxa's solutions, but also understand our customers' needs, demonstrating Moxa's in-depth investment and dedication to technological innovation, service quality, and talent development. Moxa's technician training courses include four major types. There are more than 40 annual new product/new technology training, industrial application training, software and hardware product technical training, and other enabling training.

• Multi-level technical talent development and mentorship system framework

By segmenting technical talent into product experts, application experts, and solution experts, Moxa ensures that technical team members can fulfill their potential in their areas of expertise while providing customers with comprehensive technical support. To accelerate talent growth, Moxa implements a mentoring system between senior employees and junior technical engineers. The one-on-one mentoring model not only transfers knowledge and skills quickly, but also promotes communication and collaboration among teams to ensure that each technician can provide excellent customer service in practice.

Moxa's exceptional technical service is the key to our customers' success. Through comprehensive talent training programs, Moxa not only enhances the team's technical skills, but also strengthens its problem-solving and solution-providing skills. Moxa's technical team can quickly grasp new products, accurately analyze customer needs, and effectively solve complex problems. They demonstrate our commitment to technological innovation and service quality, as well as our in-depth investment in talent development. With a professional technical team, Moxa can maintain market competitiveness and continuously provide customers with a better service experience.

Diverse Technical Service Channels

Moxa attaches great importance to customer experience, especially technical support and service response time. Therefore, we have adopted a diversified support channel strategy to ensure that customers can contact Moxa in the most convenient way wherever they are. The following are the three planning technical service channels.

Instant response, seamless experience	**Localized customer contact**	**From instant communication to in-depth support**
Moxa has established Quick Response Indicators and Case Handling Time Indicators to ensure that the team can promptly respond to customer needs. These indicators not only help monitor service quality but, more importantly, make customers feel that Moxa values their needs and responds swiftly.	Understanding that customers in different regions may prefer different communication methods, Moxa provides the most common and user-friendly contact options in each area. For example, in China, Moxa introduced the WeChat Smart Engineer Service Solution, enabling customers to quickly access Moxa's technical information directly on WeChat. Customers can also obtain answers through chat, significantly enhancing service efficiency and customer satisfaction through real-time interaction.	As in the above case in China, when customers require further support, Moxa's system automatically connects from WeChat to the Customer Relationship Management (CRM) system, ensuring that customer issues are handled appropriately. This not only reduces customer wait times but also ensures the efficiency and quality of problem resolution.

Diverse support channels are part of Moxa's customer-centric approach, ensuring that every customer experiences professionalism, efficiency, and care. Whether it is through instant message response or in-depth case handling, Moxa is constantly striving to ensure that customers' every need is timely and effectively responded to.

Region	Technical Service Channel
Headquarters	Taiwan: Phone, email, official technical support portal, FAQ
Asia Pacific	China: WeChat, phone, email, official technical support portal, FAQ Other areas: Email, official technical support portal, FAQ
Europe	Phone, email, official technical support portal, FAQ
Americas	Phone, email, official technical support portal, FAQ

Product Repair Service

Moxa's warranty covers everything from industrial network infrastructure to industrial computers, IIoT gateways, and peripherals/accessories. The warranty period ranges from one to five years to meet the needs of different product categories. Moxa offers the following three warranty and service principles:

Customer-First Warranty Commitment

- **Extensive warranty coverage:** Moxa offers a five-year warranty for its Ethernet switches, security routers, wireless access points, and clients to ensure long-term protection for critical equipment.
- **DOA policy for immediate response:** Moxa provides Dead on Arrival (DOA) for defective products discovered within three months after shipment to ensure that business does not stagnate due to waiting.
- **Flexible maintenance options:** Products within the warranty period are repaired or replaced free of charge. Even if your product is out of warranty, Moxa offers competitive repair services to get your equipment back up and running quickly.

Customer-Respect Service Process

- **Simplified service request:** Moxa's website allows customers to submit service requests for repair or replacement quickly and easily.
- **Customer Care and Guarantee:** Customers are responsible for the delivery of their products at their own risk, and Moxa encourages customers to use original packaging materials to ensure that their products reach Moxa safely for repair.
- **Data security reminder:** Moxa reminds customers to back up all important product configurations and data before sending them in for repair to ensure data security.

Services Beyond Warranty

- For certain large projects, Moxa offers an extended warranty service to ensure equipment protection for a longer period of time.
- Moxa's liability for products will not exceed the original cost, and Moxa will not be liable for unintentional or inevitable losses to customers.
- Moxa's warranty policy focuses on customers. We aim to provide transparent, fair, and efficient service to ensure that customers' critical equipment is optimally protected to ensure smooth business operations for customers.

Learn more about Moxa's warranty policy

Moxa's Return Merchandise Authorization (RMA) policy and process demonstrate Moxa's in-depth commitment to customers: providing transparent, efficient, and worry-free repair services. Moxa's goal is to ensure that when customers encounter product problems, they can perceive the value of customer service and ensure that business operations can be restored quickly. Moxa's RMA policy has two features:

1. **Simplified RMA process:** Customers only need to provide product information and serial numbers to easily apply for RMA. Moxa provides free repair and refund of shipping costs for products within the warranty period, and provides a fair repair quote for products out of the warranty period.

2. **Enhanced customer experience:** To further enhance the customer experience, Moxa offers an online repair status platform for customers to track the progress of their repairs and download detailed repair reports after repairs are completed. This not only increases transparency, but also enables customers to manage and understand the maintenance status more conveniently.

Learn more about Moxa's product repair services

Failure Analysis and Lessons Learned

Moxa is committed to continuous quality improvement to provide customers with the most reliable products and meet market needs. Moxa has established a comprehensive and rigorous management system that includes:

1. **Early Alert System (EAS):** By collecting historical maintenance data and performing big data analysis, it is possible to effectively discover potential quality problems early on.

2. **Establishment of a professional analysis team and process:** When it finds a potential quality problem or receives a customer feedback that the product is abnormal, Moxa will immediately set up a correction team to use the 8D problem-solving method to find the root cause, implement temporary and permanent corrective actions, and effectively resolve quality issues.

3. **Recurrence prevention:** The team creates lesson learned risk assessment documents based on the root cause. This lesson learned is available to the design team for review during the new product development phase. The goal is to reduce the recurrence rate of similar quality problems and continuously improve Moxa Product quality level.

Technical Service Satisfaction Survey

Moxa understands that technology satisfaction is a key indicator of service quality and the cornerstone of customer loyalty. To this end, Moxa has established a technology satisfaction survey mechanism that is implemented through three major axes.

1. Implementation of the technical satisfaction survey

Moxa sends a technical satisfaction survey when a customer's case is completed. It not only reviews the quality of our technical services but also provides an opportunity for continuous improvement. The questionnaire covers five service aspects: response speed, service attitude, problem-solving efficiency, clarity of problem explanation, and overall service experience, aiming to fully understand the service experience of customers.

2. Active follow-up

In response to the feedback that the satisfaction score is lower than the standard, Moxa actively follows up the feedback. By thoroughly understanding the causes of customer dissatisfaction and taking appropriate measures to optimize and improve our services, we demonstrate Moxa's emphasis on customer voice and unremitting pursuit of service quality.

3. Real-time satisfaction monitoring system

Moxa keeps track of customers' service to Moxa through the real-time satisfaction monitoring system and responds to potential and actual customer complaints in real time. The proactive and quick response mechanism not only enhances customer satisfaction but also strengthens customer trust and loyalty to the Moxa brand.

Moxa divides the global market into four major regions: Americas, Europe, Asia Pacific, and China. Each region has its own unique market needs and service strategies. To more effectively meet the needs of customers in different regions, Moxa adopts a diverse set of service channels to ensure that Moxa's solutions and services can precisely meet customers' needs.

To continuously improve service quality and ensure technical satisfaction, Moxa conducts technical satisfaction surveys across different service channels to learn about customer feedback in different regions and adjust and improve services based on the feedback. The survey results show that the satisfaction rate for Moxa's technical services in the Americas, Europe, Asia, and China has remained above 97%, demonstrating Moxa's commitment to global service quality and customer care.

2022-2023 Technical Service Satisfaction Survey

	Americas	Europe	Asia Pacific	China	Satisfaction[1]
2023	97.6%	98.0%	95.8%	98.5%	97.9%
2022	97.0%	97.5%	95.90%	98.2%	97.4%

Note 1: Since the number of returned questionnaires varies across the four regions, the satisfaction rate in this table is calculated by multiplying the satisfaction rate of each region by its respective weighted proportion and then summing the results.

In 2022 and 2023, Moxa's overall technical service satisfaction reached 97.4% and 97.9%, respectively, and five major areas of satisfaction were above 97%. These results demonstrate Moxa's commitment to continuous improvement and customer satisfaction. To further enhance responsiveness, Moxa has made responsiveness a key improvement indicator. Through the weekly internal customer service meeting, we not only monitor this indicator but also implement improvement measures at the same time. After improvements, Moxa's response speed satisfaction rate increased from 96.6% to 97.4% in 2023. In the future, Moxa will continue to deepen its strengths and develop improvement plans for areas that need enhancement. This demonstrates Moxa's commitment to putting customers first, ultimately earning global recognition and loyalty from clients.

Moxa 2022-2023 Technical Service Satisfaction Analysis

Year	2022	2023
Effective Problem-Solving	97.2%	97.8%
Clear Instructions	97.6%	98.0%
Response Speed	96.6%	97.4%
Service Attitude	98.4%	98.6%
Overall Service Experience	97.4%	97.8%
Satisfaction[1]	97.4%	97.9%

Note 1: The satisfaction rate in this table is calculated by summing the five indicators and dividing the total by five.

2.3.3 Customer Engagement

Moxa engages with different types of customers through various channels. The main customer types include distributors, system integrators, retailers, and vertical market customers. Customer engagement and interaction initiatives include the following:

- Distributor Conference in each region
- Distributor Technical Conference in each region
- Global Distributor Summit held every three years
- Major global vertical market exhibitions held biennially, such as InnoTrans in Berlin and CIGRE in France
- Regional online forums and seminars

2023 Global Distributor Summit

Apart from serving global large-scale and key customers, Moxa primarily collaborates with global distributors to provide services and products to end customers or system integrators. By expanding the distributor service network, Moxa meets the ever-increasing demand for its products and services. Distributors are not only key partners in Moxa's internationalization efforts but also loyal customers within Moxa's global network. Moxa always considers distributors as an integral part of the company. To maintain effective communication and interaction between Moxa headquarters and distributors, and to ensure the quality of strategic communication, Moxa's regional offices host regional distributor conferences annually. Additionally, every three years, Moxa holds a Global Distributor Summit (GDS), inviting key distributor partners from around the world to participate in meetings and activities.

The GDS was held at Moxa headquarters in September 2023. It was a four-day event and two venues were planned - Taipei and Shanghai - to kick off at the same time. Over 100 distributors from around the world were invited to attend the event, as well as strategic partners and Moxa employees from both domestic and international locations. The 2023 Moxa GDS event featured keynote presentations, an on-site Tech Fair, and a tour of Moxa Bade Plant. These activities showcased Moxa's unique culture and work environment, providing distributors with a comprehensive understanding of the company. The satisfaction survey for the 2023 GDS event recorded an overall satisfaction score of 4.88 out of 5. One of the highest praises from distributors was the opportunity to gain insight into Moxa's complete product market strategy, which facilitates their feedback and helps optimize product solutions based on market demands.

Four major themed exhibition areas showcased the latest applications and product technologies

Over 100 distributors from around the world attend the 2023 GDS

Future business strategy and deployment in 2023 GDS

Theme of 2023 GDS: Connect People, Connect Market

2023 GDS Shanghai

Product introduction in 2023 GDS Shanghai

Europe: Participate In International Automation Exhibitions And Collaborate With Channel Partners

For Moxa's channel partners, Moxa Europe organizes the annual Business Conference every year, which is the main event for Moxa partners in Europe. At the same time, Moxa also participates in important international exhibitions in Europe to develop new customers with potential.

In terms of customer engagement, Moxa actively supports its channel partners to participate in the Data Centre World series of events across Europe (London, Frankfurt, Madrid, and Paris). In addition, Moxa Europe also provides solutions for specific markets through small forums and conferences, such as "Rethink! Smart Manufacturing" or "5G Tech Week", and helps establish connections with experts in various fields.

SPS 2023

SPS is the largest industrial automation exhibition in Europe, with more than 1,200 companies participating each year. This exhibition takes place annually in Nuremberg, Germany, showcasing a wide range of smart and digital automation solutions. As a leader in industrial communications and networking, Moxa participated in 2023 with the concept "Be the Heartbeat of a Thriving Digital Future." Moxa showcased its complete portfolio of managed switches, next-generation firewalls, and industrial PCs (IPCs) for secure and future-proof machines, equipment, and OT networks at SPS 2023.

Display Topics:

- The Wall Concept Theme
- Moxa's OT Solutions
- New Technology and New Product Zone

Key Outcomes:

- 173 existing/potential customers visited
- Establish key customer relationships
- Multiple reports on OT technology

Asia Pacific: Continue To Participate in Automation Taipei Exhibition

Moxa's target market is industrial automation and smart manufacturing applications. Moxa engages with existing and potential customers by participating in automation exhibitions across the Asia-Pacific region, as well as key vertical market exhibitions or conferences in sectors such as power/energy, rail transportation, mining, and oil & gas.

Automation Taipei in 2023 , Moxa's solution was to leverage the four data forces of OT: data capture, data security, data transmission, data readiness, and service to modernize network communications with high resilience and flexibility, fulfilling the aspirations of business decision makers. At the exhibition, we focused on four major solutions: Edge Connectivity and Data Capture; Evolving Industrial Network Solutions; Connectivity + Networking + Optimum Edge Computing Solutions; and Professional Network Technical Service Solutions. Demonstrations of practical results with partners. Provide customers with an in-depth understanding of how Moxa can help achieve digital empowerment and move towards sustainable governance.

Automation Taipei 2023

Three major themed exhibition areas, four major solutions

- Moxa Solution: Driving Dual-axis Transformation with the Five Forces of OT Data
- New Technology and New Product Zone
- Smart Factory Application Zone

Four major solutions

- Edge device connection and data capture
- Industrial Networks That Keep Up with the Times
- Best Edge Computing Solution
- Professional Network Technology and iNOC Service Solutions

Key Outcomes

- 1,494 customer visits
- 337 valid request lists
- 37+ media reports

Asia Pacific Rail Transit and Power Events

Moxa specializes in network communications and edge computing solutions for automation. In addition to smart manufacturing, in the national infrastructure construction, Moxa is more focused on assisting customers in the digital transformation of the rail transit, power, and new energy industries. In 2023, we continued to introduce communication and computing solutions that can meet our customers' advanced application needs through related exhibitions and events in major countries.

MTIJ 2023

Display Topics

- Train control and on-board communication system
- Wayside and station communication system
- Rail Transit Computing Solution
- Smart traffic management and tunnel safety monitoring

Key Outcomes

- Over 400 existing/potential customers visit

RailLog Korea 2023

Display Topics

- Train control and on-board communication system
- In-vehicle surveillance/AIoT/5G application
- Vehicle-to-ground communication system

Key Outcomes

- 329 existing/potential customers visited

2023 INT'L Smart Grid Expo

Display Topics

- BESS energy storage project site monitoring and management
- Smart Substation Communication Security and Power Management
- Data Center Communication and Monitoring

Key Outcomes

- 269 existing/potential customers visited

2023 Energy Taiwan

Display Topics

- BESS energy storage container communication and monitoring
- Smart Substation Communication Security
- Smart Energy Management System

Key Outcomes

- 155 existing/potential customers visited

Asia Pacific Rail Transit and Power Events

Moxa specializes in network communications and edge computing solutions for automation. In addition to smart manufacturing, in the national infrastructure construction, Moxa is more focused on assisting customers in the digital transformation of the rail transit, power, and new energy industries. In 2023, we continued to introduce communication and computing solutions that can meet our customers' advanced application needs through related exhibitions and events in major countries.

AusRail Plus 2023

Display Topics

- In-vehicle safety communication system
- Train control and management system
- Vehicle-to-ground communication system

Key Outcomes

- 97 existing/potential customers visited

INT'L Smart Grid Expo 2023

Display Topics

- Power/Energy Industry Communication Monitoring Solution
- Renewable energy and BESS system communication network
- PRP/HSR network and IEC-61850 substation
- Visualization system

Key Outcomes

- 112 位既有 / 潛在客戶到訪

Symposium for Japanese Partners

Moxa has been actively expanding into the Japanese market for many years. In addition to regular participation in exhibitions and activities to interact with target customers, Moxa is actively seeking partners to jointly explore business opportunities in Japan. In 2023, Moxa hosted its first partner conference in Tokyo, Japan. More than 20 business partners from all over Japan were invited to discuss market opportunities and synchronize Moxa's market strategy. During the second half of the conference, Denton served as the keynote for the conference, sharing market insights for key industries in Japan. During the second half of the conference, he introduced Moxa's latest technologies, product application solutions, and solutions, including 5G technologies and Wi-Fi 6 product applications, as well as the next-generation security industry solution. Network solutions, eight major application topics including edge-to-cloud connection applications, visual network security management, and edge computing solutions were introduced and demonstrated, which were recognized by partners.

Key Outcomes

- A total of 75 employees from 22 business partners in Japan attended the event, along with Moxa distributors.

3 Green Manufacturing and Design

↓ **23**%

GHG emissions are reduced by 23% compared to 2022.

↓ **13.4**%

Through active waste reduction and recycling management measures, the waste output decreased by 13.4% compared to 2022.

↓ **56**%

Packaging optimization for 27 best-selling products reduced raw material carbon emissions per package by approximately 52-56%.

3.1 Green Manufacturing

3.1.1 GHG and Energy Management

Moxa EHS Commitments

To fulfill environmental protection and fulfill product responsibility, Moxa has established ESH policy and five commitments to reduce the impact of operations and products on the environment.

Invest in innovation and R&D	Develop products that meet customer expectations and have low environmental impact. Reduce the environmental impact of products at the stages of procurement, manufacturing operations, logistics and distribution, product use, and product disposal , and ensure that they do not cause harm to the health or safety of users.
Adoption of environmentally friendly materials	Implement the management and replacement of hazardous substances , promote the use of recycled and recycled raw materials, and promote waste recycling and reuse, and are committed to practicing a circular economy.
Promoting color manufacturing	Actively invest in energy conservation, water conservation, waste reduction, and pollution reduction to improve the ecological benefits of products and improve pollution prevention performance, and reduce the environmental impact of the company's production and manufacturing.
Promoting the R&D of low-carbon products	Improve the energy efficiency of products and help customers reduce the energy consumption of their products.
Set SBT carbon reduction targets	Collaborate with partners in the value chain to promote carbon reduction and move towards the 2050 net zero emission goal.

GHG Emission and Management

Moxa began conducting Greenhouse Gas (GHG) inventories assessment in 2023, and the audits passed the external audit of ISO 14064-1. Since Moxa's production and operations are mainly located in Taiwan, and all overseas locations are marketing offices, Moxa started the audit with Taiwan as the boundary. In the future, we will gradually plan to include overseas bases in the inventory.
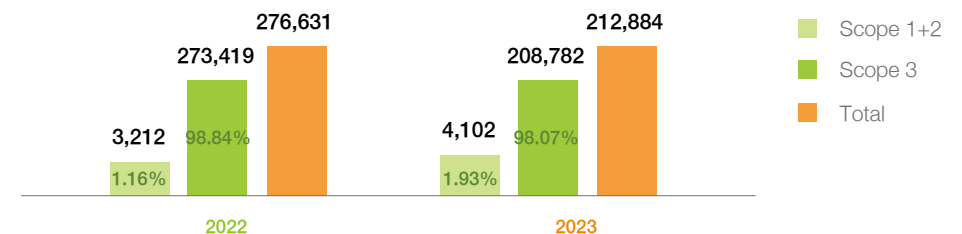
In addition to Scopes 1 and 2 of its own operations, Moxa assesses greenhouse gas emissions for Scope 3. In 2023, Moxa's total greenhouse gas emissions were 212,884 tons of CO_2e, a 23% reduction from 2022. The main aspects are two: the first is a decline in product sales and raw material purchases in 2023 compared to 2022, and the second is a fall in the sales area's electricity coefficient in 2023.

In 2023, Moxa's GHG emissions were mainly from Scope 3 emissions, accounting for 98.07% of Moxa's overall emissions. Among them, procurement of goods and services (C1) and product usage (C11) were the most significant sources (accounting for 90.03% of Scope 3 emissions, and 88.30% of Moxa's overall emissions), so C1 and C11 are the directions in which Moxa must actively promote carbon reduction actions in the value chain. of scope 2 emissions are from electricity consumption, accounting for 83.52% of Scope 1 and 2 emissions. This indicates that Moxa is focusing on the electricity use of its operations for carbon reduction. In terms of Scope 1 and Scope 2 emissions in 2023, it increased by 27.71% compared to 2022, part of which was caused by one-time refrigerant charging, accounting for about 17% of scope 1 and scope 2 emissions; the other 10% increase was mainly due to electricity usage. The analysis showed that the main increase in electricity consumption included the air conditioning electricity consumption of the Bade Plant and the i-Tower electricity consumption increase. This is an inevitable challenge for Moxa as we move towards net-zero emissions.

In November 2023, Moxa committed to SBT target setting in the SBTi within 2 years. For information on SBT target setting and net-zero carbon reduction strategy, please refer to "Featured Stories 1 - Carbon Reduction Actions and Move towards Net Zero Future".

Moxa's greenhouse gas emissions in 2022-2023

Unit: tons CO_2e

	2022	2023
Scope 1+2	3,212 (1.16%)	4,102 (1.93%)
Scope 3	273,419 (98.84%)	208,782 (98.07%)
Total	276,631	212,884

Scope 1 and 2 GHG Emissions and Emission Intensity

Scope 1 Emissions (Unit: tons CO_2e)
Scope 2 Emissions (Unit: tons CO_2e)
Emission Intensity (Unit: kg CO_2e/product)

Note1: There are six greenhouse gases under Scope 1 and Scope 2 assessment, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF_6).

Note2: The greenhouse gas emission factors are based on the greenhouse gas emission factor management table announced by the Taiwan Environmental Protection Administration's national registration platform, and the emission coefficient of electricity is based on the announcement of the Energy Administration, Ministry of Economic Affairs.

Note3: The global warming potential (GWP) is quoted from the Sixth Assessment Report of the IPCC.

Scope 3 GHG Emissions

Emission source	Source of main coefficient	Emissions in 2022 (tons CO_2e)	Emissions in 2023 (tons CO_2e)
Purchased Goods and Services (C1)	Ecoinvent 3.8 & Ministry of Environment	103,708	59,340
Fuel- and Energy-Related Activities (C3)	Ministry of Environment_Carbon Footprint Information Website	553	677
Upstream Transportation and Distribution (C4)	Ecoinvent 3.8 & Ministry of Environment	499	125
Waste Generated in Operations (C5)	Ministry of Environment_Carbon Footprint Information Website	24	24
Business Travel (C6)	Ministry of Environment_Carbon Footprint Information Website	259	384
Employee Commuting (C7)	Ministry of Environment_Carbon Footprint Information Website	1,548	1,714
Downstream Transportation and Distribution (C9)	Ecoinvent 3.8 & Ministry of Environment	5,191	17,888
Use of Sold Products (C11)	Electricity Information Disclosure	161,637	128,630
Total		273,419	208,782

Note1: Moxa's Scope 3 audits include a total of 7 items, including procurement of goods and services (C1), upstream transportation and delivery (C4), operational waste disposal (C5), business travel (C6), employee commuting (C7), downstream transportation(C9), and use in sales of products (C11), the availability and accuracy of supporting data are taken into consideration. The data of use in sales of products (C11) had not been externally verified in 2022, but external verification was completed in 2023.

Note2: There are six greenhouse gases under investigation in Scope 3, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and Sulfur fluoride (SF_6).

Note3: The global warming potential (GWP) is quoted from the IPCC Sixth Assessment Report.

Energy Structure

Moxa's energy use structure accounts for about 99.29% of purchased electricity, 0.68% of natural gas, and 0.03% of diesel. Therefore, reducing electricity use is Moxa's main goal of energy conservation. Due to the increase in production capacity, Moxa's total energy consumption in 2023 reached 6,999,056 kWH, an increase of 11.4% from 2022. Moxa will continue to improve and strive for energy management in the future, so that Moxa can reduce the negative impact of production on energy consumption.

2022-2023 Total Energy Consumption

Unit : kWH

Energy Category		2022	2023
Electricity	Self-generated renewable electricity for self-use (a)	0	0
	Purchased renewable electricity (b)	0	0
	Purchased non-renewable electricity (c)	6,235,519	6,949,587
	Total amount of electricity (d)	6,235,519	6,949,587
Diesel (e)		1,563	2,051
Natural gas (f)		43,838	47,417
Total non-renewable energy consumption (g=c+e+f)		6,280,920	6,999,056
Total Renewable Energy Consumption (h=a+b)		0	0
Total Energy Consumption (i=g+h)		6,280,920	6,999,056

Note: Statistical scope includes Moxa's locations in Taiwan.

Energy Intensity Statistics

Energy Category	Unit	2022	2023
Electricity	kWH/product	2.65	3.92
Total Energy	kWH/product	2.67	3.94

Note: Statistical scope includes Moxa's locations in Taiwan.

Energy Conservation Actions

Moxa's Bade plant aims to save 1% of electricity per year, and we report energy-saving measures on a regular basis. From 2020 to 2023, the average electricity saving rate reached 2.59% per year. Moxa will continue to improve energy efficiency and take different measures to improve energy efficiency in the factory. Implement energy-saving measures to reduce energy consumption and enhance production efficiency. The Bade Plant implemented 3 energy-saving measures in 2023, mainly for the air conditioning/chilling water system and lighting energy-saving measures, resulting in a total energy saving of 110,316 kWh and a carbon reduction of 54.6 CO_2e.

Summary of energy saving measures in 2023

Energy conservation case classification	Energy Saving Case Name	Electricity Savings (kWh/year)	Carbon reduction (ton CO_2e/year)
Air conditioning/ chilling water system	Increase the outlet water temperature of the ice water machine	83,904	41.53
Air conditioning/ chilling water system	The ice machine is filled with sufficient refrigerant to prevent the high-load operation of the chiller.	6,912	3.42
Lighting system	Adjust the on/off time of production line lighting to avoid turning on the lights during non-working hours.	19,500	9.65

To effectively monitor and manage energy usage in its manufacturing facilities, Moxa has installed an energy management system and digital meters for electricity and water at its Bade plant. This system visualizes key energy consumption information, such as air conditioning, process power, lighting sockets, automated warehousing, and water usage, on the monitoring screen of the energy management system. It can dynamically unload electricity-consuming equipment based on the demand of different areas or equipment, thereby achieving the effectiveness of electrical energy management. The energy management system also includes a database to store real-time monitoring data of electricity and water consumption, with storage capabilities of over a year.

Energy Management System Meter Information

Energy Management System Demand Monitoring Information

Energy Management System Water Meter Information

Moxa's Bade Plant obtained the Gold Label for Green Buildings and Gold Level for Smart Buildings in 2020, and energy-saving facilities have been designed since the early stage of plant construction planning. The relevant energy-saving equipment description is as follows:

- The ice machine system adopts high-efficiency energy-saving models, and cooperates with the central monitoring system to optimize the operation configuration.
- The motor adopts IE3 efficiency motor and operates with an inverter.
- Adopt buoyancy ventilation system to save energy consumption in winter.
- The air compressor adopts variable frequency operation.
- The whole plant lighting adopts LED lamps, Full-2way control switch, schedule control, and induction lighting.
- Install low-E coated glass for natural lighting and block solar radiation heat energy.

3.1.2 Water Management
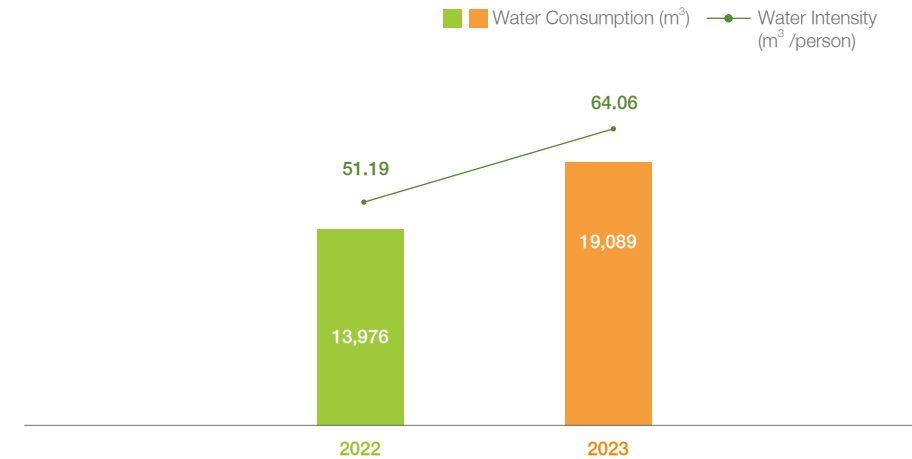
Water Consumption Structure

The manufacturing process for Moxa's products is mostly assembly, and therefore does not require a large amount of water. Most of the water required is for household water and some plant equipment (such as cooling towers, kitchens, etc.) The wastewater is treated in the wastewater treatment system without causing significant environmental impact on the water resources and the ecological environment of the water source. Even so, Moxa actively collects water consumption data, regularly monitors water quality and water consumption, and promotes water-saving activities to protect water resources.

Moxa establishes water resource management based on the ISO 14001 environmental management system and adopts water resource management, goal setting, and continuous water conservation approaches for management and reduction. Moxa is committed to strictly abiding by the country's Water Resource Act, using water resources reasonably, prioritizing the use of water-saving equipment, and monitoring water consumption through a monitoring system to improve the efficiency of water use.

Moxa's Water Sources and Treatment

Water Use Areas	Bade Plant	Xinzhuang Office
Water intake	Shihmen Reservoir	The Shimen Reservoir at the Dahan River and the Yuanshan Weir downstream and the tributary Sanxia River.
Wastewater treatment unit (treatment level)	Domestic sewage: Taoyuan Northern District Water Reclamation Center (tertiary treatment)	Domestic sewage: New Taipei Industrial Park Sewage Treatment Plant (secondary treatment)
Receiving water body of discharge water	Nankan River	Tamsui River
Release Standards	BOD : ≦ 20 mg/L SS : ≦ 20 mg/L Escherichia coli: ≦ 2.00E+05 Total nitrogen: ≦ 15 mg/L Total phosphorus: ≦ 2 mg/L	BOD : ≦ 14 mg/L SS : ≦ 12 mg/L COD: ≦ 50 mg/L

2022 - 2023 Water Consumption and Water Intensity Statistics

Legend: ■ Water Consumption (m³) — Water Intensity (m³/person)

- 2022: 13,976 (Water Consumption); 51.19 (Water Intensity)
- 2023: 19,089 (Water Consumption); 64.06 (Water Intensity)

Note: Statistical scope includes Moxa's Bade Plant.

Water-Saving Actions and Response to Water Shortage

To implement water resource management, Moxa has introduced sensor faucets, water-saving toilets, and automatic flushing toilets in its existing plants. In addition, Moxa's Bade Plant has implemented water-saving facilities such as rainwater harvesting systems and condensate water harvesting systems at the beginning of construction. The rainwater harvesting system can recover about 700 tons of rainwater per year for watering. The air-cooled ice water unit is used in winter to reduce water loss from the cooling towers. The BA (Building Automation) building management and monitoring system can be used to collect water consumption data and provide more information, serving as a reference for Moxa's water management.

Building Management Monitoring System Water Meter Information
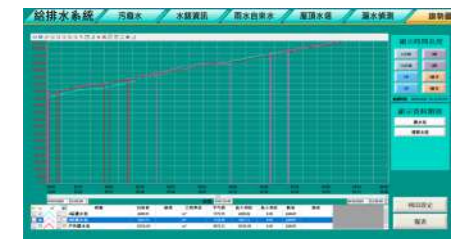
Building management and monitoring system Real-time water consumption information

Based on an analysis of the location of Moxa's Taiwan sites based on the water scenario simulation tool of WRI Adequduct, the Group found that the sites were not classified as "Low to medium" water stress areas but could avoid the risk of short-term water shortages. In addition to proactively implementing water conservation measures, a water stress response mechanism has also been established for water consumption management and water resource recycling. Currently, Bade Plant uses water for air conditioning, livelihood, kitchen, and irrigation. It consumes about 46 tons of water a day. The Bade Plant has a water storage capacity of 198 tons. In the event of water scarcity, the estimated water storage within the plant can sustain operations for approximately 4.3 days.

Moxa's emergency response mechanism

Water condition signal
Green light

Water Reminder

- Enhance water conservation awareness.
- Adjust the water output of the sanitary equipment (faucets, urinals)

Water condition signal
Yellow light, Orange light

Decompression and reduction

- Reduce water consumption
- Only air-cooled air conditioners are operated at night.

Water condition signal
Red light

District water supply

- Closed the lavatories on 6F of the Bade factory.
- Adjust the room temperature in the entire factory to 26 ℃ during the day, reduce the air conditioning load, and reduce the evaporative loss of the cooling tower.
- Only air-cooled air conditioners are operated at night (air conditioning supply may be suspended for sports facilities at night)
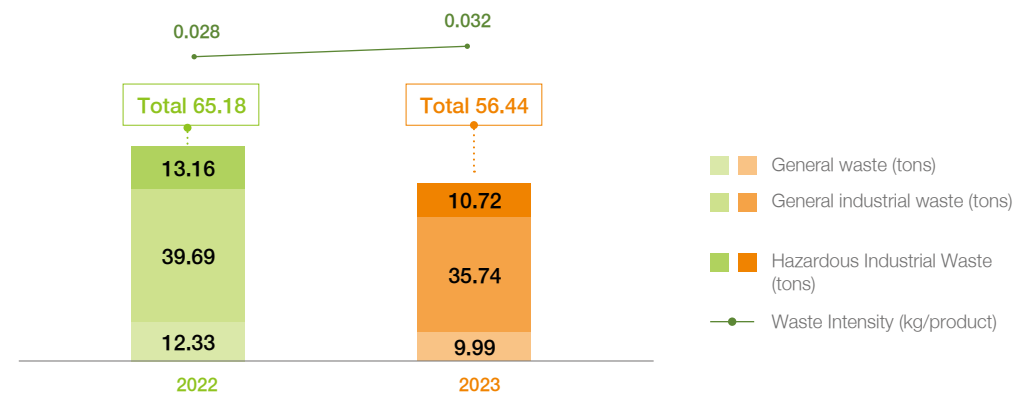
3.1.3 Waste Management

Waste Generation Structure

Moxa's waste is divided into general waste, general industrial waste, and hazardous industrial waste. General waste mainly consists of employee household waste and cafeteria waste. General business waste refers to waste generated by businesses other than hazardous business waste. Throughout the manufacturing process, strict classification and visual labeling of storage areas are implemented. Recyclable materials are sorted, stored, and confirmed for reuse before being sent to qualified recycling facilities. Non-recyclable waste is disposed of through licensed disposal companies and facilities via incineration. Hazardous business waste primarily originates from production materials, semi-finished products, and waste. Through a classified storage management mechanism, it is delivered to qualified recycling facilities for reuse.

Moxa has established a responsible management unit in compliance with the ISO14001 standard. With the goal of increasing the reuse rate of industrial waste, Moxa tracks and generates statistics on waste sources and output. The volume of waste in the waste temporary storage area on each floor and the amount of recyclable waste in the waste temporary storage area are recorded weekly. The amount of resource materials generated, and the total amount of waste generated and outsourced treatment in the entire plant area are tallied every month to understand the trends and changes in waste output and recycling, and to further adjust waste management practices. In addition, Moxa adheres to the principles of maximizing resource use and minimizing waste generation, promoting green design and waste management measures, minimizing waste during product design and manufacturing, increasing the life cycle of raw materials, and improving sustainability. The recycling of sustainable resources and the reuse of waste in order to achieve the goal of waste reduction and improvement of the reuse rate.

Moxa generated 56.44 tons of garbage in 2023, a 13.4% decline over 2022. Moxa will continue to effectively minimize waste generated during the manufacturing process through active waste reduction and recycling management initiatives, and will work toward the goal of zero landfill.

Waste generation statistics from 2022 to 2023

	2022	2023
Waste Intensity (kg/product)	0.028	0.032
Total	Total 65.18	Total 56.44
Hazardous Industrial Waste	13.16	10.72
General industrial waste	39.69	35.74
General waste	12.33	9.99

Legend:
- General waste (tons)
- General industrial waste (tons)
- Hazardous Industrial Waste (tons)
- Waste Intensity (kg/product)

Note: Since Moxa's Xinzhuang office has not completed the establishment of the waste statistics system, the scope of statistics mainly focuses on Moxa's Bade plant.

Statistics on Waste Disposal Methods from 2022 to 2023

	Disposal Method	2022	2023
General waste (tons)	Recycling and Reuse Disposal	3.43	2.94
	Incineration	8.90	7.05
	Landfill disposal	0.00	0.00
General industrial waste (tons)	Recycling and Reuse Disposal	39.69	33.54
	Incineration	0.00	2.20
	Landfill disposal	0.00	0.00
Hazardous Industrial Waste (tons)	Recycling and Reuse Disposal	13.16	10.72
	Incineration	0.00	0.00
	Landfill disposal	0.00	0.00
Total (tons)	Recycling and Reuse Disposal	56.28	47.20
	Incineration	8.90	9.24
	Landfill disposal	0.00	0.00

Note: Since Moxa's Xinzhuang office has not completed the establishment of the waste statistics system, the scope of statistics mainly focuses on Moxa's Bade plant.

Waste Reduction Actions

In waste reduction efforts, Moxa implements electronic document digitization to minimize paper usage and promotes double-sided printing to reuse paper. Additionally, upon new employee onboarding, eco-friendly utensils, bags, and water bottles are provided to instill the company's environmental ethos from day one. Visual labeling facilitates waste classification, storage, collection, and management throughout office and factory premises. Resource recycling initiatives encompass the reuse of paper boxes, packaging materials, and pallets. Furthermore, Moxa mandates subcontractors to adopt measures such as reusable static bags and segregated packaging materials, aligning efforts toward reducing business waste. These initiatives collectively contributed to achieving a waste reuse rate of over 95% in 2023.
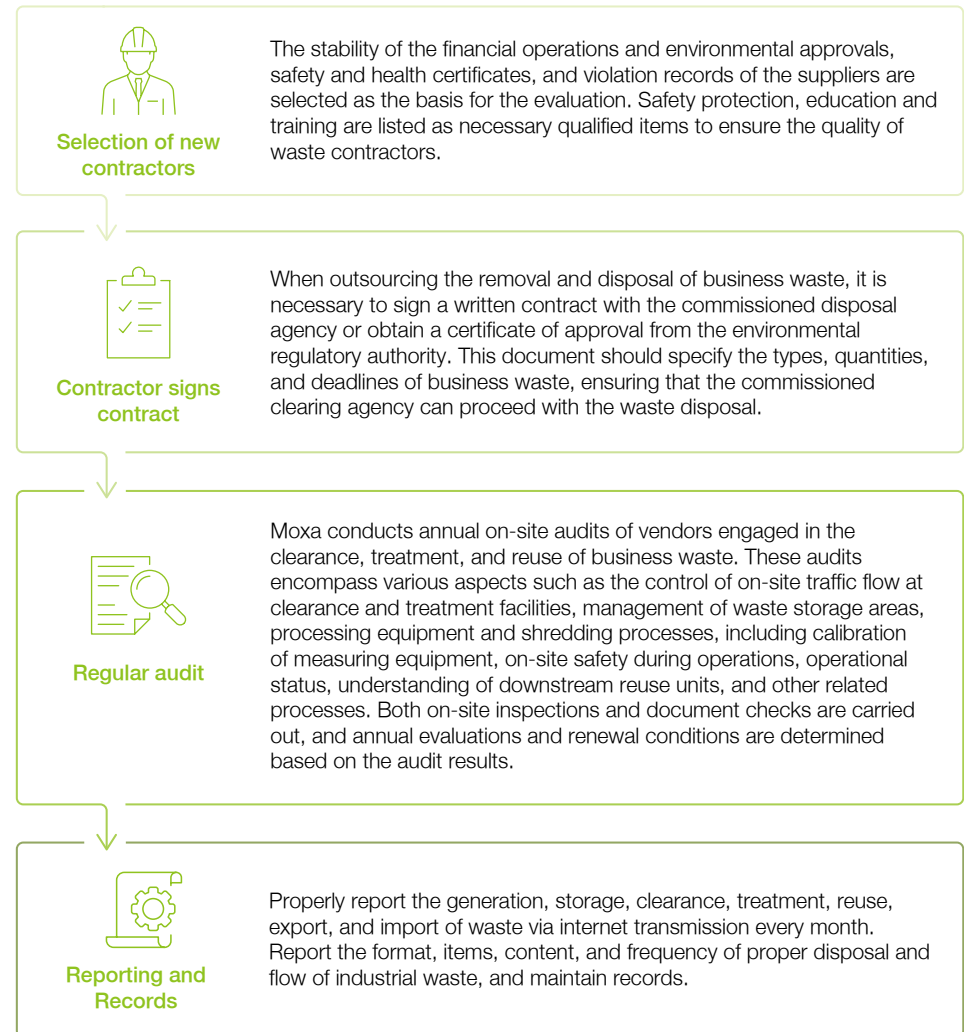

On-site Sorting of Industrial Waste at Moxa's Manufacturing Sites

Management of Waste Contractors

Moxa has the "Waste Management Code of Practice", which outlines complete waste management procedures for waste contractors to ensure that Moxa's waste is disposed of and recycled in accordance with regulatory requirements after it has been cleared and transported. The waste management contractors shall focus on the following four management items. In 2023, Moxa monitored and managed waste contractors, and no significant waste disposal incidents occurred.

Management Focus of Waste Contractors

Selection of new contractors

The stability of the financial operations and environmental approvals, safety and health certificates, and violation records of the suppliers are selected as the basis for the evaluation. Safety protection, education and training are listed as necessary qualified items to ensure the quality of waste contractors.

Contractor signs contract

When outsourcing the removal and disposal of business waste, it is necessary to sign a written contract with the commissioned disposal agency or obtain a certificate of approval from the environmental regulatory authority. This document should specify the types, quantities, and deadlines of business waste, ensuring that the commissioned clearing agency can proceed with the waste disposal.

Regular audit

Moxa conducts annual on-site audits of vendors engaged in the clearance, treatment, and reuse of business waste. These audits encompass various aspects such as the control of on-site traffic flow at clearance and treatment facilities, management of waste storage areas, processing equipment and shredding processes, including calibration of measuring equipment, on-site safety during operations, operational status, understanding of downstream reuse units, and other related processes. Both on-site inspections and document checks are carried out, and annual evaluations and renewal conditions are determined based on the audit results.

Reporting and Records

Properly report the generation, storage, clearance, treatment, reuse, export, and import of waste via internet transmission every month. Report the format, items, content, and frequency of proper disposal and flow of industrial waste, and maintain records.

3.2 Eco-Friendly Product Design

Eco-friendly Design Concepts and Principles

Moxa adheres to the concept of environmental friendliness and promotes three major green product principles, including sustainable product design, sustainable material selection, and sustainable product packaging. While increasing value, we aim to reduce the impact of our products on the environment and provide customers with high-quality sustainable products.

Principles of Green Products
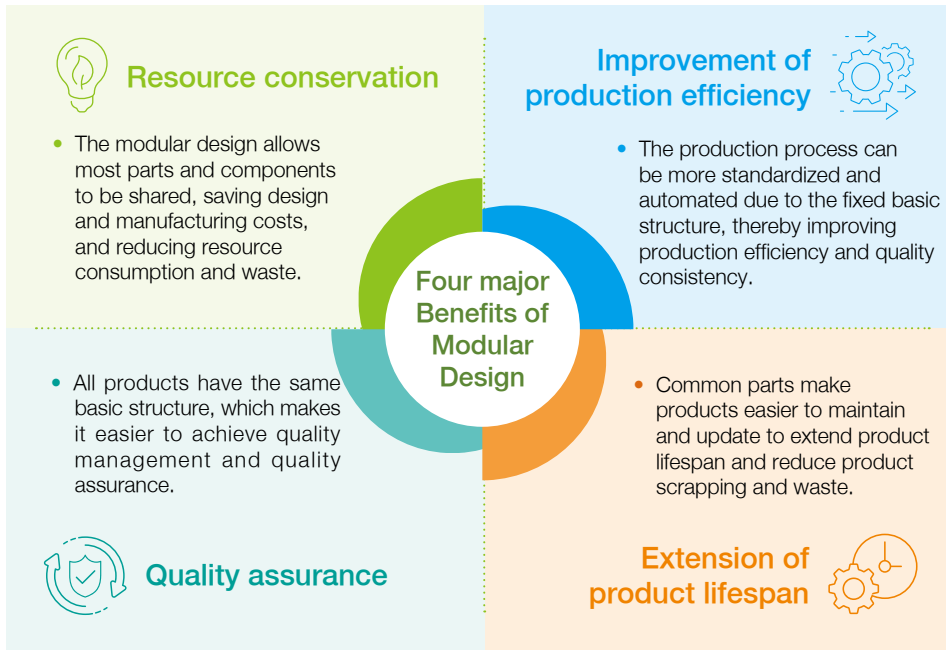

3.2.1 Sustainable Product Design

Modular Design

Moxa has always been striving for sustainable development and seeks to integrate sustainability principles into product design and manufacturing processes. Through the practice of sustainable design, we can reduce environmental impact, increase product life cycle, and create more value for society and stakeholders. According to the "Green Mechanical Design Guidelines", Moxa has adopted the following four major principles for sustainable product design.

Key Principles	Purpose
Reduction of types of materials and number of parts	Reduce material procurement costs and inventory costs, as well as lower the handling and sorting costs during the recycling process to simplify the recycling and regeneration procedures.
Modularization of components	Modularization of components facilitates assembly and disassembly, material preparation, recycling, and reuse of parts and components that need to be replaced. It also makes products easier to maintain and update, thereby extending product service life.
Avoid gluing between different materials	Reducing material gluing can avoid complex handling procedures to separate materials, thereby increasing recycling efficiency and reducing recycling costs.
Increase in size of recyclable parts/ miniaturization of non-recyclable parts	Upsizing the design of recyclable parts can increase the recycling rate and reduce the energy consumption during the recycling process. At the same time, reducing the size of the non-recyclable parts in the design can reduce their impact on the environment.

With the aforementioned sustainable product design principles in mind, "modular design" has become one of Moxa's key focuses. The modular design not only increases the flexibility and maintainability of products, but also reduces production costs, increases production efficiency, and extends product service life, thereby promoting the effective use of resources.

Four major Benefits of Modular Design

Resource conservation
- The modular design allows most parts and components to be shared, saving design and manufacturing costs, and reducing resource consumption and waste.

Improvement of production efficiency
- The production process can be more standardized and automated due to the fixed basic structure, thereby improving production efficiency and quality consistency.

Four major Benefits of Modular Design

Quality assurance
- All products have the same basic structure, which makes it easier to achieve quality management and quality assurance.

Extension of product lifespan
- Common parts make products easier to maintain and update to extend product lifespan and reduce product scrapping and waste.

Moxa's modular design principle is "family design" and a "standard modular design platform" is established to achieve modular design.

Family design

Family design refers to the fact that products have similar or identical basic design elements, only some of the designs may be slightly different, and most parts can be shared to reduce manufacturing costs and waste of resources.

Case Study

The Moxa EDS-4000 series was developed based on the core concept of family-based design. More than 20 types of PCBs and more than 300 types of mechanical components were integrated into 4 types of PCB through a consistent design vocabulary and the same system architecture. and 4 types of mechanical parts, in which the mechanical parts except the front panel are all common parts.

Before Family Design
20+ PCB & 300 + ME

After Family Design
4 PCB & 4 ME
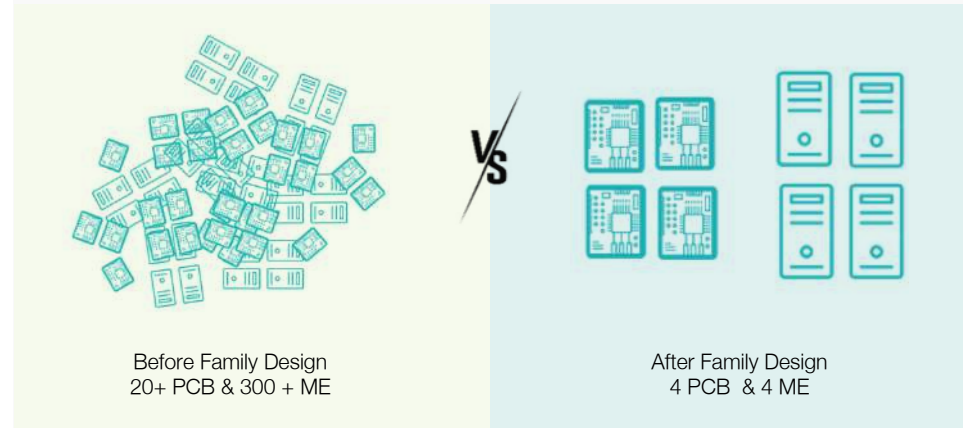
Therefore, only by changing the front panel, the product layout of 68 models can be completed.

Moxa Family Design

1 Platform × 4 Main Boards × 4 MEs = 68 Models

Standard Modular Design Platform

The concept of the standard modular design platform is like the process of building blocks. The main structure is a stable base that supports the entire structure with left-right symmetry. Through this design platform, the parts that need to be assembled on the left and right sides of the main structure can be selected from parts with different shapes and functions according to development needs. In addition, the top, bottom, and front panel of the product can also be replaced according to the product's specifications, so that the appearance and function of the product can be easily changed.

Case Study

Moxa completed the preliminary planning and development of the standard modular design platform in 2022, which was actually applied to the Oncell, CCG, and other new series of products in 2023. At the same time, we have expanded the types of modular kits. In 2024, there are still many models that can be used for product development based on this modular design platform.

Energy-Saving Design for Products

Moxa's product energy-saving design focuses on "improving energy efficiency" and "reducing product energy consumption" to help customers improve energy efficiency and reduce the impact of product use on the environment when using Moxa products. of carbon emissions.

Improve Energy Efficiency

Moxa has established the Power & Protection Department, abbreviated as the Power Team, with the aim of conducting in-depth research on circuit architecture and component knowledge. The department's mission is to establish Moxa's core competency in power and protection technology and to provide high-reliability and high-quality power solutions for all products.

In response to the trend of increasing product energy consumption and miniaturization, the "development of miniaturized power supplies with high conversion efficiency" has been the focus of the Power Team development in recent years. The Power Team started to develop high-efficiency power modules in 2020. By introducing a new circuit architecture, flat-panel transformer design, and the third-generation semiconductor device, gallium nitride (Gallium Nitride, hereinafter referred to as GaN), high conversion efficiency and miniaturization are achieved. Power target.

Key Developments for High-Efficiency Power Modules

- **Circuit architecture:** Select an appropriate flexible switching power supply architecture to reduce switching loss and improve power efficiency.
- **Flat-panel transformer design:** Flat-panel transformers produce small leakage inductance due to their good coupling characteristics. We pursue miniaturization without sacrificing power conversion efficiency.
- **Use of the third-generation semiconductor element GaN:** Has the characteristics of lower switching loss to improve the power conversion efficiency.

The Power Team has developed 3 models of power modules so far, and the average efficiency is better than the current industry standard. The average efficiency of the DC-DC 30W wide-input power module is up to 91%, and the average efficiency of the DC-DC 75W wide-input power module is up to 90%. In addition, the AC-DC 65W power module adopts the third-generation semiconductor component, GaN, with an average efficiency of up to 91.8%.

In addition to the aforementioned high-efficiency power modules, the Power Team also conducts research on ideas for energy-saving power supplies. The idea was developed into a patent and a patent was obtained in March 2020. The purpose of this patent is to reduce waste heat from system power supplies and reduce energy costs.

Reducing Product Energy Consumption

In addition to improving the power conversion efficiency of products, reducing the energy consumption of the products is also a key direction to achieve energy conservation and carbon reduction. Moxa's products continuously innovate, with recent generations incorporating energy-saving principles into their design. Below are practical examples of Moxa products reducing energy consumption.

Case 1. Low Energy USB-to-Serial Converters

The new USB-to-serial converters (UPort 1200/1400/1600-G2 series) developed by Moxa adopt the latest generation of Moxa's application-specific integrated circuits and optimized power architecture to allow customers to save about $47~ 67% of energy consumption.

The following table compares the power consumption of USB continuous transmission over USB 2.0 with generation 1 (G1) and generation 2 (G2) powered by USB under the same scenarios.

Product name	G1 Energy Consumption	G2 Energy Consumption	Energy saving
UPort1250	1.8W, USB	0.8625W	52%
UPort1250I	2.4W, DC	1.265W	47%
UPort1450	3.12W, DC	1.33W	57%
UPort1450I	4.32W, DC	2.225W	48%
UPort1650-8	6.96W, DC	2.33W	67%

Case 2. Full introduction of Panel PC Optical Bonding

Since 2022, all MOXA Panel PCs have transitioned to an optical bonding design. Compared to the previous air gap bounding method, while this transition has slightly increased manufacturing costs, the advantage of reduced reflection has allowed for approximately 10% energy consumption reduction while maintaining high brightness requirements for LCD backlighting.

Case 3. Automatic backlight adjustment design for MPC-2121 series products

In the past, products did not automatically adjust the LCD brightness according to the environmental brightness, and customers had to adjust the brightness according to the environmental brightness. The MPC-2121 series has incorporated a light sensor into the product. Through the detection of the light sensor, the LCD display will automatically adjust the brightness according to the ambient brightness to produce the most suitable brightness for the human eye while achieving energy conservation.

Case 4. EDS-G205, EDS-G308 series support Energy Efficient Ethernet (IEEE 802.3az)

The EDS-G205 and EDS-G308 series support Energy-Efficient Ethernet (EEE), which enables them to consume less power (42% - 57% in energy savings) during periods of low data activity. The design of the product allows customers to decide whether to enable this feature, and the EEE function is turned on.

Product name	Closure of EEE	EEE on	Energy saving
EDS-G205-1GTXSFP	3.374W	1.446W	57%
EDS-G308	6.822W	3.957W	42%

Case 5. Special energy-saving and power-saving mode design

- The UC-3100 series is equipped with an MCU-controlled power supply. Customers can adjust the product's standby behavior according to the usage scenario and activate or shut down the CPU power via LTE to achieve energy saving.
- The new OnCell G4302-LTE4 series introduces an energy-saving design. When entering the standby mode, the power consumption is reduced from 2.8W to only 70mW. Customers can set the time to enter standby mode and wake up equipment according to the usage scenario to reduce unnecessary energy waste.

3.2.2 Sustainable Materials

Hazardous Substance Management

Moxa references the latest domestic and international regulations and trends, as well as customer requirements, to establish hazardous substance management policies that ensures control over all products and materials.

Suppliers are required to provide preliminary assessment documents, including the "Supplier Declaration of Conformity to Environmentally Controlled Substances" during new supplier audit. Purchase agreements explicitly state that any products, components, and packaging materials provided must comply with listed environmental protection related regulations. This aims to achieve the selection of environmentally friendly materials through sustainable supply chain management.

Moxa's Hazardous Substance Policies

1. Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Directive)
2. Administrative measures for the restriction of the use of hazardous substances in electrical and electronic products (China RoHS)
3. Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH Regulation)
4. Regulation on persistent organic pollutants (POPs Regulation)
5. Directive on packaging and packaging waste (PPW Directive)
6. Directive on batteries and accumulators and waste batteries and accumulators
7. Rotterdam Convention
8. Montreal Protocol

Moxa utilizes the Green Product Management System (GPMS) for hazardous substance management, conducting reviews of material composition information and compliance documentation. Moxa also requires suppliers and subcontractors to adhere to Moxa's procurement standards, including providing the "Supplier Declaration of Conformity to Environmentally Controlled Substances", along with controlling part approval processes and conducting incoming material inspections to produce and provide products with low environmental or human health risks.

Hazardous Substance Management Process

Regulatory Compliance	Communication	Management	Risk Assessment	Response
• Hazardous substance policies • Domestic and foreign regulatory trends • Customer requirements	• Supplier education and training • Supplier performance evaluation	• Material composition Information Review • Inventory of Substance Use • Incoming inspection	• Substance use status • Compliance confirmation in response to regulatory updates	• Compliance declaration • Customer survey reply

For special industrial applications such as the railway and marine industries, Moxa responds to the control and requirements of hazardous substances in accordance with relevant conventions, regulations, industry associations, and customer requests. In response to the latest regulatory developments, the U.S. Environmental Protection Agency (EPA) and hazardous substance regulatory authorities worldwide are focusing on Perfluoroalkyl and Polyfluoroalkyl substances (PFAS), known for their stable chemical properties. PFAS are widely used in various products due to their high heat resistance and corrosion resistance. However, their persistence in the environment without natural degradation poses significant risks to human health. Moxa will initiate an inventory and assessment control plan starting in 2024 to address these concerns.

Hazardous Substance Management for Special Industrial Applications

Railway: Moxa can provide the UNIFE Declaration to specific products in accordance with the RISL (Railway Industry Substance List), designed for the railway industry by the UNIFE (Union of European Railway Industries).

Marine: Moxa's specific products comply with the hazardous material requirements of APPENDIX 1 in RESOLUTION MEPC.269(68) of the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships 2009 and ANNEX in REGULATION (EU) No 1257/2013, and we can provide Material Declaration (MD) and Supplier's Declaration of Conformity (SDoC).

Purchase of Environmentally Friendly Materials

Moxa has established a Material Management Committee composed of members from Component Engineering, Supply Chain Management, and the R&D Center. This cross-departmental committee focuses on three main areas: operation planning, annual procurement strategy, and the principles for selecting and replacing product parts.

The committee manages material inventory and risks while promoting environmental sustainability. It aims to increase the use of green products and materials by defining their proportion and evaluating low-carbon materials based on GHG emission factors from the supply chain. The goal is to reduce carbon emissions from products.

3.2.3 Sustainable Packaging

Modular Design of Packaging Materials

Moxa began to integrate product carton sizes in 2021. It reduced the number of discrete carton parts by 80% from the cartons originally developed for different product lines in previous years, and reduced them to seven major part numbers to simplify packaging design and production line operations. process and reduce operating costs in transportation and warehousing.

In the development of series-based products, Moxa prioritizes not only modular design for the products themselves but also emphasizes the modularity of cushioning materials in packaging. This approach enhances packaging efficiency while reducing material waste, thereby achieving the dual goals of environmental sustainability and cost-effectiveness. For example, in the EDS-G4000 series, 68 models share a single packaging configuration, while in the new generation of industrial computers, 75 models share only three packaging cushioning.

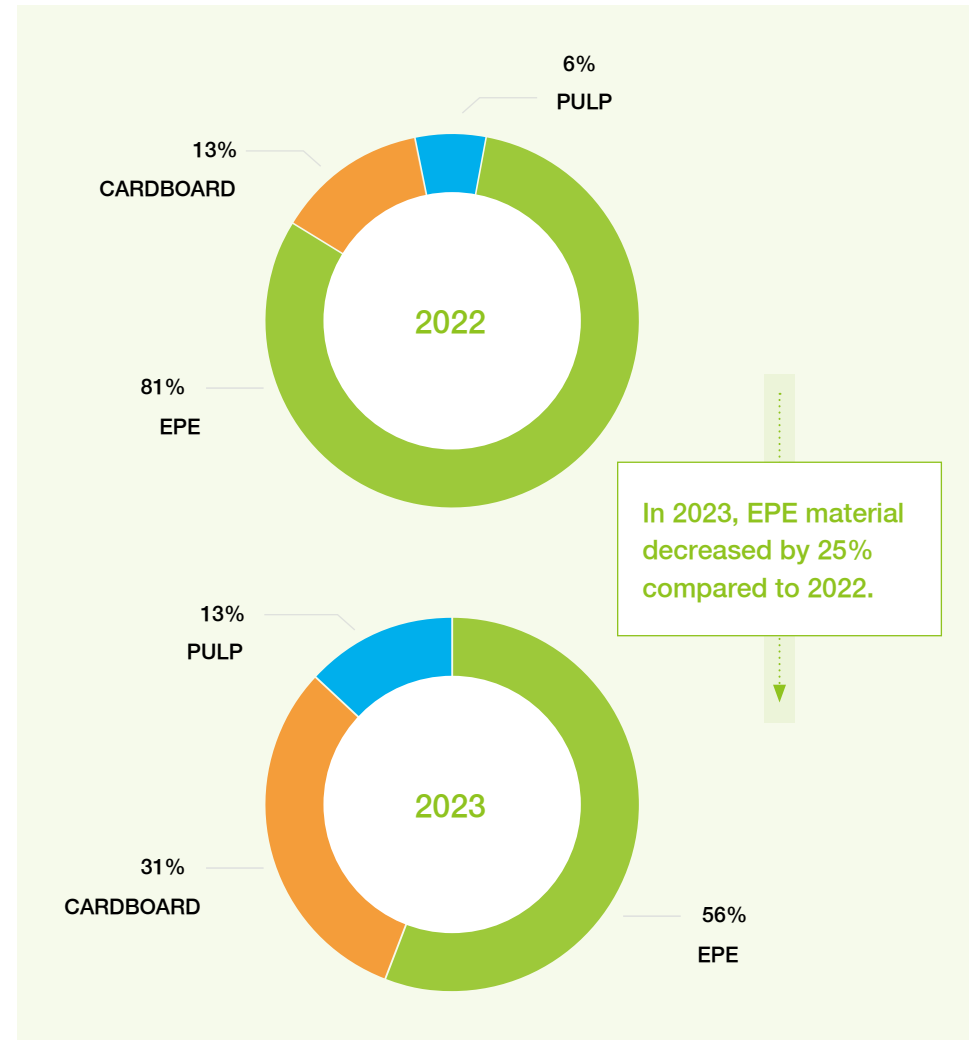**Shared packaging materials for EDS G4000 series products.**

Selection of Environmentally Friendly Packaging Materials

With continuous focus on sustainable development, Moxa is actively seeking innovative packaging solutions to better address environmental challenges. Currently, Moxa uses corrugated cardboard, which is a material with a recycling rate of over 80%, for all cartons and color boxes. Its cushioning material has also changed from traditional EPE foam to more environmentally friendly paper pulp (100% recycled pulp) or corrugated paper (90% recycled paper pulp). % recycled pulp) materials. This transformation can not only effectively reduce the reliance on plastic resources, but also help to reduce carbon emissions and waste generation. In 2023, in terms of the number of applications for new materials for packaging cushioning materials, the ratio of the number of new EPE foam materials to the overall new materials decreased by 25% compared to 2022.

In addition to selecting eco-friendly packaging materials to reduce the impact of packaging materials on the environment, Moxa also actively promotes packaging material reuse by collecting and reusing the cartons and cushioning materials provided by suppliers or outsourced transportation. For the logistics in the field, colleagues can reuse recycled cardboard boxes or buffer materials inside Moxa or in the packaging of samples to send samples to promote the recycling and reuse of packaging materials and reduce waste.

Effectiveness of Moxa's Environmentally Friendly Packaging Materials Selection

2022:
- 6% PULP
- 13% CARDBOARD
- 81% EPE

In 2023, EPE material decreased by 25% compared to 2022.

2023:
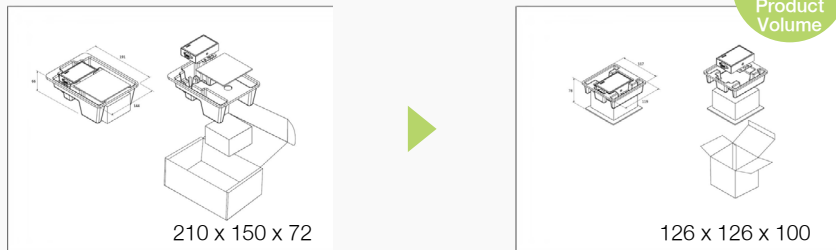- 13% PULP
- 31% CARDBOARD
- 56% EPE

Optimization of Packaging Material for Reduction and Volume Reduction

In 2023, Moxa consolidated its top-selling products and identified 27 models to drive packaging volume optimization and material sharing through Design for Lean principles. While ensuring product quality, this initiative involved redesigning, selecting, combining, and matching cushioning materials, product cartons, and outer boxes. These efforts increased the number of models with shared packaging, reduced warehouse volume for packaging materials, decreased finished product volume, lowered production costs for packaging cartons, improved configuration efficiency for boxed products, and subsequently reduced greenhouse gas emissions.
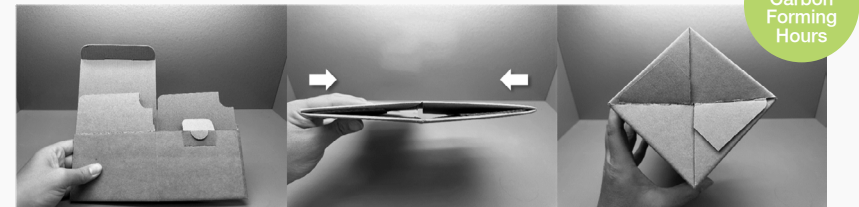
Reduce Finished Product Volume

Estimated benefit

210 x 150 x 72

126 x 126 x 100

-30% Finished Product Volume

Reduce Storage Volume of Packaging

Estimated benefit

-72% Material Stroage Volume

Reduce Production Hours

Estimated benefit

-60% Carbon Forming Hours
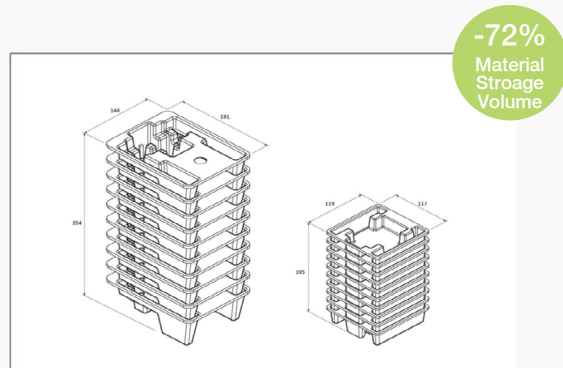
Enhanced Container Configuration Benefits

Estimated benefit

-52% Shipping Costs of Finished Goods

-30% Storage Costs of Finished Goods
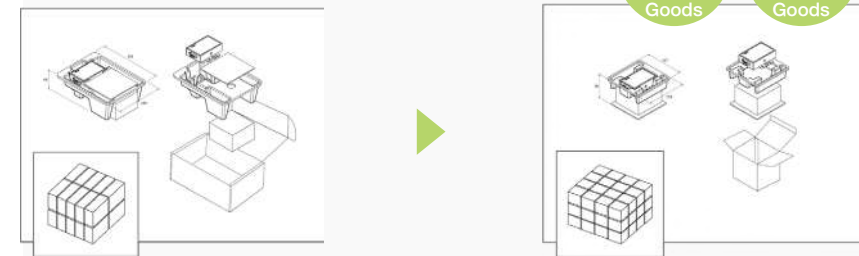
Reduce Greenhouse Gas Emissions

Estimated benefit

After packaging optimization, the consumption of packaging-related materials can be reduced by 45%, which can reduce the load weight of logistics. With the improvement of the benefits of box configuration, the number of logistics transportation trips can be reduced. It is calculated that the improvements of this project can reduce the carbon emissions per package by about 52-56%, and the carbon emissions during product transportation can also be reduced by about 51-56%.

-56% Transportation Carbon Emissions

4 Responsible Procurement

4 Subcontractors

Assisted and guided 4 subcontractors in conducting greenhouse gas inventories, all of which passed ISO 14064-1 external verification.

The First Time

Conducted a sustainability risk survey and established a collaboration plan to assist medium- and high-risk suppliers in addressing and improving deficiencies.
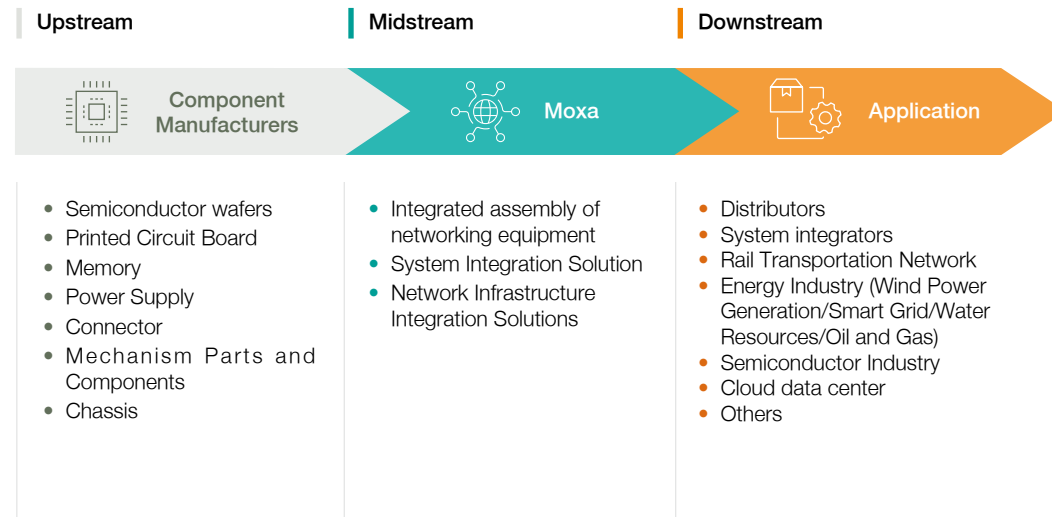
4.1 Supply Chain Management

4.1.1 Supply Chain Overview

Moxa Value Chain

As a leading manufacturer of IIoT devices, Moxa is committed to providing customers around the world with edge networking, industrial computing, and network infrastructure solutions for the Industrial Internet. Moxa values customers' demand for stable supply. Through development and cooperation with upstream component suppliers, as well as through Moxa's equipment and system integration, we ensure long-term stable and reliable supply to the downstream supply chain. Moxa manages the component supply chain through a mature and comprehensive risk assessment and management mechanism that covers new supplier assessment, supplier evaluation, supplier risk assessment, material risk assessment, and responding to related sustainability risks. Mechanisms and business engage in two-way interaction. Moxa works with suppliers to create high-quality products and services to achieve the goals of supply chain resilience and sustainable management.
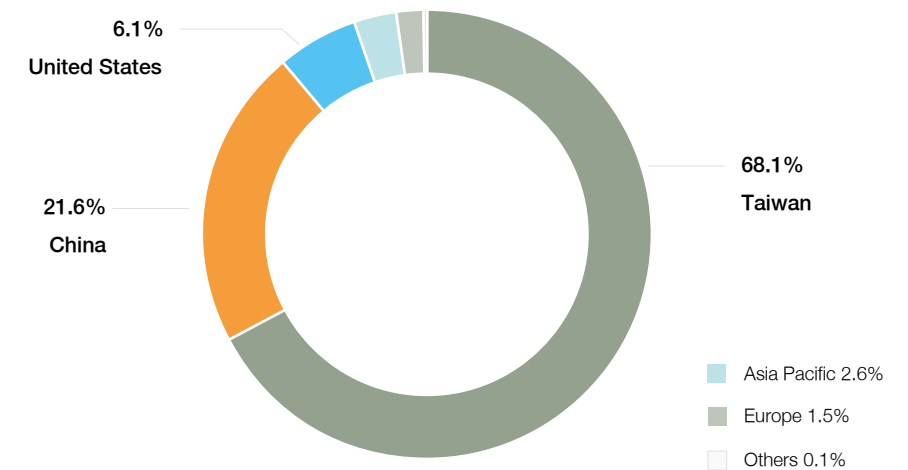
Composition of Suppliers

Moxa is committed to making products and services accessible to all corners of the world. Its global distribution and service network covers customers in 87 countries and regions, enabling it to provide customers with close and timely services. In terms of supply chain management, Moxa has suppliers located all over the world, making Moxa's supply chain more resilient and capable of responding to and mitigating risks. Moxa's suppliers are divided into direct procurement related to production and indirect procurement unrelated to production. Direct procurement has accounted for the vast majority of procurement expenditures over the years. Moxa's direct procurement items mainly include electronic materials, electromechanical materials, and mechanical materials. The main sources of procurement are mainly Taiwan and China.

Moxa Industrial value chain

Upstream	Midstream	Downstream
Component Manufacturers	Moxa	Application
• Semiconductor wafers • Printed Circuit Board • Memory • Power Supply • Connector • Mechanism Parts and Components • Chassis	• Integrated assembly of networking equipment • System Integration Solution • Network Infrastructure Integration Solutions	• Distributors • System integrators • Rail Transportation Network • Energy Industry (Wind Power Generation/Smart Grid/Water Resources/Oil and Gas) • Semiconductor Industry • Cloud data center • Others

2023 Regions of Direct Procurement Suppliers[1]

- 6.1% United States
- 21.6% China
- 68.1% Taiwan
- Asia Pacific 2.6%
- Europe 1.5%
- Others 0.1%

Note1: Moxa's direct sourcing suppliers are determined based on the country of origin of their production facilities.
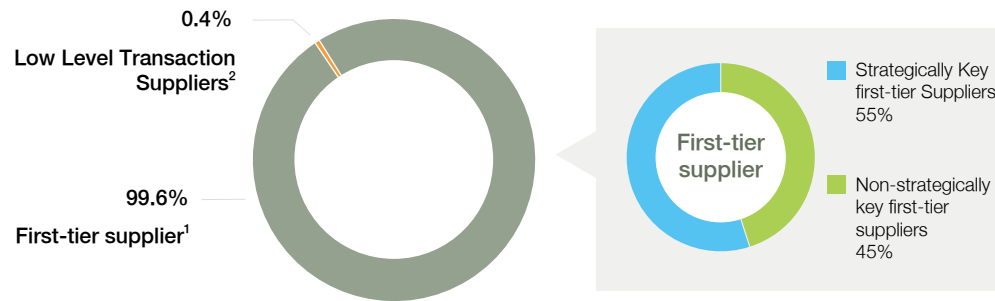
To effectively implement supplier management and implement supplier procurement strategies, Moxa categorizes suppliers based on principles such as procurement frequency, annual purchase amount, and raw material dependency and substitutability. Subsequently, it will implement tiered management and formulate procurement strategies tailored to different supplier categories. Moxa had a total of 250 first-tier suppliers in 2023, of which strategically key first-tier suppliers accounted for 55% of the procurement amount and non-strategically key first-tier suppliers accounted for 45% of the total procurement amount.

Strategic Key Supplier Definition

Distributors: Procurement amount > NT$10 million or distributed strategic[1] /preferred[2] manufacturers' brands.

Manufacturers: Classified as strategic/preferred manufacturers.

Note1: Strategic manufacturers refer to suppliers of critical materials for which Moxa relies heavily on technical or quality capabilities that are difficult to replace.

Note2: Preferred manufacturers refer to suppliers with an annual supplier evaluation rating of A4 - A5 (evaluation score > 80 points).

2023 Region of Direct Procurement Suppliers

0.4%
Low Level Transaction Suppliers[2]

99.6%
First-tier supplier[1]

First-tier supplier

Strategically Key first-tier Suppliers 55%

Non-strategically key first-tier suppliers 45%

Note1: First-tier supplier : Suppliers that are not one-time transactions, and the annual procurement amount is > NTD 300,000.

Note2: Low Level Transaction Suppliers: Suppliers that are not one-time transactions, and the annual procurement amount is ≤ NTD 300,000.

Local Procurement

Moxa specializes in local procurement and establishes close and long-term cooperative relationships with local partners to create local employment opportunities, reduce greenhouse gas emissions generated during logistics and transportation, and shorten the production lead time of materials and products, thereby fostering high efficiency and high competition. Advantageous industrial supply chain. Moxa regards promoting the sustainable development of the real estate industry as a part of its corporate social responsibility. Recognizing that the only way to create a win-win supply chain partnership is to improve the supplier's capabilities and quality. Therefore, Moxa has spared no effort in providing supplier quality guidance. The program helps suppliers improve their capabilities in technology, production process, and quality. In 2023, Moxa's local procurement accounted for 68% of the total procurement amount, and the bulk of the procurement of mechanical parts and printed circuit boards (PCBs) was 99%. In 2023, the overall proportion of local procurement increased by 9% compared to 2022. In the future, Moxa will continue to pay attention to local partners and establish close and long-term cooperative relations with local suppliers.

Local procurement[1] ratio for Taiwan's headquarters in 2022-2023

Proportion of Overall Local Procurement

Proportion of Local Procurement of Customized Parts[2]

2022: 59%, 99%
2023: 68%, 99%
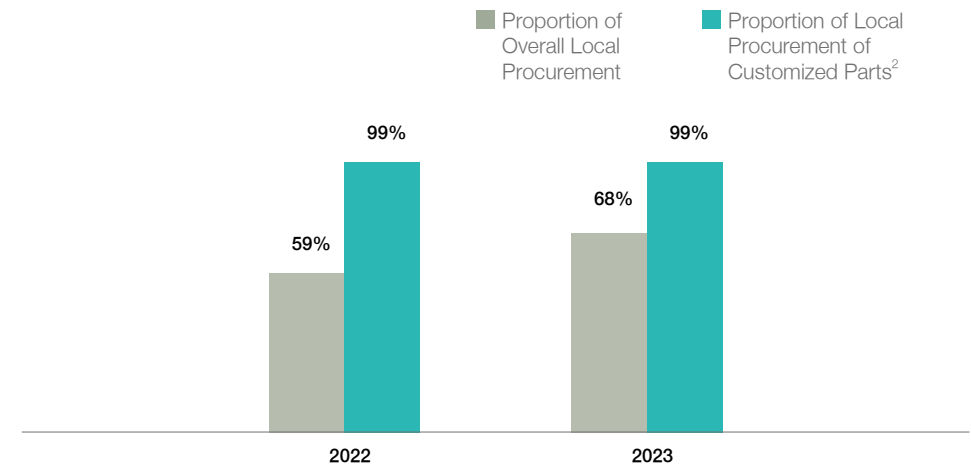
Note1: Local procurement is defined as Moxa's "order-and-receive" suppliers are located in the same country as the supplier's production location.

Note2: Customized parts include mechanical parts and printed circuit boards.
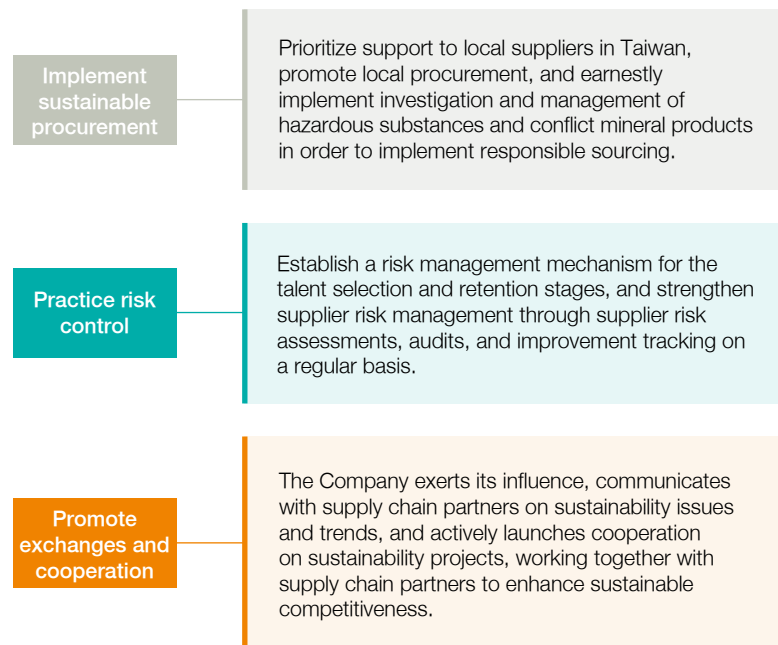
4.1.2 Sustainable Supply Chain Management

Sustainable Supply Chain Management Mechanism

Sustainable Supply Chain Management Strategy

Moxa believes that growing together with supply chain partners not only contributes to the sustainable operation of Moxa's business but also enhances the sustainable growth of the entire value chain. Therefore, Moxa actively invests resources in collaborating with supply chain partners and strives for the three major sustainability goals. Implement management strategies to practice sustainable shared value with supply chain partners.

Moxa's Sustainable Supply Chain Management Strategy

Implement sustainable procurement
Prioritize support to local suppliers in Taiwan, promote local procurement, and earnestly implement investigation and management of hazardous substances and conflict mineral products in order to implement responsible sourcing.

Practice risk control
Establish a risk management mechanism for the talent selection and retention stages, and strengthen supplier risk management through supplier risk assessments, audits, and improvement tracking on a regular basis.

Promote exchanges and cooperation
The Company exerts its influence, communicates with supply chain partners on sustainability issues and trends, and actively launches cooperation on sustainability projects, working together with supply chain partners to enhance sustainable competitiveness.

Code of Conduct for Suppliers

Moxa is committed to corporate sustainability, and we expect Moxa's supply chain partners to share the same philosophy and values. In 2023, Moxa used the Responsible Business Alliance (RBA) Supplier Code of Conduct as a blueprint to develop the "Moxa Supplier Code of Conduct" to ensure that all of its suppliers adhere to internationally recognized sustainability standards. Moxa plans to start supplier communication and engagement in 2025 to achieve an engagement rate of 70%. The goal is to achieve a 100% engagement rate by 2027. Moxa expects all supply chain partners to agree with Moxa's concept of sustainable development and abide by Moxa's Supplier Code of Conduct to build sustainable development of the entire supply chain.

Five frameworks of Moxa's Supplier Code of Conduct

Labor	Health and Safety	Environment	Code of Ethics	Management System
• Free employment options • Young workers • Working hours • Salary and Benefits • Humane treatment • Anti-discrimination/anti-harassment • Freedom of Association	• Occupational Safety • Emergency preparedness • Occupational injuries and occupational diseases • Industrial Hygiene • Manual Work • Machine protection • Public health, room and board • Health and Safety Communication • Natural Disaster Risk Mitigation	• Environmental Permits and Reporting • Pollution Prevention and Resource Conservation • Hazardous substances • Solid waste • Air Emissions • Material Restrictions • Water Resource Management • Energy Consumption and GHG Emissions • Green Design • Green Procurement	• Ethical Corporate Management • No improper gains • Information Disclosure • Intellectual property • Fair Trading, Advertising, and Competition • Identity protection and protection against retaliation • Responsible Sourcing of Minerals • Privacy • Avoidance of Conflicts of Interest • Comply with import and export laws and regulations	• Company commitment • Management duties and responsibilities • Legal and customer requirements • Risk Assessment and Risk Management • Improvement goal • Training • Communication • Employee Opinions, Participation, and Grievance • Review and evaluation • Corrective action • Documents and Records • Supplier Responsibilities • Information security

Sustainable Supply Chain Management Framework

Moxa's sustainable supply chain management framework is based on the current supply chain risk assessment and management mechanism, which covers new supplier audit supplier risk assessment, supplier performance evaluation, and the previous, mid, and late risk assessment management structures. , Conduct ongoing supplier assessments, investigations, and management responses. This management framework is designed to incorporate Sustainability management aspects, so that the existing management framework and performance evaluation can be extended to include sustainability management. The goal is to optimize Purpose of supply chain management, strengthening of risk management mechanisms, enhancement of supply chain resilience, and co-creation of a win-win partnership. The goal is to empower Moxa to take responsibility for its supply chain management to have a positive impact on society, the economy, and the environment, and to integrate Moxa's supply chain management into international standards to make it more sustainable and resilient.

Moxa's Sustainable Supply Chain Management Framework

Management Structure	Execution target	Implementation period	Implementation Description
New Supplier Audit	New supplier	Before cooperation with new suppliers	New suppliers are required to prepare ISO 9001 and ISO 14001 certificates, and ensure that their products meet Moxa's quality management, technical capabilities, manufacturing capacity, cost, environmental management, and sustainable development requirements. In addition to the aforementioned requirements, Moxa places great emphasis on whether suppliers comply with relevant local regulations regarding "human rights" and "environmental health and safety." Therefore, in 2023, Moxa specifically designed assessment criteria for "human rights" and "environmental health and safety," merging them with the environmental management evaluation theme. This is aimed at strengthening requirements for suppliers in environmental, safety, labor rights, and health management systems to ensure that they meet compliance standards in risk management mechanisms.
Supplier Risk Assessment	Existing Suppliers	The first half of each year	Conduct supplier risk surveys and assessments from the "operations" and "financial" aspects, and optimize the operational risk assessment through the "Moxa Sustainable Supply Chain Questionnaire" to more comprehensively inventory and review suppliers' sustainable performance in various aspects. completion rate and risk.
Supplier Performance Evaluation	Existing Suppliers	Q1 of each year	Moxa conducts supplier evaluations based on five major assessment dimensions: technology, quality, procurement, delivery, and green products. Subsequently, procurement strategies and management are implemented according to the evaluation results. In 2023, Moxa introduced ESG (Environmental, Social, and Governance) assessment criteria to review and enhance suppliers' sustainable business capabilities.

New Supplier Audit

Moxa's new supplier audit covers not only product quality management, technical capabilities, manufacturing capacity, and costs, but also sustainable development requirements (including human rights, occupational safety and health, and environmental management). Sustainable development assessment accounted for 6%. New suppliers must have ISO 9001 and ISO 14001 certificates and comply with Moxa's green product policy and local regulations in terms of labor rights and occupational safety and health. In 2023, 100% of Moxa's new suppliers were evaluated and selected using environmental and social criteria.

Criteria of New Supplier Audit

- 6% Human Rights/ Occupational Safety and Health/ Environmental Management
- 44% Quality Management System
- 30% Technical Capability
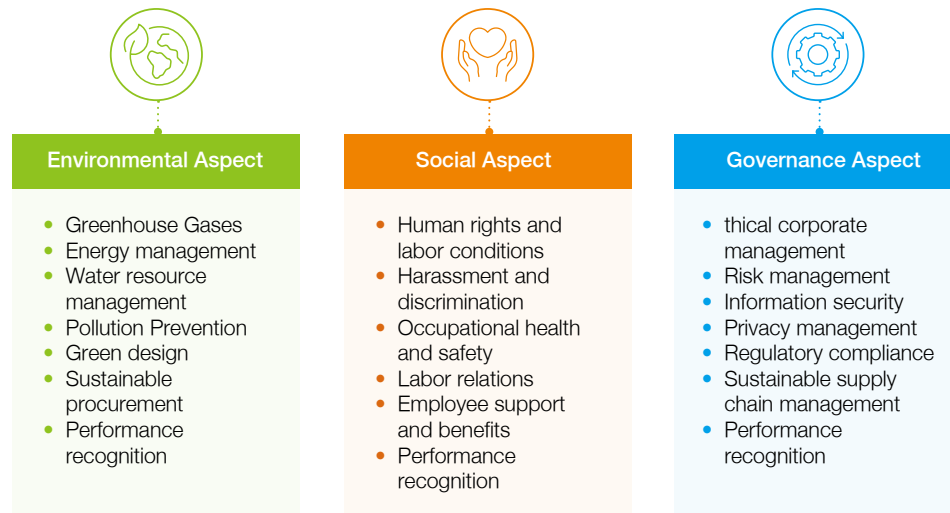- 10% Manufacturing Capacity
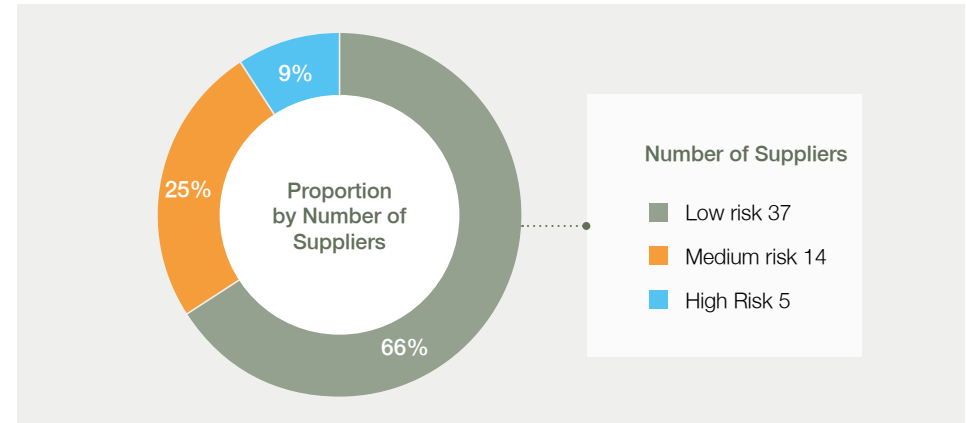- 10% Cost
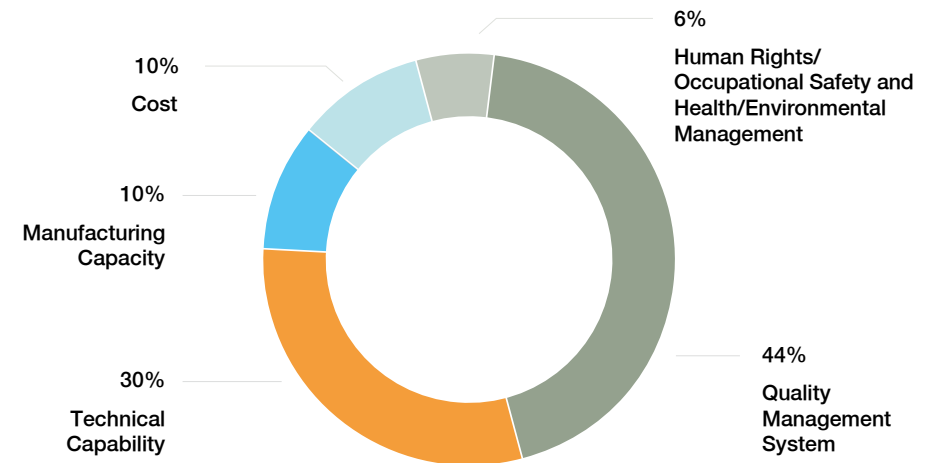
Supplier Risk Assessment

Moxa has designed a well-developed sustainable supplier assessment mechanism and conducts supplier risk surveys every year. The survey focuses on the financial and operational risks of suppliers. To further review the suppliers' sustainability implementation, In 2023, Moxa distributed its first "Sustainable Supply Chain Questionnaire" to 56 first-tier suppliers[1]. The overall response rate was 100%. The assessment content covered three major aspects: environmental, social, and governance. Suppliers with a score of "60 points" or "required compliance with deficiencies" are high-risk suppliers. After analyzing the responses of the supplier self-assessment, of the 56 suppliers surveyed in 2023, 5 were classified as high risk (9%), 14 as medium risk (25%), 37 suppliers (66%) were low-risk suppliers. The high-risk suppliers had major deficiencies in the environmental "pollution prevention" and social "occupational safety and health" issues.

Note1: The procurement amount of the 56 first-tier suppliers surveyed in 2023 accounted for 65% of the total procurement amount of the overall direct procurement supplier.

Moxa's Sustainable Supply Chain Survey Questionnaire

Environmental Aspect	Social Aspect	Governance Aspect
• Greenhouse Gases • Energy management • Water resource management • Pollution Prevention • Green design • Sustainable procurement • Performance recognition	• Human rights and labor conditions • Harassment and discrimination • Occupational health and safety • Labor relations • Employee support and benefits • Performance recognition	• thical corporate management • Risk management • Information security • Privacy management • Regulatory compliance • Sustainable supply chain management • Performance recognition

Moxa's 2023 Sustainable Supply Chain Risk Survey Results

Proportion by Number of Suppliers: 9%, 25%, 66%

Number of Suppliers
- Low risk 37
- Medium risk 14
- High Risk 5

ESG Risk Factors of High-Risk Suppliers in 2023

	Aspect	Topic	Risk Factors
Risk Factors	Environment	Pollution Prevention	Failure to apply for a work permit for toxic substances in accordance with laws and regulations
	Society	Occupational Safety and Health	No occupational safety and health management personnel in compliance with local regulations
			Failure to formulate a labor health protection plan in compliance with local laws and regulations
			Failure to provide regular employee health and safety inspections in accordance with local laws and regulations

Moxa plans to manage suppliers' sustainability-related negative impacts through a 3R mechanism, targeting not only high-risk suppliers but also incorporating moderate-risk suppliers simultaneously. Moxa will conduct on-site audits for both moderate and high-risk suppliers to gain practical insights into their current status and challenges regarding sustainability issues. Subsequently, tailored cooperation plans will be established to address the main areas of deficiency, aiming for collaborative improvement between Moxa and moderate to high-risk suppliers. This collaborative effort seeks to reduce sustainability risks across Moxa's entire value chain, thereby enhancing the competitiveness of both the supply chain and Moxa as an organization.

Moxa's 3R Supplier Negative Impact Management Mechanism

Step 1

Reconfirm

Subject	Suppliers rated as medium or high risk according to the self-assessment questionnaire
Management mechanism	Further confirm with the supplier the accuracy of the response to the deficiency items, and propose improvement items based on the confirmation results.

Step 2

Reduce

Subject	Reconfirmed as a high-risk supplier
Management mechanism	Included in the target of fixed sustainability risk investigation, and plan on-site audits, and establish a counseling and cooperation plan, and require suppliers to complete the improvement within the time limit.

Step 3

Reactive

Subject	High-risk suppliers with low willingness to improve or failing to complete the improvement within the time limit
Management mechanism	Adjust procurement strategies, such as introducing or including control of substitute materials, to reduce supply risks.

Supplier Performance Evaluation

At the end of each year, Moxa conducts an annual supplier performance evaluation for suppliers with a transaction in that year. Based on the evaluation results, Moxa provides incentives, guidance, or appropriate management measures such as replacement to establish a robust supply chain. The annual performance evaluation covers five major aspects of technology, quality, cost, delivery time, and green products. The evaluation team conducts a professional performance score, identifies the evaluation grades of A1 - A5 based on the total score, and holds an annual evaluation meeting. Summarize the consensus, reaching a consensus based on the evaluation results to start the formulation and implementation of the procurement strategy for the next year. To review the suppliers' sustainability capabilities, Moxa added Sustainable Development assessment questions in 2023, mainly including sustainability-related certifications (such as ISO 14001, ISO 9001, ISO 14064, ISO 45001, or ISO 27001), Inventory and reduction of greenhouse gases, and sign Moxa's Supply Chain Code of Conduct.

Moxa's annual supplier performance evaluation dimensions and indicators

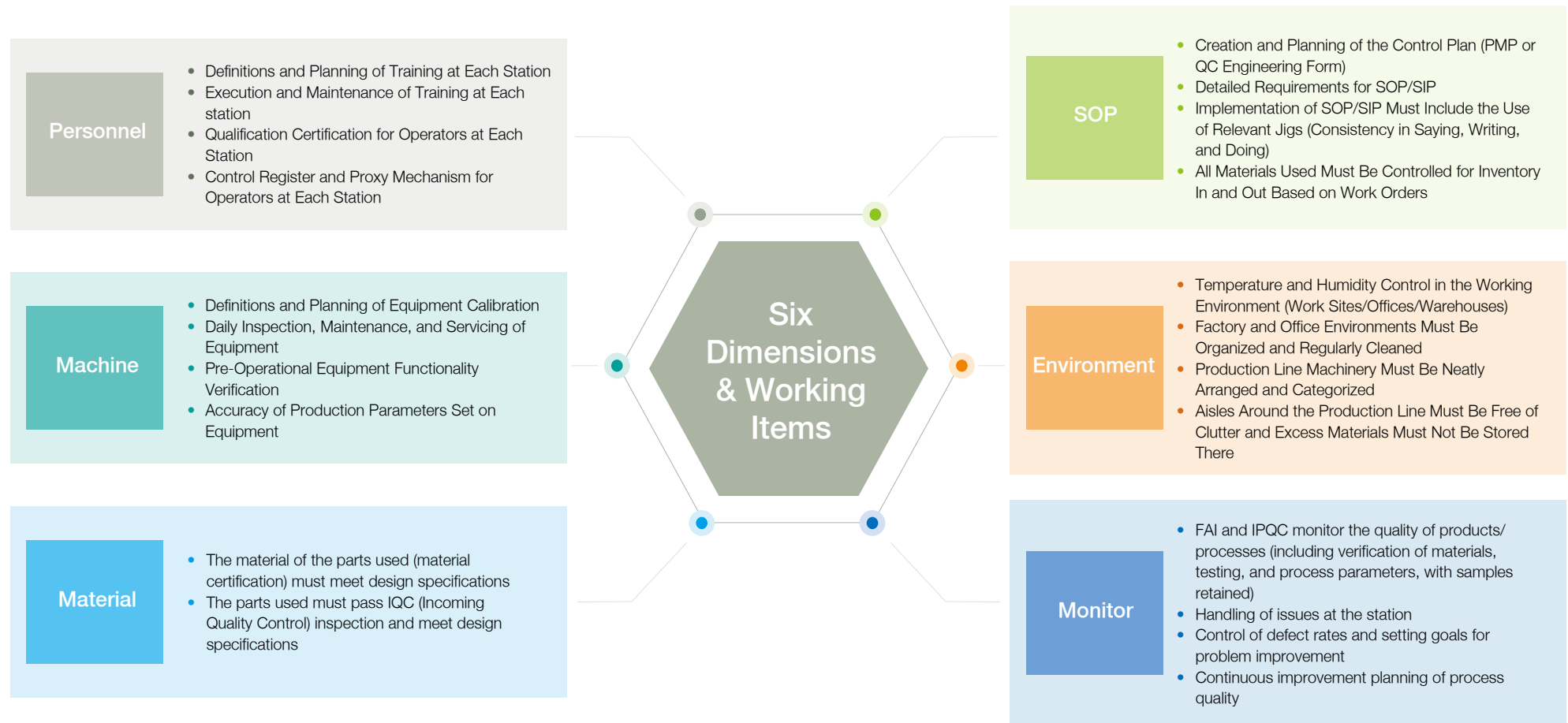| Aspect	Proportion (%)	Evaluation Indicators	
Quality	26.66%	• Return Rate • Abnormal recurrence rate	• Customer Complaint
Cost	26.66%	• Business performance • Delivery performance • Cooperation and service	• Contract • Corporate Operations • Sustainable Development
Technology	26.66%	• Manufacturing contract • Communication • Degree of cooperation • Sample submission	• Sample Delivery Schedule • Contact • Technology
Delivery date	15%	• Deal rate • Lead time adjustment and flexibility	• Collaborative material preparation
Green product	5%	• Demand for green products (e.g.: Hazardous Substance Composition)	• Conflict Minerals Template (CMRT) to meet deadlines

Supplier Rating

Assessment Level	Evaluation Criteria	Rewards and Improvement Actions
A5 Outstanding Performance	Total score over 90 points	• Give priority to accepting new materials and provide preferential trading terms. • Select excellent suppliers and award medals
A4 Good	Total score: 80-89.9	Positive incentives are provided and the status quo is maintained for transaction activities.
A3 To be enhanced	Total score: 70-79.9 Or the proportion of the quality aspect score is between 70% - 80%	Conduct a three-dimensional evaluation (supplier risk/dependency/improvement opportunity) based on the quality performance trend of the past three years.
A2 Countermeasures Required	Total score: 60-69.9 or the quality aspect score below 70%	Conduct three-dimensional evaluations based on the quality performance trends in the past three years. (Supplier Risk / Dependency / Improvement Opportunities)
A1 Unqualified	Overall score below 59.9 or the quality aspect score below 60% or the procurement aspect with a score below 60%	• To determine whether it should be placed on probation. • Stop new material orders and prevent incoming material anomalies. • Strategic phase-out supplier's materials (Stop Moving)

4.1.3 Enhance the Sustainability of Supply Chain

Supplier Collaboration and Improvement

Quality Collaboration and Improvement

Moxa collaborates with suppliers to improve the quality of suppliers through proactive Audit of process quality control capabilities. From Quality Process Audit (QPA) to collaborative Quality Training Effective Plan, the main purpose of which is to improve the process, yield rate and management mechanism of the supplier's production process quality to optimize the quality performance and resilience of the supply chain. Moxa manages suppliers' production processes and yield according to the QPA process mechanism to audit each production process. The goal is to grade the suppliers' technical level and enhance the control capabilities of their process quality to prevent suppliers from failing to implement process management requirements. Potential Risks. From the quality control of incoming materials at the forefront of the QPA audit process, to the inspection of various production processes and finished products, to the packaging and shipping at the end of the process, each station must implement the six principles of "people, machine, material, method, environment, and monitoring". Carry out audits in six large scale.

Personnel
- Definitions and Planning of Training at Each Station
- Execution and Maintenance of Training at Each station
- Qualification Certification for Operators at Each Station
- Control Register and Proxy Mechanism for Operators at Each Station

SOP
- Creation and Planning of the Control Plan (PMP or QC Engineering Form)
- Detailed Requirements for SOP/SIP
- Implementation of SOP/SIP Must Include the Use of Relevant Jigs (Consistency in Saying, Writing, and Doing)
- All Materials Used Must Be Controlled for Inventory In and Out Based on Work Orders

Six Dimensions & Working Items

Machine
- Definitions and Planning of Equipment Calibration
- Daily Inspection, Maintenance, and Servicing of Equipment
- Pre-Operational Equipment Functionality Verification
- Accuracy of Production Parameters Set on Equipment

Environment
- Temperature and Humidity Control in the Working Environment (Work Sites/Offices/Warehouses)
- Factory and Office Environments Must Be Organized and Regularly Cleaned
- Production Line Machinery Must Be Neatly Arranged and Categorized
- Aisles Around the Production Line Must Be Free of Clutter and Excess Materials Must Not Be Stored There

Material
- The material of the parts used (material certification) must meet design specifications
- The parts used must pass IQC (Incoming Quality Control) inspection and meet design specifications

Monitor
- FAI and IPQC monitor the quality of products/processes (including verification of materials, testing, and process parameters, with samples retained)
- Handling of issues at the station
- Control of defect rates and setting goals for problem improvement
- Continuous improvement planning of process quality

QPA Supplier Identification Ability Level

Process Capability Level	QPA compliance rate	Description
A (Excellent)	91%~100%	Outstanding process capability, production quality can meet customers' special standards
B (Good)	81%~90%	Excellent process capability, production quality can meet customer standards
C (Fair)	71%~80%	The manufacturing process meets the requirements of Moxa and can produce Moxa standard parts.
D (Poor)	61%~70%	If the manufacturing process does not meet the Moxa requirements, it may be possible to make improvements or provide guidance to meet the Moxa requirements.
E (Fail)	<60%	Unqualified Suppliers

Based on the annual supplier evaluation results, suppliers with quality concerns will be placed on probation after a consensus meeting decision and will not be allowed to undertake new projects in the future. However, in line with Moxa's philosophy of maintaining long-term partnerships and enhancing supply chain flexibility, an annual quality improvement program will be initiated for suppliers willing to improve their quality. If the supplier meets the quality improvement targets during the year of guidance, the probation status will be lifted, and they will revert to being a regular supplier. This approach aims to maximize the benefits of quality improvement for both parties through cooperation

Quality Guidance and Improvement Plan

Short-term countermeasures	Enhance supplier shipment detection ability: To effectively improve the quality of suppliers' finished products, it is necessary to improve the shipment detection ability to stop defective products in the supplier's factory.
Long-term Countermeasures	Strengthen supplier process management capabilities: Identify the suppliers' process management weaknesses and provide them with guidance to help deepen the process management capabilities and improve product quality.

GHG Inventory and Guidance

In 2023, Moxa prioritized four key subcontractors for greenhouse gas inventory checks, guidance, and training. Through on-site coaching sessions and the involvement of subcontractors in each coaching meeting, Moxa shared its experiences with greenhouse gas inventory checks and assisted in coaching subcontractors on the process. This initiative aimed to ensure that all four subcontractors completed their greenhouse gas inventories in 2023 and passed external verification according to ISO 14064-1 standards. After assisting subcontractors in completing greenhouse gas inventories in 2023, Moxa required these partners to conduct their own greenhouse gas inventories and external verifications annually starting from 2024. This ensures that Moxa can accurately monitor the greenhouse gas emissions of subcontractors, serving as the basis for calculating Scope 3 greenhouse gas reduction targets. Starting from 2024, Moxa will identify suppliers of high-carbon-emission raw materials and gradually coach and assist them in completing greenhouse gas inventories. Additionally, suppliers will be required to set carbon reduction targets in collaboration with Moxa to collectively achieve the goal of net-zero emissions by 2050.

Supplier Training and Engagement

In order to clearly communicate to suppliers Moxa's plans for a sustainable supply chain and to let suppliers understand Moxa's commitment to sustainable management of the supply chain, the Company held its first ESG awareness conference in 2023, inviting 56 first-tier suppliers. During the meeting, Moxa shared its ESG vision and milestones, and let suppliers understand the purpose of the "Moxa Sustainable Supply Chain Survey" and explained the contents of the questionnaire. Capacity building program to help supply chain partners improve their sustainable development capabilities. In addition, in 2023, Moxa invited four major subcontractors to conduct GHG inventory training with 48 participants in total. The goal is to enhance the contractors' self-assessment capabilities and explain to them Moxa's GHG reduction goals and plans.

Looking ahead to 2024, Moxa will continue its sustainable supply chain advocacy efforts and conduct Moxa Sustainable Supply Chain survey questionnaire education and training sessions for all Tier 1 suppliers (approximately 300 companies). Additionally, Moxa will plan sustainability capacity enhancement programs for moderate and high-risk suppliers.

4.2 Responsible Minerals Procurement

Responsible Minerals Management

The Responsible Minerals Initiative (RMI) has found that armed rebel groups in the Democratic Republic of the Congo and surrounding countries obtain minerals such as tantalum, tin, tungsten, gold, cobalt, and mica through illegal means such as forced labor and child labor. These groups then sell the minerals to finance arms, leading to violent conflicts or wars. Therefore, minerals extracted under such conditions of armed conflict and human rights abuses are classified as conflict minerals.

Moxa ensures that the sources of its raw materials are reliable and free from conflict, protecting the human rights, health, and environment of the regions where these minerals are produced. Following this principle, Moxa implements regulatory compliance measures, requiring suppliers to commit in their purchase agreement not to use conflict minerals illegally. Additionally, Moxa establishes a due diligence framework based on the "Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas" issued by the Organization for Economic Cooperation and Development (OECD). This ensures adherence to international laws and regulations, including those that restrict illegal mineral trade and uphold United Nations sanctions resolutions.

Learn more about Moxa's responsible procurement

Moxa initiates an annual survey based on the Conflict Minerals Reporting Template (CMRT) released by the Responsible Minerals Initiative (RMI) and the supplier and brand lists from the previous year's transactions. We require suppliers to disclose the sources of tantalum (Tantalum), tin (Tin), tungsten (Tungsten), and gold (Gold), collectively known as 3TGs, based on the latest updated smelter list published by RMI to conduct a comprehensive risk assessment. This process results in Moxa's annual CMRT report, which evaluates and addresses potential risk mitigation measures and responds to customer inquiries and requirements.
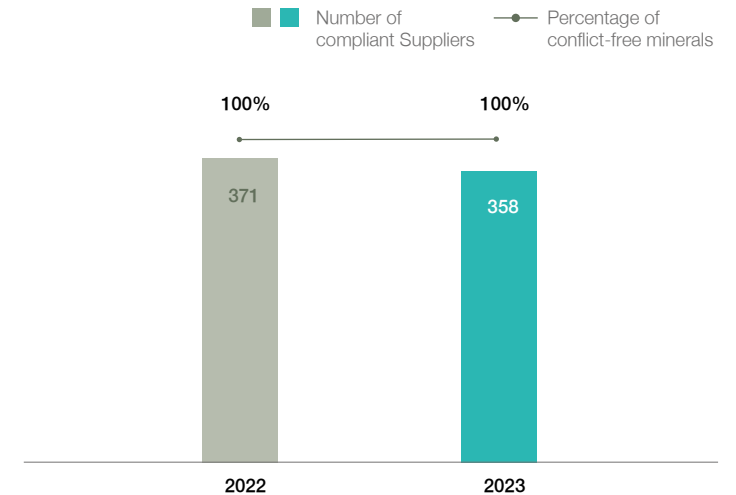
Conflict-free Minerals Due Diligence

Number of compliant Suppliers | Percentage of conflict-free minerals

100% | 100%

371 (2022) | 358 (2023)

Responsible Mineral Management Process

Regulatory Compliance	**Procurement Policy**	**Investigate Sources of Mineral Raw Materials**	**Due Diligence**
Confirm the requirements of international laws and regulations for conflict-free minerals	Understand relevant regulatory changes and promptly adjust company policies, establish internal management tools, and conduct ESG risk assessments for the supply chain.	Utilizing the Conflict Minerals Reporting Template (CMRT), conduct supplier mineral source investigations and identification.	Following the OECD Due Diligence Guidance, establish investigation plans to identify and assess risks, and respond to customer requests.

Future planning

Moxa will continue to enhance responsible minerals management in the following three key areas.

- **Management mechanism:** Understand relevant regulatory changes and promptly adjust company policies, establish internal management tools, and conduct ESG risk assessments for the supply chain.
- **Due diligence:** Enhance data accuracy and completeness through audits and corrective improvement measures, and assist suppliers in establishing frameworks.
- **Communication:** Conduct supplier education and training, and distribute self-assessment questionnaires to suppliers.

5 Inclusive Workplace and Society

0 Occupational Accidents

No occupational or safety accidents occurred inside or outside the factory, and no regulations related to occupational safety and health were violated.

First

Recognized as a Healthy Workplace, conducted 20 CPR+AED first-aid training sessions, and received the AED Safe Workplace certification in New Taipei City, Taiwan.

93%

The retention rate for new employees within two years reached 93%, an increase of 5% compared to 2022.

>3,800 People Benefited

Provided employees with volunteer leaves, facilitating 105 volunteer events in 2023 that benefited over 3,800 individuals.

5.1 Talent Attraction and Retention

5.1.1 Talent Recruitment

Recruitment Strategies

Moxa prioritizes employees, focusing on long-term value, fostering participation, sharing, and a sense of belonging. The company continuously enhances workplace diversity, equality, and inclusivity. Moxa adheres to labor laws at all global locations and employs a recruitment policy that is diverse, equal, and inclusive. The hiring process is based on transparency and fairness, with open selection procedures, and excludes irrelevant factors such as race, color, age, religion, nationality, gender, sexual orientation, marital status, or political beliefs. Moxa recruits diverse talent worldwide, offering competitive salaries, benefits, humane management, and a robust career development system.

In response to rapid industry changes and evolving talent needs in the post-pandemic era, Moxa has adjusted its recruitment strategy to attract top professionals. The company now uses diverse recruitment channels, flexible plans, and a series of activities to enhance its employer brand. These activities significantly boost Moxa's awareness and favorability among candidates. Recruitment channels include job platforms, social media, campus recruitment events, credit courses, internship programs, company visits, and headhunters. Additionally, Moxa attracts and trains young talent through its Moxa Farming System, focusing on developing future leaders in the industrial automation.

Key Recruitment Programs

Campus Recruitment

By participating in campus job fair exhibitions at target schools, Moxa enhances its visibility among students. Current Moxa employees who graduated from these schools are invited to share their experiences, providing students with comprehensive and professional information about job opportunities and the company. This approach not only informs students but also encourages them to consider their future career development.

Offering Credit Courses

Moxa collaborates with specific schools to offer technical "micro-credit courses" and partners with professors to teach company-specialized technologies and practical applications as industry experts. This allows students to quickly gain exposure to industry developments and hands-on experience, supplementing their education with additional learning in technological fields.

Talent Recruitment Event In National Taiwan University

Talent Recruitment Event In National Tsing Hua University

Corporate Credit Courses

Leading Program For National Tsing Hua University

Corporate Sessions

Moxa collaborates with professors at target schools to enter classrooms and share insights on industry demands, challenges, and technologies. Current Moxa employees who are alumni of these schools are also invited to share their career development experiences. This approach provides students with a comprehensive and in-depth understanding of Moxa, its products and technologies, and career development opportunities, offering valuable guidance for their future careers.

Corporate-specific Presentation

Corporate-specific Lecture

Corporate Tour

By inviting target school departments, Moxa organizes a tailor-made "One Day Know Moxa" event for students. This includes an introduction to Moxa, its industry applications, products, job roles, alumni job search experiences, and lab tours. Through interactions with employees, students can deeply experience the workplace atmosphere at Moxa.

Northern Region Schools Joint Corporate Tour
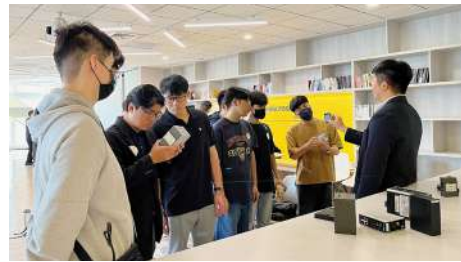
Corporate Tour by National Taipei University of Technology

Online job application platforms

Moxa extensively uses online recruitment platforms to expose job openings, participates in platform recruitment events, and invests in advertising to prominently display job opportunities and campus-related information. Additionally, supervisors and employees are encouraged to build their professional profiles on these platforms, allowing candidates to quickly see and connect with Moxa employees, thereby increasing awareness of Moxa.

Moxa Recruitment Website

Moxa Linkedin

Internship Programs

Providing practical fieldwork opportunities at Moxa allows students to gain pre-employment experience, including practical work, environmental, and cultural experiences. Additionally, workplace integration and soft skills training are arranged, enabling students to combine theory with practice. Students who perform exceptionally well and exhibit the qualities Moxa seeks will have the opportunity to continue working at Moxa, allowing for a smooth and swift transition into the professional workplace.

Corporate Internship (Headquarters)

Corporate Internship (Bade)

Strengthening Employer Brand

Generation Z primarily use the internet to obtain information, they frequently engage in digital interactions on platforms like Facebook, Instagram, and YouTube. Therefore, Moxa actively engages with the younger generation through social media platforms. Moxa editors regularly compile and publish information on job vacancies, work environment, welfare activities, cultural activities, recruitment activities, training and learning opportunities, alumni career sharing and perspectives from supervisors, the number of followers on social media platforms has increased year by year, with a growth of 33% compared to 2022. Additionally, Moxa collaborates with influencers to introduce the company in an engaging and lively manner, selects appropriate media for talks and reports, and uses marketing activities to interact with target audiences online. The company also encourages employees to engage in social media by showing support, sharing posts, and leveraging their networks to increase Moxa's visibility and favorability among potential candidates. In addition to strengthening the employer brand, Moxa regularly monitors social media and recruitment platforms to understand candidate feedback and reviews. Moxa expresses gratitude for positive feedback and forms project teams to investigate and address the root causes of negative feedback, implementing necessary improvements.

Internal Employee Referral and Transfer System

To encourage employees to refer suitable candidates, Moxa introduced an enhanced referral bonus mechanism in 2022. This initiative increased the internal referral hiring rate from 23% to 26.6% in 2023, representing an overall growth of 3.6%. Notably, 28% of senior positions were filled through internal referrals, demonstrating significant success.

2022 to 2023 Internal Referral Hiring

Note: The scope of statistics includes the headquarters in Taiwan.

Moxa supports employees' long-term career development and has designed an open internal transfer mechanism to lower barriers and smoothen the process. At the same time, through a more open and transparent mechanism, we provide colleagues with multiple job vacancies and a stage for functional growth and development to help colleagues expand their horizons and capabilities, so as to develop all-round excellent talents across units and functions. Based on the number of job openings, the internal transfer rate[1] was 6% from 2022 to 2023, with transfers accounting for this percentage of new hires.

Note 1:The scope of statistics includes all full-time employees of Moxa globally (excluding contract employees and foundation staff); Transfer rate = Number of transfers ÷ Total number of employees in the group.

New Hire Recruitment and On-boarding

Moxa offers competitive compensation and benefits, a diverse learning environment, and a fulfilling job roles to attract outstanding talent and foster a work-life balance in the workplace. In 2023, the Taiwan Headquarters recruited for 417 positions, receiving a total of 26,954 resumes. Of these, 314 candidates were offered full-time contracts, with 284 on board, resulting in a 90% onboarding rate. In 2023, Moxa hired a total of 362 new full-time employees globally, with an average hiring rate of 19%.

2022 to 2023 Hiring and Onboarding Statistics

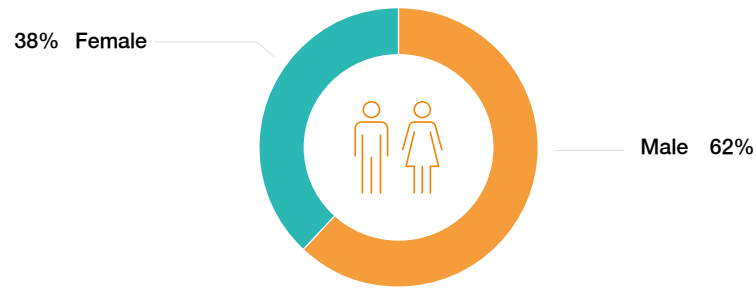|	2022	2023
Planned Number of Full-Time Hires (people) (a)	393	417
Number of Full-Time Applicants (people) (b)	16,061	26,954
Application Rate (times) (c)=(b)/(a)	41	65
Number of Full-Time Job Offers Issued (people) (d)	342	314
Number of Full-Time New Hires (people) (e)	294	284
Onboarding Rate (%) (f) = (e) / (d)	86	90

Note: The scope of statistics is for the Taiwan headquarters.
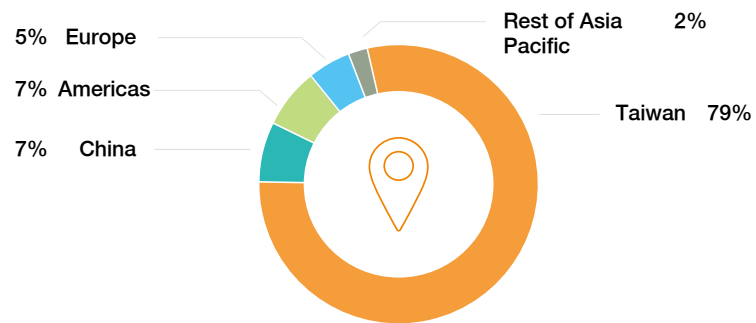
2023 New Hire Gender Distribution

		Male		Female	
		Number of people	Percentage (%)	Number of people	Percentage (%)
Region	Taiwan	169	60%	115	40%
	China	14	54%	12	46%
	Americas	19	79%	5	21%
	Europe	14	74%	5	26%
	Rest of Asia Pacific	7	78%	2	22%
Age	Under 30 years old	89	54%	75	46%
	30 - 50 years old	129	67%	63	33%
	Over 50 years old	5	83%	1	17%
Total		223	62%	139	38%

Note: The scope of statistics includes all full-time employees of Moxa globally (excluding contract employees and MOXA Foundation staff).
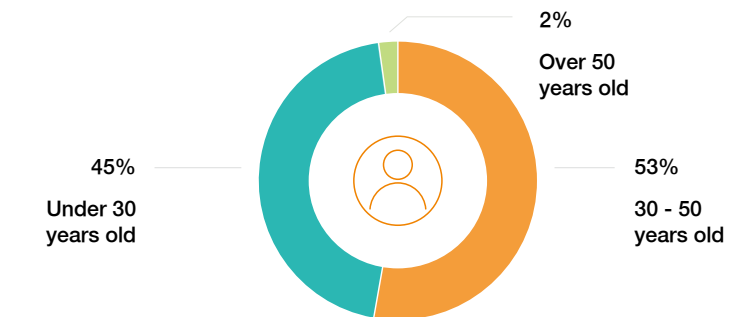
2023 New Hire Gender Distribution

38% Female

Male 62%

2023 New Hire Regional Distribution

5% Europe

7% Americas

7% China

Rest of Asia Pacific 2%

Taiwan 79%

2023 New Hire Age Distribution

2%
Over 50 years old

45% Under 30 years old

53% 30 - 50 years old

2022 to 2023 New Hire Distribution Rate

		2022		2023	
		Number of New Hires (people)	New Hire Rate (%)	Number of New Hires (people)	New Hire Rate (%)
Region	Taiwan	294	22%	284	19%
	China	29	23%	26	20%
	Americas	7	9%	24	29%
	Europe	7	10%	19	26%
	Asia Pacific and Other Regions	13	48%	9	29%
	Total	350	21%	362	19%
Gender	Male	213	19%	223	19%
	Female	137	25%	139	23%
Age	Under 30 years old	145	54%	164	55%
	30 - 50 years old	193	16%	192	15%
	Over 50 years old	12	7%	6	3%

Note: Statistical scope includes all full-time Moxa employees worldwide (excluding contractors and foundation employees).
Note: New recruitment rate = total number of new employees ÷ average number of employees in the year.

New Hire Support and Retention

To help new employees quickly adapt to the workplace, Moxa initiates comprehensive onboarding training. This includes an orientation activity that covers company introduction, online workplace safety courses, job-related professional online courses, and a "Little Angel" system to assist with integration into the work environment. New hires also receive training on Moxa's work processes and company culture. Supervisors conduct regular one-on-one meetings to monitor their adaptation to work and cultural integration. Additionally, new hires receive an online feedback survey at 60 days on the job to assess their adaptation status. In 2023, the turnover rate for new employees within the first three months was 2.7%. Compared to 2022, the one-year retention rate for new hires improved by 3%, and the two-year retention rate increased by 6%.

2022 to 2023 New Hire Retention Rate

	2022	2023
One-Year Retention Rate for New Hires (%)	90%	93%
Two-Year Retention Rate for New Hires (%)	87%	93%

Note: The scope of statistics includes all full-time employees of Moxa globally (excluding contract employees and MOXA Foundation staff).
Note: Retention rate = Number of new hires retained one/two years after their start date ÷ Total number of new hires

5.1.2 Talent Diversity and Inclusion

Diverse Workforce Composition

Moxa actively attracts diverse talent from the world. Currently, the global workforce comprises individuals from over 29 nationalities, and most general managers and employees at overseas branches are locally hired. Taiwan serves as the headquarters and the center for operations and research & development. Moxa also has subsidiaries in the United States, Germany, the United Kingdom, France, India, Brazil, South Korea, Japan, and China, with distribution and service points across 87 countries worldwide. In 2023, Moxa had more than 1,900 employees worldwide, of which more than 98.9% were full-time employees. In terms of geographical distribution, 82% of employees are affiliated to the main operating headquarters (Taiwan), followed by about 7% of employees are located in China, and the rest are distributed in the Americas, Europe and other regions in Asia. In terms of age distribution, 72% of employees' age are between 30 to 50 years old. The average age of the overall employees is 38.8.

Moxa attaches great importance to equal treatment and job security for employees of different genders. We ensure that there are no gender differences in talent selection and promotion, providing Moxa employees with a safe and equal work environment. Moxa also values and cares about the employment rights of people with disabilities. In 2023, the percentage of employees with disabilities was 1.2%, an increase from 2022 and better than what the law requires.

### 2023 Global Employee Employment Type Statistics

Unit : People			Global	Taiwan	China	Americas	Europe	Rest of Asia Pacific
Global		Total	1,915	1,574	141	90	75	35
	By contract type	Permanent employees	1,895	1,557	138	90	75	35
		Fixed-term contract employees	20	17	3	0	0	0
	By working hours	Full-time employees	1,895	1,554	141	90	75	35
		Part-time employees	20	20	0	0	0	0
Male		Total	1,256	1,016	88	69	58	25
	By contract type	Permanent employees	1,248	1,008	88	69	58	25
		Fixed-term contract employees	8	8	0	0	0	0
	By working hours	Full-time employees	1,244	1,004	88	69	58	25
		Part-time employees	12	12	0	0	0	0
Female		Total	659	558	53	21	17	10
	By contract type	Permanent employees	647	549	50	21	17	10
		Fixed-term contract employees	12	9	3	0	0	0
	By working hours	Full-time employees	651	550	53	21	17	10
		Part-time employees	8	8	0	0	0	0

2023 Global Employee Employment Type

		Gender		Age		
		Male	Female	Under 30 years old	30 - 50 years old	Over 50 years old
Total Employees		66%	34%	17%	72%	11%
Job Category	Senior Management	73%	27%	0%	7%	93%
	Mid-Level Management	72%	28%	0%	54%	46%
	Entry-Level Management	78%	22%	0%	88%	12%
	Non-Management Positions	64%	36%	20%	72%	8%
Functional Category	Managers	76%	24%	0%	74%	26%
	Professionals	68%	32%	20%	72%	7%
	Sales	83%	17%	17%	66%	17%
	Business Bupport	37%	63%	22%	70%	9%

Note: Job categories are defined according to Moxa's classification of managerial levels.

### 2022 to 2023 Employment Ratio of Employees with Disabilities
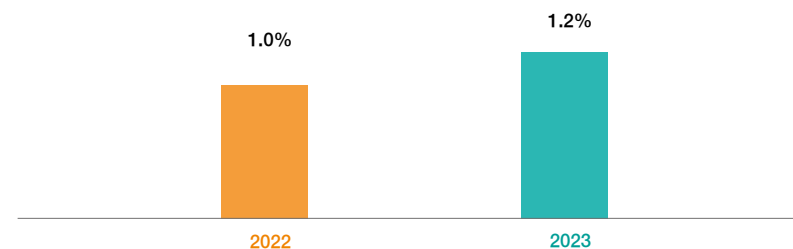
Note: The scope of statistics is for the Taiwan headquarters.

Employee Resignation

In 2023, the global turnover rate for Moxa employees was 6.6%, and the voluntary turnover rate was 5.6%, both of which decreased compared to 2022. Human Resources Department will conduct exit interview with employees who tender resignation to understand the reason for leaving. The primary reasons for leaving include personal career planning and family-related factors.

2022-2023 Global Employee Turnover Rate

Total turnover rate[1] Voluntary turnover rate[2]

2022: 8.1% / 7.1%
2023: 6.6% / 5.6%
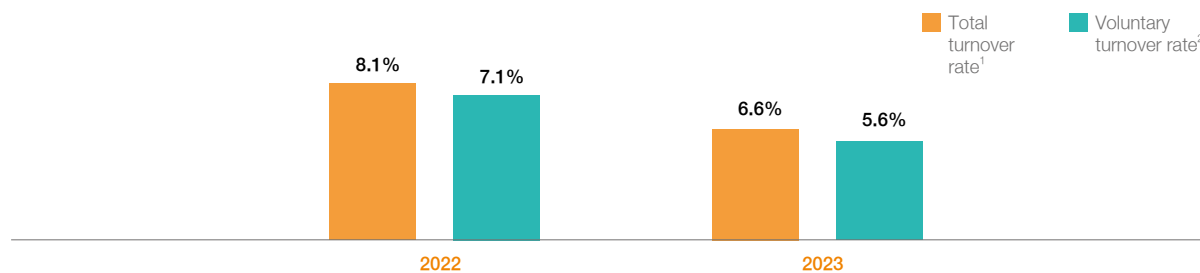
Note 1: Total Turnover Rate includes voluntary resignations (including retirements) and involuntary separations (including terminations, layoffs, or death). Total Turnover Rate = Number of departures in the year ÷ Average number of employees for the year.

Note 2: Voluntary Turnover Rate = Number of voluntary resignations in the year ÷ Average number of employees for the year

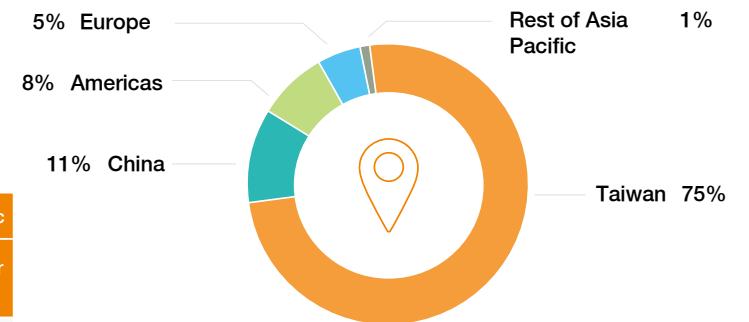### 2023 Global Employee Turnover Rate by Gender and Age

Gender	Age	Global		Taiwan		China		Americas		Europe		Rest of Asia Pacific	
		Number of people	Turnover rate	Number of people	Turnover rate	Number of people	Turnover rate	Number of people	Turnover rate	Number of people	Turnover rate	Number of people	Turnover rate
Male	Under 30 years old	12	7%	8	5%	2	18%	2	33%	0	0%	0	0%
	30 - 50 years old	53	6%	43	6%	5	7%	2	8%	2	7%	1	6%
	Over 50 years old	9	6%	6	7%	0	0%	2	6%	1	5%	0	0%
Female	Under 30 years old	7	6%	5	4%	2	22%	0	0%	0	0%	0	0%
	30 - 50 years old	31	7%	22	6%	4	12%	3	24%	2	12%	0	0%
	Over 50 years old	6	12%	5	13%	0	0%	0	0%	1	40%	0	0%

Note: Turnover Rate = Number of departures in the group for the year ÷ Average number of employees in the group for the year.
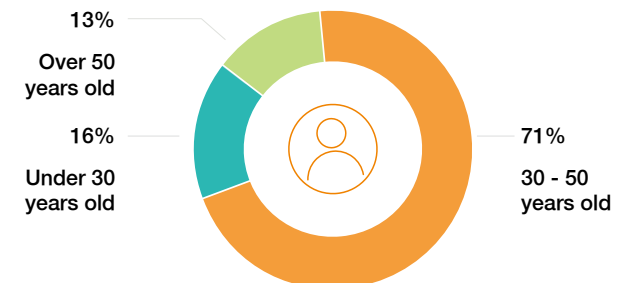
2023 Turnover Distribution by Gender

37% Female
63% Male
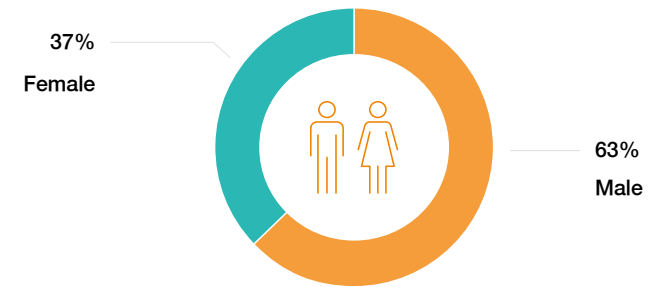
2023 Turnover Distribution by Regions

5% Europe
8% Americas
11% China
Rest of Asia Pacific 1%
Taiwan 75%

2023 Turnover Distribution by Age

13% Over 50 years old
16% Under 30 years old
71% 30 - 50 years old

MOXA

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Workplace Equity

Moxa drives the compensation equity in the workplace. When establishing the global compensation structure, factors such as market pay conditions for various roles within the industry are considered, with no gender-based differentiation. Currently, all positions are evaluated based on this structure. In 2023, the global salary ratio between women and men shows no significant difference in pay within the same job level category.

Moxa is committed to creating a diverse, equitable, and inclusive workplace environment. Among the members of Moxa's Global Executive Board (GEB), there are currently two CEOs, one of whom is a woman. Moxa provides equal career development opportunities for female employees. In 2023, the percentage of women in senior management roles increased from 25% to 27%, and the proportion of women in STEM (engineering/technology/research & development) roles rose from 17% to 19%. These figures reflect Moxa's commitment to advancing workplace equity.

2022 to 2023 Female Employee by Job Level

	2022	2023
Percentage of Female Employees	34%	34%
Percentage of Female Managers	24%	24%
Percentage of Female Senior Managers	25%	27%
Percentage of Female Mid-Level Managers	28%	28%
Percentage of Female Junior Managers	22%	22%
Percentage of Female STEM Employees	17%	19%

Note: The scope of statistics is for all permanent employees globally at Moxa (excluding contractors and MOXA Foundation staff).

5.1.3 Talent Retention

Compensation Competitiveness

The compensation and benefits provided at all Moxa locations globally comply with local legal requirements, and all full-time employees are entitled to insurance and pension plans as required by the laws. Moxa's compensation policy ensures that there is no differentiation based on region, race, ethnicity, background, social class, lineage, religion, disability, gender, sexual orientation, pregnancy, marital status, union membership, political views, or age. From total compensation perspective to consider total reward system, including salary, benefits and bonuses.

Moxa participates in annual industry compensation surveys and adjusts salaries based on market conditions, company performance, and individual performance to ensure competitiveness and fairness. Moxa ensures that starting salaries for direct staff comply with local regulations while also offering compensation that is competitive in the market.

Taiwan Base Salary for Direct Staff **1.26** Times Higher Than Minimum Wage

Long-Term Incentives

The Company Success Incentive Plan (CSIP) is a mid- and long-term incentive plan of Moxa Group designed on the basis of its pay philosophy (Sharing success, market competitiveness, equitable equality, and performance alignment). The CSIP applies to regular full-time employees and must have been actively employed by Moxa during the previous fiscal year, and remain actively employed and in good standing. The purpose is to motivate employee to achieve the long-term strategic objectives of Company, to contribute and take ownership for realizing the long-term vision of the Company, and to share the long-term success of the Company. The BOD, at its sole discretion, determines the total incentive amount of the CSIP, which is in nature a discretionary incentive, for each year, after an overall consideration including but not limited to the Company's long-term business performance, overall operating results, development of the organization and talent. The BOD then authorizes the co-CEOs to distribute, grant, and accrue the incentives of the CSIP.

Employee Benefits and Support

In addition to providing basic benefits in accordance with Labor Standards Act, Moxa offers several benefits beyond legal requirements to promote work-life balance, physical and mental well-being, personal growth, and cognitive development. Company-sponsored activities also foster employee interaction, shape Moxa's culture, and enhance team cohesion.
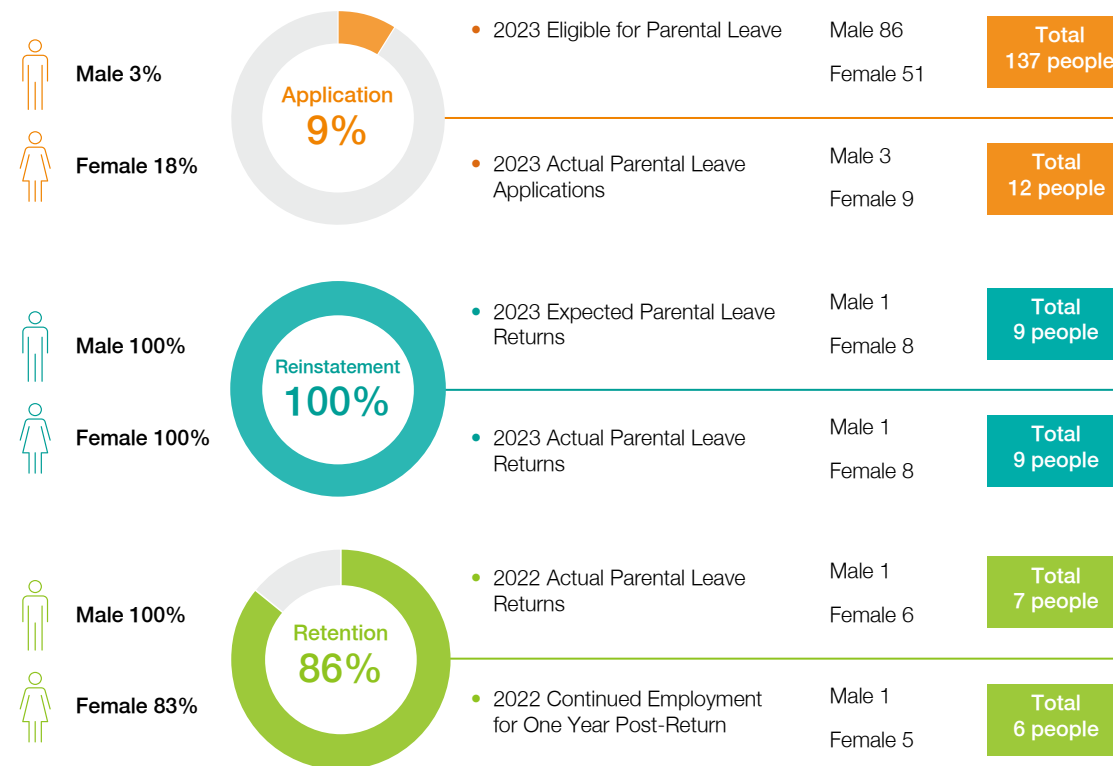
Moxa Employee Benefits and Support Measures

Employee benefits and support measures	Purpose	Description
Travel and Education Subsidy	Encourage colleagues to relax, recharge, and inject new vitality in their spare time to enhance their personal skills and cultivate their interests.	Annual subsidy starting at NT$25,000.
Reading Hours	Every Wednesday at a fixed time for Reading Hours (9:00-10:00), engage in in-depth thinking, conversations, and contemplation to broaden our perspectives and inspire ideas, allowing for fulfillment amidst the busy schedule.	An annual NT$2,700 subsidy for reading and learning resources (including physical books, e-books, podcasts, and various online courses).
Flexible Points - Art Activities	Encourage employees to relax and recharge their batteries in their spare time while increasing their artistic flair.	Provide employees with 5,000 points annually, which can be used for enjoying cultural and artistic activities (such as movies, theater, concerts, exhibitions, stand-up comedy, or digital streaming platforms).
Benefit Points - Group Outing	Promote non-work group activities among employees.	Provide employees with 5,000 points annually, which can be used for participating in activities organized by the Employee Welfare Committee, clubs, or division-level events.
Life Event Care	Participate in employees' major life events and provide support	Provide employees with marriage and childbirth allowances, as well as hospitalization and condolence payments.
Employee Assistance Program (EAP)	**Moxa** cares about the mental health and work-life balance of employees and their families, providing personalized counseling services to enhance well-being, reduce personal and professional stress, and actively support employees in facing life's challenges.	All employees can use professional third-party employee assistance consulting services for both work and personal issues.
Hybrid Work	Increase the flexibility of colleagues' work and create a high-efficiency work environment while maintaining face-to-face social interaction in the post-pandemic era.	Employees can choose their working location for two days each week.
Flexible Working Hours		Work hours are flexible within two hours before or after a 9:00 AM start, with a full eight-hour workday (excluding a one-hour lunch break).
Floating Holidays	Providing employees with more additional paid time off than what the Labor Standards Act allows for more flexible use of vacation days for employees to relax and recharge their batteries.	Provide employees with more additional paid time off every year than what is required by law
Clubs	Encourage Moxa employees to engage in club activities to foster teamwork, collaboration, planning, and organizational skills, enrich their leisure life, develop teamwork virtues, cultivate leadership abilities, and establish a strong corporate culture.	Employees receive company-sponsored subsidies for participating in clubs.
Festival Events		The Company will distribute gift certificates/gifts during special festive events such as the Dragon Boat Festival and the Mid-Autumn Festival.
Sports Day/ Family Day		The company organizes annual Sports Day and Family Day to strengthen the bonds between employees and their families.

Encouragement of Childbirth

Moxa's "Attendance Policy" in accordance with Labor Standards Act provides female employees with 56 days of maternity leave before and after childbirth. Additionally, employees can choose 7 working days of leave during their spouse's pregnancy and the 15 days surrounding the childbirth (or miscarriage). Salaries are maintained during both maternity leave and paternity leave. Maternity-friendly parking spaces are provided for employees during pregnancy, maternity gifts are provided after the childbirth, and the company has a parent-child room available for employees to use. Unpaid parental leave is available for employees who need childcare care. In 2023, the return-to-work rate for employees who took parental leave was 100%. Moxa provides ample support for these employees to readjust to the work environment. The company offers a fully equipped breastfeeding room with private access, a sterilizer, a dedicated milk storage refrigerator, a separate sink, restroom, and an emergency assistance bell, ensuring a safe and convenient environment for employees to collect breast milk.

2023 Employee Parental Leave Statistics

Male 3%
Female 18%

Application 9%

- 2023 Eligible for Parental Leave — Male 86, Female 51 — **Total 137 people**
- 2023 Actual Parental Leave Applications — Male 3, Female 9 — **Total 12 people**

Male 100%
Female 100%

Reinstatement 100%

- 2023 Expected Parental Leave Returns — Male 1, Female 8 — **Total 9 people**
- 2023 Actual Parental Leave Returns — Male 1, Female 8 — **Total 9 people**

Male 100%
Female 83%

Retention 86%

- 2022 Actual Parental Leave Returns — Male 1, Female 6 — **Total 7 people**
- 2022 Continued Employment for One Year Post-Return — Male 1, Female 5 — **Total 6 people**

Note: The scope of statistics is for the Taiwan headquarters.

Improve Insurance and Retirement Systems

Moxa complies with local retirement laws and regulations to protect the rights and interests of employees during retirement. In Taiwan, the application and payment criteria are set according to the "Labor Standards Act" and the "Labor Pension Act". Each year, Moxa appoints an actuary to prepare an actuarial report on the labor pension reserve fund. At the end of each year, the company reviews pension allocations, estimating the amount of pension that eligible retirees will receive by December 31 of the following year, to ensure the special account balance is sufficient for payments. Since the implementation of the new labor pension system, Moxa has been contributing 6% of employees' salaries monthly to individual pension accounts as required by law. Employees who meet the legal retirement criteria can apply for retirement.

Organizational and Individual Performance Management

Moxa has developed a comprehensive performance management system called the Growth & Performance System (GPS), which encompasses both organizational and individual performance management. This system acts as a navigational tool for Moxa, with the core objective of aligning organizational and employee goals to achieve strategic objectives, while also fostering mutual growth. 100% employees undergo regular performance evaluations annually.

In organizational performance management, Moxa is dedicated to ensuring overall development and achieving strategic goals by setting clear objectives, conducting comprehensive assessments, and implementing continuous improvements. This approach guarantees the organization's stable operation and growth.

In individual performance management, Moxa focuses on the development and contributions of each employee. Through clear goal setting, regular evaluations, and offering diverse development opportunities, Moxa ensures that every employee can realize their potential while staying aligned with organizational goals. This focus on personal growth not only motivates employees but also facilitates their long-term development within the company.

Moxa Growth & Performance System (GPS)

Assessment Type	System content	Audience	Frequency	System Purpose and Approach
Performance Goals	• Undertaking responsibilities aligned with organizational or functional annual objectives. • Defining annual work priorities within individual job responsibilities • Setting goals related to people management and development	• All Empoylees • Management Role	Biannually	• Employees and management collaboratively set annual goals for individuals and teams to ensure alignment with organizational strategies. • Emphasize the goal-setting process in performance management, understanding the origins and organizational purposes of the goals, and establishing a connection between meaningfulness and personal development.
Development Goals	• Skills required to achieve current goals and responsibilities • Skills needed to take on additional responsibilities in the future	All Employees	Biannually	• Emphasizing personal development and growth, providing clear development goals and corresponding assessment mechanisms. • Ensure that employees have the opportunity to set and achieve personal development-related goals through regular evaluations and interviews.
Encourage Timely Feedback	• Observe employees' work successes and areas for improvement • Provide feedback with specific, practical examples	All Employees	Real-time	• Fostering a culture of real-time feedback, where employees can receive recognition or suggestions for improvement regarding their work performance, which contributes to increased job satisfaction. • Employees and supervisors can more effectively set and adjust goals to better align with organizational needs.
Results and Impact Orientation	• Evaluate the result and impact of individual goals • Expectations corresponding to the definition of individual job responsibilities	All Employees	Biannually	Focus on the results and tangible impact of individual goals, and evaluate them through the achievement of both organizational and individual goals.
Core Values and Behaviors	• Demonstrating core values through behaviors • Key behavioral displays within the team	All Employees	Biannually	Clearly articulate the organization's core values and expected behavioral standards, encouraging employees to demonstrate behaviors that align with these core values in their work, thereby promoting the development and resonance of the organizational culture.

5.2 Human Rights Protection and Employee Communication

5.2.1 Human Rights Protection

Human Rights Protection and Commitment

Moxa's core values affirm that every employee is a cornerstone of the company's success. By recognizing each other's strengths and contributions, respecting individual differences, Moxa aims to be an organization where mutual learning and growth thrive. In light of this, Moxa ensures equal employment opportunities for all employees and explicitly states in its code of conduct that there shall be no discrimination based on any non-work-related factors such as race, color, creed, gender, gender identity or expression, religion, belief, age, national origin or ancestry, marital status, registered domestic partner status, appearance, physical or mental disability, medical conditions including genetic characteristics, pregnancy, sexual orientation, or political views. All forms of violence and harassment are strictly prohibited, creating a workplace free from discrimination, violence, and sexual harassment. Additionally, Moxa is committed to responsible employment practices, refusing to engage in child labor, forced labor, or compulsory labor in any form, and applies the same standards to suppliers and business partners. Moxa's code of conduct is also a mandatory training course for all employees. In 2023, none of Moxa's operational sites reported incidents of child labor or forced labor.

Human Rights Rrotection Training And Complaint Channel

Moxa incorporates the prevention of sexual harassment and Workplace Unlawful Infringement under the "Act of Gender Equality in Employment" into the mandatory onboarding training for new employees, with a 100% completion rate. Human rights-related cases are included as practical examples in the training curriculum and are also published on the company's internal website. Additionally, Moxa has established a complaint channel (MCCC@moxa.com) for employees to report any violations of human rights or personal grievances. Moxa investigates reported cases while protecting the anonymity of the whistleblower and takes necessary actions or corrective measures. In 2023, Moxa did not have any reported human rights violations. For related statistical information, please refer to section 1.3.1 Integrity Values.

5.2.2 Employees Relationship Management

Communications and Management of Employees Relationship

To establish harmonious employee relations and cooperation, Moxa follows Article 83 of the Labor Standards Act and the regulations announced by the Taiwan Ministry of the Interior. Every four years, labor representatives are elected, who participate in labor-management meetings held quarterly to negotiate and discuss employee issues. The chair of these meetings alternates between employees and management representatives. All employees can provide suggestions and improvements to the company on labor conditions, labor relations, welfare planning, and work efficiency through the labor representatives.

Additionally, Moxa has established an Employee Welfare Committee, with representatives from each department serving one-year terms. This committee explores employee needs in each department and regularly holds meetings to discuss various recreational and festive activities for the year. Through the rich array of Employee Welfare Committee activities, club activities, and company culture events, employees and their families develop strong connections and alignment with the company culture. In 2023, 61% of the Employee Welfare Committee members voluntarily continued their service into 2024.

Flower Club

Tennis Club

Softball Club

Multiple Communication Channels

At the organizational level, Moxa holds quarterly Group Corporate Update meeting to introduce the company's business strategies and execution plans with all departments. At the individual level, managers regularly arrange one-on-one meetings with employees to facilitate two-way information exchange. Additionally, the company continues to promote the Employee Assistance Program (EAP), which includes an "Employee Assistance Hotline" offering psychological, legal, and financial counseling. Third-party consulting companies provide these services, and the information is made available on the internal website for employee access. Counselors meet directly with employees to offer a variety of confidential counseling and stress-relief options.
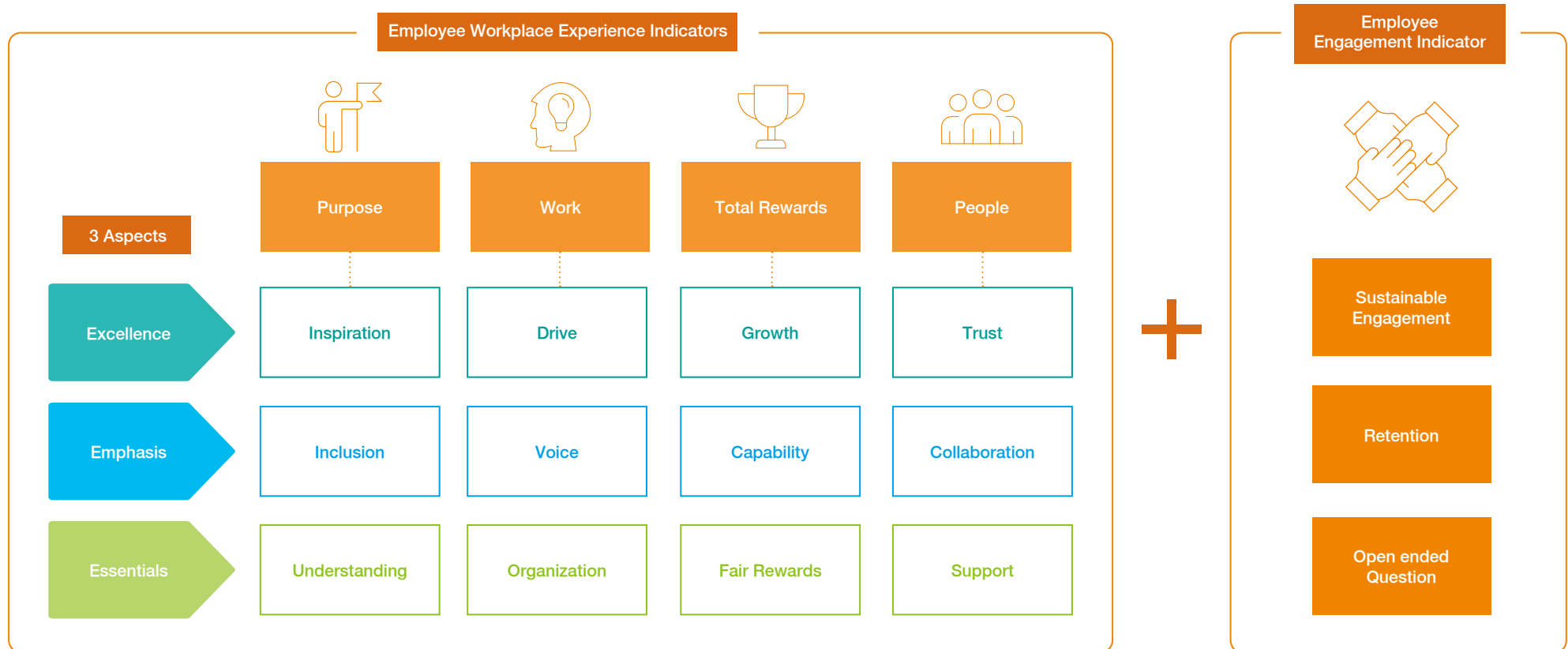
Moxa Global People Voice Survey

Moxa firmly believes that employees are the most valuable asset of the company and considers employee surveys an essential source of information for achieving sustainable business operations. By regularly conducting employee surveys, continuously improving the survey process, holding multiple employee briefings whilst ensuring the anonymity and confidentiality of the surveys. These helped to provide employees an open and safe platform to express their opinions, while also providing Moxa with the means to identify concerns and opportunities for improvement, thereby establishing a long-term, positive relationship between the employer and employees.

The most recent global employee survey conducted by Moxa took place in 2022. The survey targeted employees who had been with the company for more than three months. The questionnaire design framework included two main indicators: the "Employee Workplace Experience Indicators" and the "Employee Engagement Indicators." The "Employee Workplace Experience Indicators" consists of three dimensions: Excellence, Emphasis and Essentials, each containing four categories. The "Employee Engagement Indicators" includes sustainable engagement, retention, and open-ended questions.

The complete questionnaire comprises 15 categories and 67 questions. The survey results showed a response rate of 90%, with Moxa demonstrating higher satisfaction levels in four categories: Capability, Fair Rewards, Collaboration, and Support. Additionally, Moxa has incorporated opportunities for optimization and improvement identified in the survey into the company's five-year development strategy, transforming them into concrete actions to provide Moxa employees with a better work environment and experience.
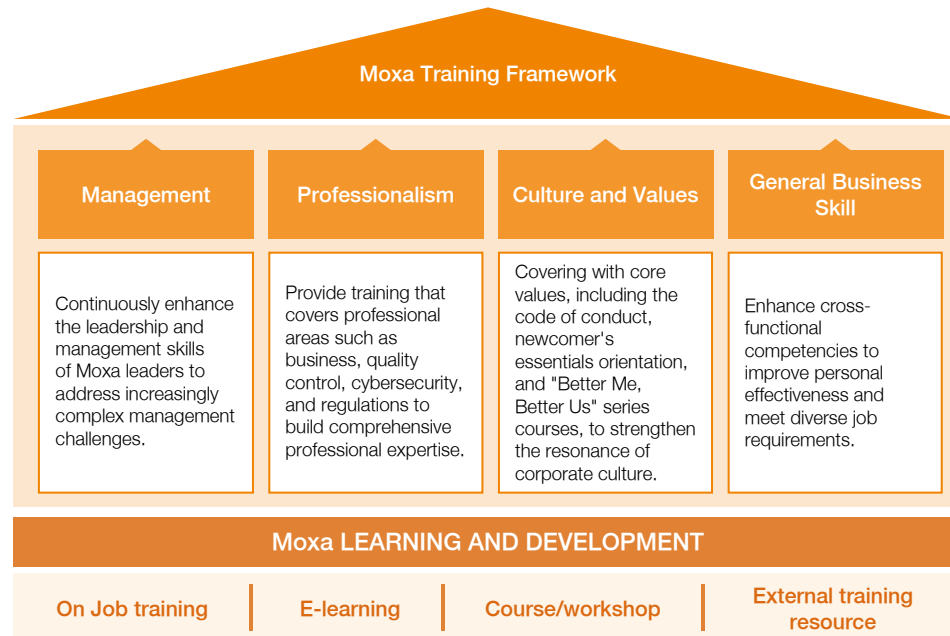
Employee Opinion Survey Structure

	Employee Workplace Experience Indicators					Employee Engagement Indicator
3 Aspects	Purpose	Work	Total Rewards	People		Sustainable Engagement
Excellence	Inspiration	Drive	Growth	Trust	+	
Emphasis	Inclusion	Voice	Capability	Collaboration		Retention
Essentials	Understanding	Organization	Fair Rewards	Support		Open ended Question

5.3 Talent Development and Cultivation

5.3.1 Talent Development Strategy

Comprehensive Training System

Moxa is committed to building a learning organization and provides opportunities for growth and development based on the ability and ambition of employees, so that employees can enjoy their work and maximize their potential in various fields. Every year, Moxa combines core values and strategic goals to develop a unique Moxa training framework that includes four strategic pillars: **Management, Professionalism, Culture and Values, and General Business Skills.** According to the key focus areas of the current year, various main themes are planned, with different learning modules or elective courses designed. Following the systematic approach of ADDIE, which are Analyzed(A), Designed(D), Developed(D), Implemented(I), and Evaluated(E) for effectiveness. Moxa also integrates various learning resources through the e-learning management system, Moxa College, which includes digital courses and e-learning courses to enhance overall learning effectiveness.

Key Highlights of Training Framework

Moxa Training Framework

Management	Professionalism	Culture and Values	General Business Skill
Continuously enhance the leadership and management skills of Moxa leaders to address increasingly complex management challenges.	Provide training that covers professional areas such as business, quality control, cybersecurity, and regulations to build comprehensive professional expertise.	Covering with core values, including the code of conduct, newcomer's essentials orientation, and "Better Me, Better Us" series courses, to strengthen the resonance of corporate culture.	Enhance cross-functional competencies to improve personal effectiveness and meet diverse job requirements.

Moxa LEARNING AND DEVELOPMENT

On Job training	E-learning	Course/workshop	External training resource

Key Development Programs

Management

Moxa's people leaders play a crucial role in shaping the company culture. Therefore, the company offers various customized collaborative learning workshops tailored to the specific needs of different levels and units. These workshops cover topics such as leadership decision-making, coaching skills, interpersonal styles, people case management, attendance management, and various study groups. Managers are encouraged to engage in these collaborative learning sessions to grow together.

For employees newly promoted or transitioning to managerial positions, Moxa arranges a six-month "Management Essential Program." This program includes five key learning modules: establishing the right managerial mindset, developing communication and guidance skills, managing the performance cycle, mastering interview techniques, and enhancing legal knowledge. This structured approach helps new frontline leaders systematically transition from professional workers to team leaders.

Due to the emphasis on experiential feedback in management training, each learning topic is paired with practical scenarios. Corresponding action exercises and group call-back sessions are designed to bring the learned concepts and methods back to the workplace for application, thereby validating the effectiveness of the training

2023 Management Essential Program

START ▶▶▶ → Before Training 1 on 1 → Mindset and Positioning for Managers → Group Coaching → Communication and Guidance for Team Members → Group Coaching → Performance Management → During The Training 1 on 1 → Recruit team member → Assignment → Human Resources for Managers → Group Coaching → After Training 1 on 1 → GOAL

In planning its training topics, Moxa aligns with the company's management calendar to ensure that employees' knowledge and learning effectively address practical needs. For instance, the "Performance Management Series" courses are designed to match the company's performance management cycle. At the start of the cycle, employees complete courses on performance fundamentals and goal-setting methods to help leaders set goals for their teams. Additionally, before the mid-year review, they undergo training on feedback and evaluation techniques to enable supervisors to effectively track and assess team members' performance progress.

To enhance learning efficiency, some courses have utilized "Blended Learning", allowing employees to complete "pre-test, learn, practice, and post-test on an interactive e-learning platform, offering flexibility and accommodating individual learning paces. Additionally, employees are required to engage in monthly 1-on-1 sessions with their direct supervisors to share and receive feedback, solidifying the knowledge and skills they have learned. Through online community learning and exchanges, managers from the same cohort can build a network, providing a strong support system for their management careers.

Experiential activities in manager courses

Professionalism

Cultivating professional skills is a key factor in enhancing overall performance and maintaining a competitive edge for Moxa. It helps employees acquire in depth knowledge and skills in specific fields, improving their ability to solve complex problems and adapt to environmental changes. This enables the company to respond more flexibly to challenges, ensuring continuous progress and growth.

Product Reliability

Since the establishment of Moxa Reliability Center in 2021, it has published 10 issues of the quarterly "MIB Journal." This internal publication shares with Moxa employees how to use reliability science and quality engineering analysis methods to address real product failure cases from clients. Additionally, in 2023, Moxa collaborated with professors from the Center for Reliability Science and Technology at Chang Gung University to develop a learning map for Moxa employees on Failure Modes And Effects Analysis (FMEA) and Fault Tree Analysis (FTA). This initiative aims to build foundational knowledge and skills for product reliability estimation, covering topics such as "Introduction to Product Reliability Estimation" and "FMEA Quality Intelligence Management System and Case Analysis." To date, these courses have been attended by 340 employees globally.

Legal Regulations

Moxa's core values emphasize "integrity". To ensure that employees comply with various laws and regulations at work, maintain the company's reputation, and reduce legal risks, Moxa provides extensive regulatory trainings. These trainings help individuals and teams adhere to regulations and protect the company's legal rights in business practices. The legal compliance courses planned for 2023 include "Competition Law & Compliance", "Moxa Contracts with Distrubutors", "Protection of Confidential Information", "U.S. Export Administration Regulation, (EAR)," and "Introduction of California Consumer Privacy Act (CCPA) and California Privacy Rights Act (CPRA)". Course contents were customized for different overseas regions, with a total global enrollment of 1,118 participants.

Cyberseucrity Education

Facing increasingly complex and evolving cybersecurity challenges, the confidentiality, integrity, and availability of information within the enterprise have become crucial. Moxa provides adequate cybersecurity awareness training to empower each member in becoming a subject expert. The cybersecurity education courses planned for 2023 include "Social Engineering Training", "Corporate Cybersecurity Awareness Training," "Basic Application and Licensing of Free and Open-Source Software," "Introduction to Common Vulnerability Scoring System (CVSS)," and "IEC 62443-4-1 Clause Explanation and Practical Discussion." The training targets new employees and job-related personnel, with a total of 1,448 participants in global internal courses and external training sessions.

Culture and Values

To help new employees quickly integrate into Moxa's culture and values, Moxa organizes mandatory cultural-related courses specifically for new hires. In 2023, a total of 12 newcomer essential orientations and 14 foundation courses were organized. These courses are conducted primarily through experiential learning and workshops, allowing employees to actively participate in discussions during the sessions.

Moxa values the holistic development of its employees, focusing on two main themes: Better Me and Better Us. In collaboration with internal trainers, Moxa has designed a series of elective courses that gradually help employees achieve self-awareness and fully develop their personal potential. These courses further aim to cultivate the mindset and skills necessary for effective communication and collaboration with others, building the soft skills needed for teamwork. In 2023, the total number of hours for series courses reached 728 hours.

Photo of energized employees at Newcomer Essential Orientation

To foster a culture of continuous self-directed learning among employees, Moxa has implemented three key measures: friendly learning spaces, autonomous learning hours, and diverse learning incentives. These initiatives encourage employees to utilize various channels for self-directed learning and personal development.

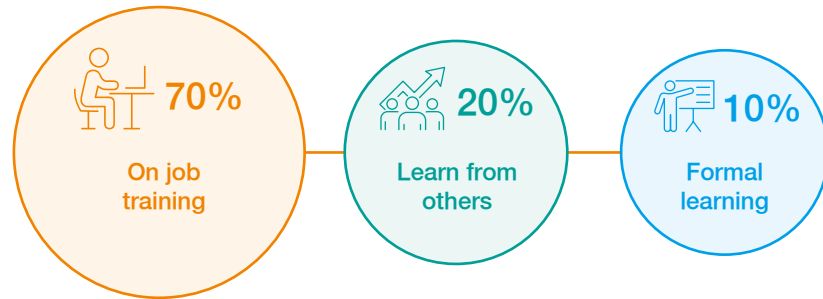| Friendly learning spaces | To create a space for learning and exchange, Moxa has designed "Book Crossing" areas in each office areas for colleagues to freely browse or float books to exchange reading interests. In 2023, more than 450 books were released by our employees, shaping an atmosphere of self-directed learning through voluntary participation. |

| Autonomous learning hours | To encourage employees to develop a reading habit, Moxa has been promoting "Reading Hour" for more than 18 years. Every employee can spend an hour a week during reading hour for learning, contemplation, and reflection. Throughout the year, employees can enjoy a total of 50 hours of "Reading Hour". |

| Diverse learning incentives | Moxa encourages diverse learning channels by subsidizing NTD 2,700 per year for each employee to freely purchase books, e-books, digital courses, or meditation apps. We look forward to spreading the knowledge and experience gained by individual employees throughout the organization, co-creating Moxa's learning culture. |

General Business Skills

To enhance employees' comprehensive skills, Moxa offers a range of general courses beyond on-the-job professional training. These include topics like "Problem Solving and Decision Making", "Business Presentation Skills", "Business Email Writing Etiquette", and "Workplace Communication". Courses are delivered in-person or online, tailored to various training needs. The design integrates the expertise of both internal and external instructors. External instructors provide fresh perspectives and diverse ideas, while internal instructors offer insights closely aligned with company culture and practical needs. The course design incorporates the expertise and experience of both internal and external instructors. External instructors bring the latest perspectives and diverse thinking, inspiring employees with new ideas. Meanwhile, internal instructors, being more familiar with the company's culture, can provide suggestions that closely meet actual needs.

To ensure employees apply course learnings to their work, many courses include follow-up training. For example, in "Business Presentation Skills" follow-up, employees create and practice work presentations using course elements and receive feedback from external experts. In "Problem Solving and Decision Making" course, employees use proper logic and tools to address real work problems and receive guidance from internal instructors.

Business Presentations Skills Course

Interdepartmental Communication Course

Business Email Writing Etiquette

5.3.2 Talent Development Performance and Recognition

Employee Training Statistics

70%
On job training

20%
Learn from others

10%
Formal learning

Moxa is committed to employee training and development, driving organizational growth through individual development to cope with the challenges of constantly changing technologies and markets. Following the "70-20-10" rule of adult learning, each unit plans "on-the-job" training and professional courses for employees. Additionally, experienced colleagues serve as mentors whilst organizing thematic co-learning workshops that encourages "learning from others" in Moxa. Moreover, HR Learning and Development Department coordinates various professional, general training courses as well as learning projects, providing "formal learning" resources. In 2023, Moxa achieved a total of 28,821 training hours and the total training expenses were NT$ 13,207,000.

2023 Employee Training Statistics

Total Employee Training Expenses (NT$ thousands)	13,207
Average Training Expenses Per Person (NT$/person)	8,390
Total Employee Training Hours (hours)	28,821
Average Training Hours Per Person (hours/person)	18.31

Note: The statistics include training programs organized by HR Learning and Development Department, only cover the Taiwan headquarters and excluding on-the-job training and department-organized courses by individual units.

Talent Advocacy and Exchange

Since 2022, Moxa has joined the "TALENT, in Taiwan" Talent Sustainability Action Alliance for three consecutive years, working with "Learning" and "Cheers" and more than 100 enterprises in Taiwan to promote and advocate talent sustainability. development. In addition, Moxa also actively engages in sharing activities with the outside world. At the end of 2022, corporate members of the "CommonWealth Sustainability" were invited to the Bade plant to share Moxa's approach to managing a "happy workplace". In addition, at the In 2022 and 2023, the Company was invited to participate in the "Talent Sustainability Forum" for two consecutive years to exchange experience in Moxa's talent management and talent cultivation. It is hoped that through more diverse exchange activities, the Company will engage in mutual learning and collaboration with domestic and oversea enterprises. Implement the sustainable talent management of the enterprise.

CommonWealth Sustainability Group visits Moxa's Bade plant

Moxa invited to share talent management and development experiences

Cultural Performance Recognition

Since 2002, Moxa has established two annual awards: "Practical and Realistic" and "Passionate Vitality," to encourage employees to demonstrate the company's desired cultural traits in their work. "Practical and Realistic" means taking responsibility for one's work and doing what needs to be done without seeking to please others or advance personal or departmental interests. It focuses on the company's overall benefit and promotes doing the right thing actively. "Passionate Vitality" refers to approaching employees, customers, and partners with enthusiasm, exhibiting strong team spirit, and completing tasks effectively. It embodies a spirited and energetic attitude that inspires and cares for the surrounding community.

In 2023, six employees from over 1,900 globally were selected for each award. The winners received trophies and cash prizes at the year-end party, ensuring that "Practical and Realistic" and "Passionate Vitality" are not just slogans but real behavioral demonstrations and core aspects of Moxa's culture. The company hopes these role models will inspire others and deepen the integration of Moxa's cultural values among its employees.

Moxa Bravo - Mutual Recognition Platform

Moxa firmly believes that helping employees understand and find meaning in their work is an integral part of business operations and a reflection of its management philosophy. Creating a culture of mutual recognition and appreciation is a concrete way put our philosophy into practice. On the Moxa Bravo platform, employees worldwide can express their recognition and gratitude to their colleagues anytime and anywhere, ensuring that every effort, big or small, is fully acknowledged and captured.

Since its launch in December 2022, the Bravo platform has received widespread acclaim, with 90% of employees registering in the first month. It has outperformed similar platforms in companies of the same size domestically and internationally in terms of account activation rate, recognition coverage, and sending coverage. By the end of 2023, with the joint participation of project teams and employees, Bravo had accumulated over 57,000 acknowledgments, with each Moxa employee receiving an average of about 30 recognitions on Bravo. The platform's monthly growth rate averaged 24%. Starting in 2023, Bravo also integrated diverse DEI (Diversity, Equity, and Inclusion) topics and international holiday activities, adding more vibrancy to the platform's operations.

The impressive results of Moxa Bravo demonstrate that Moxa has successfully taken a step forward in creating a culture of mutual recognition and appreciation. Beyond the gamified design of the platform and the diverse thematic activity mechanisms, the atmosphere of commitment, accountability, and willingness to provide positive feedback within Moxa has been fertile ground for this growth. Looking ahead, as the company continues to grow, Moxa Bravo will further promote DEI topics and international activities, recognizing and celebrating employees' efforts from more diverse perspectives. This not only contributes to sustainable business operations but also enhances employees' sense of belonging.

2023 Moxa Bravo Journey

March
International Women's Day
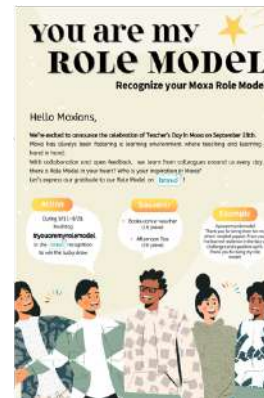
April
Bravo milestone Breaking 10,000

May
Labor's Day Appreciation Month

July
International Friendship Day

September
Teacher's Day

November
Bravo Milestone Marketplace

November
Bravo Milestone Recognize Globally!

5.4 Occupational Health and Safety

5.4.1 Building a Healthy Workplace

Be Healthy, Enjoy Health Protection Plan

Moxa is a people-oriented company and values our employees. Providing a safe and healthy workplace is our commitment and responsibility to our employees. Moxa's initiative to promote a healthy workplace is driven from the top down. Senior management not only announces the Environmental, Health, and Safety (EHS) policy, which declares the promotion of activities beneficial to physical and mental health, helping Moxa employees enjoy their work, achieve self-fulfillment, and attain a happy life, but also actively participates in various internal health activities (such as sports events or first aid training courses). By leading by example, they demonstrate their support for and commitment to creating a healthy workplace.

Moxa, in accordance with the "Occupational Safety and Health Act," employs dedicated occupational health nurse. Additionally, exceeding regulatory requirements, Moxa collaborates with a contracted occupational disease doctor from Linkou Chang Gung Memorial Hospital to provide on-site health services. This creates a professional team for employee health services, actively caring for employee health. To enhance employees' health awareness and promote a healthy lifestyle, Moxa launched the "Be Healthy, Enjoy Health Protection Plan" in 2022. This health management program sets short-term, mid-term, and long-term goals to ensure its effectiveness and sustainability. Short-term: "Know Your Number" enhances employees' health awareness through occupational health needs assessment and health risk management. Mid-term: "Improve Your Number" – Create a friendly workplace and continuously promote health initiatives to integrate abnormal health care mechanism. Long-term: "Refine Your Number" – Encourage employees to independently manage their health, creating an outstanding healthy workplace that aims for work-life balance and overall physical and mental well-being.

The health management plan covers the health management system, health risk assessment, individual health management, health knowledge building, and health promotion activities to promote goals at each stage. Additionally, feedback is solicited from occupational health doctor, professional instructors, or other relevant employees (such as members of employee welfare committee members and occupational safety and health committee) on the program's content, allowing for adjustments to the goals and processes of the health management program.

Be Healthy

~2023

Know Your Number

- Improve health management.
- Occupation disease prevention.
- Increase health care awareness.

~2025

Improve Your Number

- Promote friendly workplaces.
- Promote workplace health promotion.
- Abnormal health care mechanism.

~2028

Refine Your Number

- Winner of best healthy workplace award.
- Take the initiative to conduct self-health management.
- Physical and mental health balance.

Healthy Workplace Assessment and Planning

Moxa provides health checkup plans for different groups of people. Occupational health doctors and occupational health nurses assess the health needs of people based on the results of the health checkups. Moxa's planned health check-up include pre-employment physical examinations, health checks for tasks with specific hazards, regular health check-ups, and health examinations for catering staff.

New recruits are required to submit a physical examination report to the occupational health nurse on the day of employment. The occupational caregiver conducts one-on-one health education based on the health data of each employee. If the health data preliminarily determines that the definition of case acceptance is met, an occupational medical consultation will be arranged as soon as possible. Among the 284 new employees at the Taiwan headquarters in 2023, a total of 5 employees met the definition of case acceptance and were classified as high-risk cases. The occupational health doctor consulted the 5 employees and gave medical advice based on their respective conditions. Patients who meet the clinical treatment standards, After seeing a doctor, they will be included in the case acceptance management.

In terms of regular health checkups for general workers, Moxa goes beyond the regulations by providing employees with an annual health checkup subsidy of NTD 5,000. In 2023, the total health checkup expenses totaled NTD 6,485 thousand. The occupational health nurses screen medical institutions that meet the physical and health examination standards set by the Occupational Safety and Health Administration and are willing to participate in the bidding process. Employees then vote to select five contract hospitals for on-site health check-ups, based on the hospitals' facilities (such as the age of the equipment and transportation convenience) and related service evaluations (such as the handling of abnormal results and the time required for examinations). In designing the checklist, the occupational health nurse consider the common diseases and health issues associated with employees' age groups. They collaborate with contracted healthcare institutions to plan five major categories of health checkup packages: "Heart Care", "Lung Care", "Digestive Health", "Liver Protection", and "Women's Health", totaling 29 items. These packages are offered to employees and their dependents at discounted rates for health checkup arrangements. In 2023, a total of 1,328 individuals were eligible for health check-ups, with 1,263 completing the examinations (a completion rate of 95.11%). Among them, 93 individuals were classified as high-risk cases due to meeting the criteria for physician care. The occupational health nurses and occupational disease doctor completed consultations for 100% of these high-risk cases in 2023, providing appropriate medical and referral advice.

Moxa's Bade Plant has X-Ray testing equipment for health checkups related to special hazardous operations. Nine operators undergo health checks for ionizing radiation before starting and annually thereafter, with health management based on occupational disease specialists' assessments. In 2023, the completion rate for special hazards health exams was 100%, with no high-risk cases. Additionally, the plant's kitchen requires six employees to have regular health checks for meal feeding operations, achieving a 100% completion rate. Three catering staffs were classified as high-risk due to abnormal hyperglycemia and blood pressure, and they are monitored regularly by an occupational health doctor and nurse.

Moxa 2023 Taiwan Headquarters Health Check-Up

	Pre-employment Physical Examinations	General Physical Examinations	Special Hazards Operations Physical Examinations	Catering staff physical examinations
Eligible for check-up	284	1,328	9	6
Participants	284	1,263[1]	9	6
Completion rate (%)	100%	95.11%[2]	100%	100%
Number of high - risk individuals[3] (persons)	5	93	0	3
Ratio at high risk (%)	1.76%	7.36%	0%	50%

Note1: In 2023, a total of 65 employees did not participate in the annual health check-up. Among them, 16 requested to defer the subsidy to the next year due to pregnancy, 4 could not participate due to oversea business trip, and 45 opted out due to personal reasons.
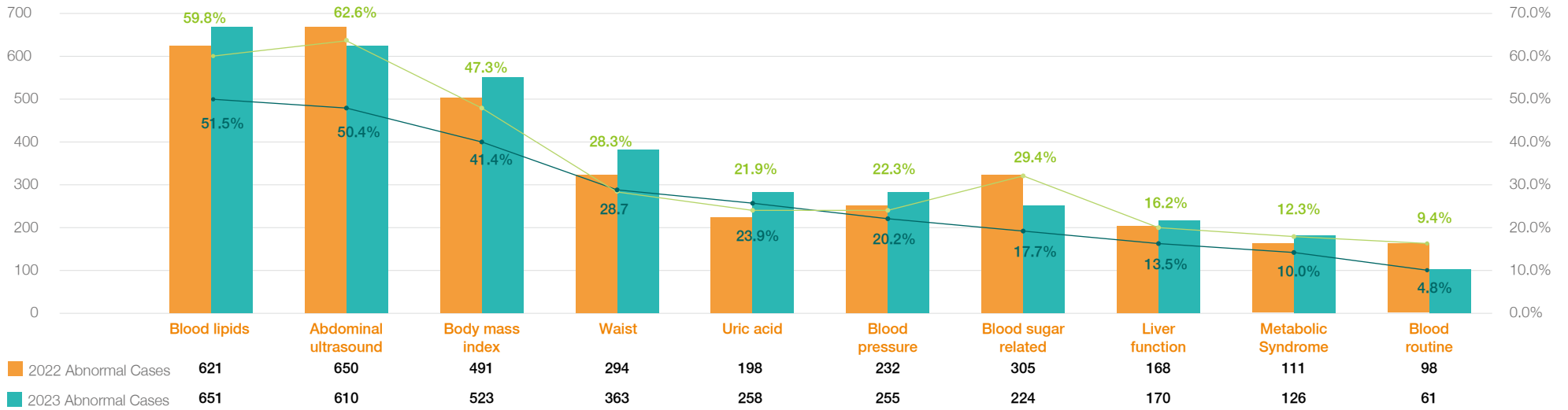
Note2: Although Moxa's annual health check completion rate is not 100%, based on the statistics of employees required to undergo health checkups under the Labor Health Protection Rules, Moxa's health check completion rate was 100% by 2023.

Note3: The statistics of high-risk employees are defined as the number of people whose health check results meet the definition of accepted case. In 2023, 100% of the employees classified as high risk have been consulted by an occupational nurse or occupational doctor, and provided medical treatment and medical advice on a case-by-case basis, and Regular follow-up and care.
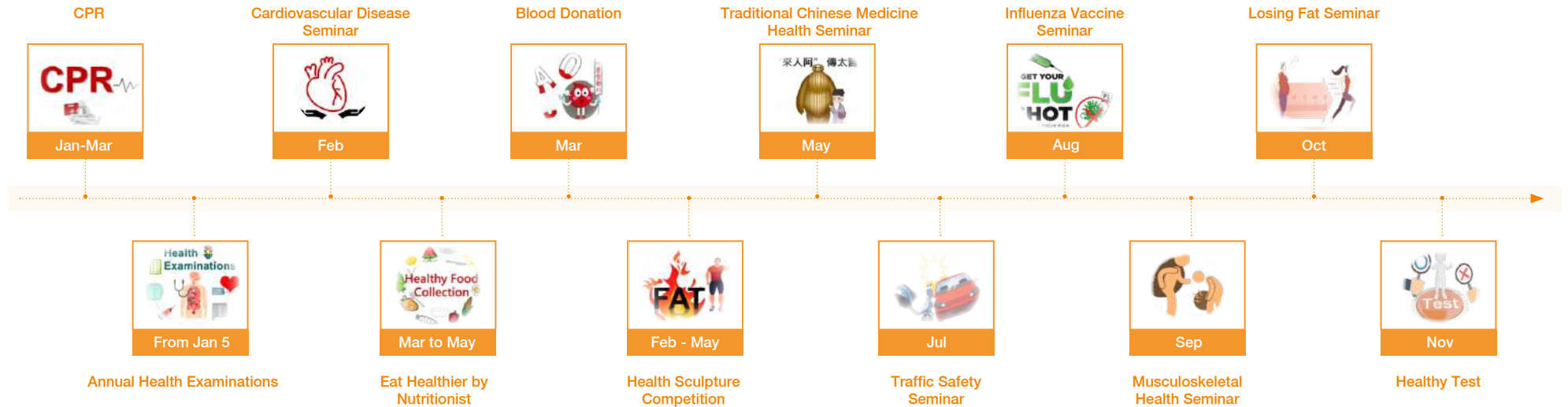
After the annual health check-ups, occupational health nurses manage cases that meet specific criteria for case management based on the results (more details, please refer to health risk management section for details). At the end of each year, occupational health doctor and nurses conduct a detailed analysis of health check-up results, using age and gender as variables. This analysis identifies health hazards and potential disease factors. The results are compared with data from the National Health Service's "Health Promotion Statistical Yearbook" and the "National Nutrition and Health Survey" to assess differences in health prevalence between Moxa employees and the general population of the same age. This process also identifies the top ten abnormal health indicators among Moxa employees.

Based on the 2022 health check-up analysis, Moxa organized several health promotion activities in 2023, including two cardiovascular prevention seminars with 137 participants, twenty AED+CPR first aid training sessions with 1,042 participants, four nutritionist lectures with 633 participants, and health sculpting activities with 107 participants. Moxa invited employees to fill out a health needs questionnaire in 2023 to provide health management programs that better meet the needs of employees. The survey showed that the top five health needs of employees are vision care, ergonomic seminars, health sculpting, nutrition, and stress relief and sleep aid. In 2024, Moxa will adjust the content of its health management program based on employee needs to increase participation and more effectively enhance employees' health awareness and knowledge.

2022 to 2023 Employee Health Top 10 Abnormal Indicators

	Blood lipids	Abdominal ultrasound	Body mass index	Waist	Uric acid	Blood pressure	Blood sugar related	Liver function	Metabolic Syndrome	Blood routine
2022 Abnormal Cases	621	650	491	294	198	232	305	168	111	98
2023 Abnormal Cases	651	610	523	363	258	255	224	170	126	61

Percentage values (2023 green / 2022 dark):
- Blood lipids: 59.8% / 51.5%
- Abdominal ultrasound: 62.6% / 50.4%
- Body mass index: 47.3% / 41.4%
- Waist: 28.3% / 28.7%
- Uric acid: 21.9% / 23.9%
- Blood pressure: 22.3% / 20.2%
- Blood sugar related: 29.4% / 17.7%
- Liver function: 16.2% / 13.5%
- Metabolic Syndrome: 12.3% / 10.0%
- Blood routine: 9.4% / 4.8%

2023 Annual Healthy Plan

CPR — Jan-Mar

Annual Health Examinations — From Jan 5

Cardiovascular Disease Seminar — Feb

Eat Healthier by Nutritionist — Mar to May

Blood Donation — Mar

Health Sculpture Competition — Feb - May

Traditional Chinese Medicine Health Seminar — May

Traffic Safety Seminar — Jul

Influenza Vaccine Seminar — Aug

Musculoskeletal Health Seminar — Sep

Losing Fat Seminar — Oct

Healthy Test — Nov

Implementation of Health Risk Management

In addition to actively promoting health activities and keeping track of the health status of employees, Moxa also implements health risk management. The Moxa health risk management system is developed through discussions among occupational health and business-related personnel (such as occupational doctors, occupational safety and health team members, and HR team members). It includes various aspects such as health management procedures, special population health protection plans (including regulations of maternal health protection, abnormal workload-triggered diseases prevention plan , ergonomic hazards, and unlawful infringement in the workplace), and operational guidelines of on-site health service. In accordance with the aforementioned health management systems, the occupational nurses identify hazard factors through different inspection channels and determine defined at-risk groups. They collaborated with occupational safety team members and occupational doctors to identify whether abnormalities are related to physical, chemical, ergonomic, and to develop prevention and improvement plans. Once the groups requiring management and monitoring are identified, occupational nurses include them in individual health management. In 2023, Moxa had no records on occupational disease cases.

In addition to the previously mentioned groups, Moxa also referred to the National Health Administration's Chronic Disease Risk Assessment Platform to establish the Moxa Health Classification Standard with input from occupational doctors. Health check results classify and identify eligible cases, which are included in the health management list for appropriate measures. Through occupational nursing and health education consultations, employees receive timely diagnosis and treatment to delay disease progression or prevent recurrence.

As of 2023, there have been 238 consultations, including 132 health consultations, 58 case management consultations, 16 ergonomic hazard consultations, 13 abnormal workload consultations, 5 return-to-work/job accommodation consultations, and 7 on-site visits.

Moxa prioritizes health management for special groups by annually reviewing four major health protection plans. If an employee is found to be at risk or potentially at risk, occupational nurses
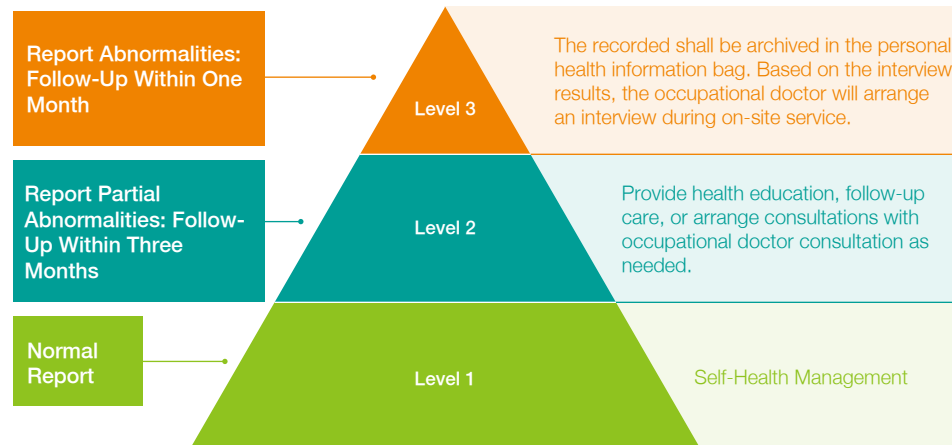
collaborate with occupational safety team members, occupational health doctor, or HR personnel to discuss improvement plans, minimizing exposure to harmful conditions and reducing health risks.

2023 Special Puluotion Health Program Survey

	Number of people surveyed		Non-hazardous		Suspected of hazard		Hazardous	
	Male	Female	Male	Female	Male	Female	Male	Female
Maternal Health Protection	-	561	-	561	-	0	-	0
Workplace Unlawful Infringement	1,020	561	1,020	561	0	0	0	0
Abnormal Workload	1,020	561	978	525	41	36	1	0
Ergonomic Hazards	764	387	741	380	23	7	0	0

Special Population Health Program: Maternal Health Protection

To protect female employees who are preparing for pregnancy, are pregnant, have given birth within the past year, or are still breastfeeding after one year, Moxa provides necessary safety and health measures to achieve the goals of the Workplace Maternal Health Protection Program. Employees who meet the definition can notify the occupational health nurse via the internal website or "Teams" for health consultation arrangements. To avoid omissions, the occupational health nurse checks the list of employees applying for prenatal checkup leave, maternity leave, and return-to-work after parental leave each month to ensure completeness.
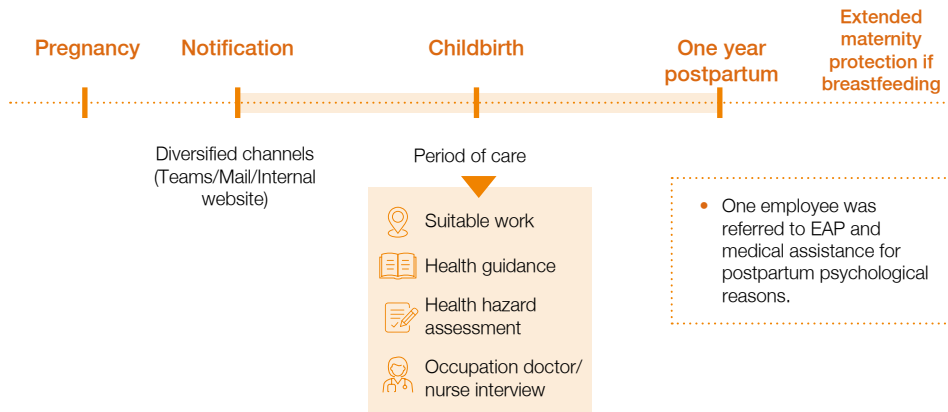
After compiling the list, the occupational health nurse initiates maternal protection hazard identification and assessment. Occupational safety team members identify and assess workplace hazards, classify risks, improve workplace conditions, and manage hazard control. The occupational health nurse and doctor use this assessment to interview the employees, considering their main complaints to provide suggestions on health hazards, risk classification, job suitability, and hazard control.

In 2023, out of 561 women of childbearing age, 24 pregnant employees were included in the care list. After assessments and health consultations, it was determined that there were no hazards, allowing them to continue their original work.

For a friendly and optimized workplace, occupational safety team members regularly inspect environmental health and safety topics, review Safety Data Sheets (SDS), and arrange for re-evaluation of workplaces by the occupational health doctor, occupational health nurse, and relevant personnel when necessary to find suitable improvement measures. Moxa also has a dedicated, comfortable breastfeeding room, priority seating for pregnant women in the mixed office area, and a parent-child room for employees' children, creating a workplace that meets the needs of working mothers.

Moxa Health Rating

Report Abnormalities: Follow-Up Within One Month → **Level 3**: The recorded shall be archived in the personal health information bag. Based on the interview results, the occupational doctor will arrange an interview during on-site service.

Report Partial Abnormalities: Follow-Up Within Three Months → **Level 2**: Provide health education, follow-up care, or arrange consultations with occupational doctor consultation as needed.

Normal Report → **Level 1**: Self-Health Management

2023 Maternal Health Care

Year	Number of receiving care	Risk level		
		Level 1	Level 2	Level 3
2023	24	24	0	0
Approaches		Providing health consultation and guidance	Health consultation: inform about hazards and implement control measures.	Medical assistance, implementing work restrictions, or work change

Pregnancy — Notification — Childbirth — One year postpartum — **Extended maternity protection if breastfeeding**

Diversified channels (Teams/Mail/Internal website)

Period of care

- Suitable work
- Health guidance
- Health hazard assessment
- Occupation doctor/ nurse interview

- One employee was referred to EAP and medical assistance for postpartum psychological reasons.

Special Puloution Health Program - Abnormal Workload

To protect the physical, mental, safety, and health of employees and to prevent health impacts from long working hours and other work-related workloads, Moxa offers a hybrid working system, better-than-regulation flexible leave, full-paid sick leave, and flexible working hours. The design of the attendance management based on the following principles promotes the balance between employees' physical and mental health and family; to understand the physical and mental health of employees, health-related assessment questionnaires (worktype, personal health questionnaire and work health questionnaire) to implement workplace health management. Based on the analysis results, the occupational nurse provides health guidance to those who meet the definition of care for a occupational doctor. If the condition meets the definition of physician care, we arrange consultation with a physician during the on-site service. In 2023, 77 employees were eligible for consultations. One, identified as high workload in the survey, was assessed by the occupational doctor as having a very high cerebrovascular risk. Immediate medical treatment and job adjustment were recommended. The case was managed and tracked, and by the next quarter's follow-up, the employee had completed the job transfer.

In addition to the annual review of high-risk groups for cerebrovascular and cardiovascular diseases, those with a ten-year cardiovascular disease risk >20%, or those with existing cerebrovascular or cardiovascular diseases, HR preliminarily classifies employees with long working hours or long sick leave into the abnormal workload list each month. Occupational nurses then refer to the latest health check results to assess the risk level and provide timely care. In addition, during the season when cardiovascular diseases are common, Moxa organizes related disease prevention lectures and CPR cum Automated External Electric Shock device first aid training to educate employees on the prevention of cerebrovascular disease, emergency response, and health care.

CPR+AED first aid training

A total of 20 sessions were held, with 1,042 participants completing the practical training, with an average course satisfaction rate of 4.91. During the course, employees could clearly identify the location of AEDs and nearby first aid kits, ensuring they can respond correctly to emergencies.

First aid knowledge

Practical operation drill

Received New Taipei City's AED Safe Place Certification

Special Puloution Health Program - Ergonomic Hazards

Prevent musculoskeletal injuries and illnesses caused by employees from repetitive work and other related human hazards. Moxa takes the initiative to survey employees' symptoms during the annual health checkup using the "Musculoskeletal Symptom Questionnaire". The survey results are used to classify employees' hazard levels, identify ergonomic hazards at work, and select and implement Prevent work-related musculoskeletal injuries due to work load, work posture, and repetitiveness at work. At the same time, through the health care for long sick leave and the reported cases of occupational disasters, the occupational health care screened the workstations or operations with musculoskeletal injuries or potential musculoskeletal injuries and diseases, and then gave relevant care.

In 2023, there were no cases of musculoskeletal issues arising from prolonged sick leave or work-related accidents. Among the 1,263 employees who underwent health checkups, a total of 1,151 employees completed the "Musculoskeletal Symptom Survey" (response rate: 91.13%). Upon analysis, there were 30 cases identified with suspected hazards. After consulting with occupational physicians to understand job tasks and clarify causality and executability with work, it was determined that no business adjustments were necessary for any of the visited cases.

In order to improve and provide correct skeletal muscle awareness, we organize relevant courses for occupational nurses, and set different topics according to the work type in the factory to meet the needs of employees. In Xinzhuang, an online seminar titled "Sit Right to Avoid Pain" was hosted by Professor Yu-Jen Chen from NTU, with 76 participants. In Bade, considering the production line work, physical therapist Wen-Ren Jian shared "Avoid Pain, Live Healthily!" with 79 participants. To meet employees' real needs, physical therapists provided on-site services, with 70 employees receiving one-on-one consultations. Among the 32 who completed satisfaction surveys, the average pain score improved from 3.57 to 1.07 after guidance.

Invite a physical therapist for a seminar and on-site guidance

Special Puloution Health Program – Workplace Unlawful Infringement

At Moxa, we strive to prevent employees from being mistreated by supervisors and colleagues based on their positional advantages , bullied or subjected to violence, such as physical attacks, verbal abuse, intimidation, or threats, from customers, service users, or other stakeholders. Mental or physical harm or even life-threatening situations, the Company clearly stated in its policy of "zero tolerance" for all kinds of unlawful infringement in the workplace, and implemented hazard factor assessment, health education and publicity every year, and well-established case study. Handling procedures and the "Moxa Code of Conduct" for employees to follow.

Every year, Moxa implements identification and evaluation, effectiveness improvement, education and training, and establishes handling procedures in accordance with the "Prevention and Management of Unlawful Infringement in the Performance of Duties". In 2023, a total of 43 units were assessed for workplace abuse risk. The results of each unit's self-assessment showed low internal and external risks. For external potential risk assessment results, the possible sources are both the "customer end" and the "customer contact environment", and the corresponding recommended measures are to provide a safe environment and avoid contact with external personnel alone; Make recommendations on the appropriate configuration of the workplace and assist in providing appropriate solutions to reduce or eliminate the potential hazards of unlawful infringement caused by an inappropriate working environment. In addition, to raise employees' awareness of unlawful infringement, Moxa conducts the required workplace violence prevention courses every year for employees and supervisors, as well as promotes self-protection against workplace abuse and grievance channels, to ensure that workplace abuse incidents are effectively prevented and handled. A total of 1,363 employees attended workplace unlawful infringement training in 2023.

Unlawful Infringement Prevention Measures

Hazard identification and risk assessment	Proper Workplace Arrangement	Adjust workforce by job suitability	Establish Code of Conduct
Conduct hazard prevention and communication training	Establish incident procedures	Evaluate and improve effectiveness	Other safety and health issues

Moxa has established an infringement complaint mechanism. After receiving complaints of illegal acts, we will activate an employee care and protection mechanism and handle cases according to the "Moxa Code of Conduct Procedures". Protection policy Receiving cases in confidence, suggesting work adjustments, providing psychological or medical assistance as necessary, and proactively taking preventive measures and relevant protective actions.

Procedures for Infringement Incidents

Grievance channel	• Complaint Email: Mccc@moxa.com • Report to Department Managers, HRBP, or Group HR Head
Handling of Report	According to the "Moxa Code of Conduct Case Procedure," HR personnel and the investigation team coordinate to address and verify the incident and provide assistance.
Follow-up of the incident	Assist in negotiation and dispute mediation, and provide medical assistance or referral for psychological counseling.

Enhance Employee Health Awareness

Health Literacy Enhancement

For employees to understand health knowledge through correct channels, use such knowledge (information) to make appropriate decisions to promote and maintain good health. The occupational care staff has compiled the feedback from various health lectures in 2023, and formulated a "Health Academy" activity in 2024. Various health lectures will be placed in the healthy elementary classrooms for employees to repeat learning online, and employees are encouraged to actively participate in various health-related activities., which provides "healthy points". Those with the best health points at the end of the year will be rewarded with relevant prizes. By participating in the activities, we hope that employees can achieve their short-term goal of Know Your Number by participating in the activities.

Health Academy Planning

Health Promotion Activities

Moxa cares about the health of its employees and not only prevents work-related injuries, but also organizes a series of health promotion activities through occupational care to actively and effectively create a healthy lifestyle to promote and maintain a healthy atmosphere. In addition to the knowledge-based "Health Intelligence" component, the health promotion plan includes activities aimed at shaping health behaviors such as "Nutritionist Guides Healthy Eating", health sculpting activities, "Common Traditional Chinese Medicine Health and Q&A", defensive driving seminars for cars and motorcycles, "Stay Healthy, Stay Ahead of the Flu" awareness sessions, and strategies for "Fat Loss Without Regain". In 2023, a total of 44 health promotion-related activities were conducted, with a total participation of 3,074 individuals.

Healthy Sculpture Event

In 2022, Moxa began organizing the health sculpture activity, which has been loved and supported by employees. In 2023, after discussion with two occupational doctors, the activity was revised to focus on building muscle and reducing fat, rather than losing weight, and 107 employees responded. participation, an increase of 1.1 times compared to 2020. In addition to hardware equipment (such as a gym and exercise room), Moxa also organizes a series of professional nutritionist lectures to promote proper diet concepts. Moxa not only provides facilities like gyms and sports spaces but also organizes professional nutritionist seminars on proper diet. The company offers organic meals with low oil and salt or selects healthy meals from nearby companies, helping employees gain clearer meal preparation concepts through practical examples.

In 2023, the health sculpting activities resulted in an overall body fat reduction of 244.9% and a muscle increase of 4.81%. After the activity, in order to encourage employees to maintain a good posture and share information (knowledge) to prevent gaining weight, a lecture on "Avoid Yo-Yo effect: Golden Rules For Successful Fat Loss!" was held in the third quarter of 2023. A total of 141 people attended the lecture by professional doctors and nutritionists. The Company analyzed the pros, cons, and indications of the commonly used "16:8 Fasting" and "4+2R High Protein Fat Reduction" programs internally, in order to correct the feedback. In addition, considering that the "4+2R High Protein Fat Reduction" program is popular among employees to support the intestinal flora to achieve the weight loss effect, the occupational nurse wrote a health education topic titled "Gut Health: Cultivating Beneficial Bacteria Together" to promote health concepts among employees.

A series seminars of Avoid Yo-Yo effect: Golden Rules For Successful Fat Loss!

Gastrointestinal Health Newsletter

5.4.2 Maintaining Workplace Safety

Occupational Safety and Health Management

Policy and Management

Moxa has established a comprehensive Environmental, Health, and Safety (EHS) policy (hereinafter referred to as "the policy") to safeguard employee health and safety while protecting the environment. This policy applies to all Moxa global operations and personnel, including employees, suppliers, contractors, outsourced personnel, clients, and other key external stakeholders involved in operations.

Moxa commits to adhering to relevant legal requirements and actively responding to domestic and international initiatives and voluntary commitments. The policy emphasizes creating a safe working environment, promoting employee health, and preventing occupational injuries and diseases. It also commits to providing appropriate and necessary training to internal and external stakeholders to raise awareness of EHS impacts and deepen their understanding of EHS.

Moxa has established a robust management mechanism to implement the EHS policy through the Occupational Safety and Health Committee (hereinafter referred to as "the Committee"). This mechanism includes a clear organizational structure, defined responsibilities, adherence to international occupational safety and health management standards, and rigorous standard procedures. The Committee, chaired by the GEB and holding quarterly meetings, consists of department heads, occupational safety and health team members, engineers, and labor representatives. Moxa values employee involvement and consultation, with labor representatives making up more than one-third of the Committee members, ensuring employees' participation in the decision-making process on safety and health-related issues.
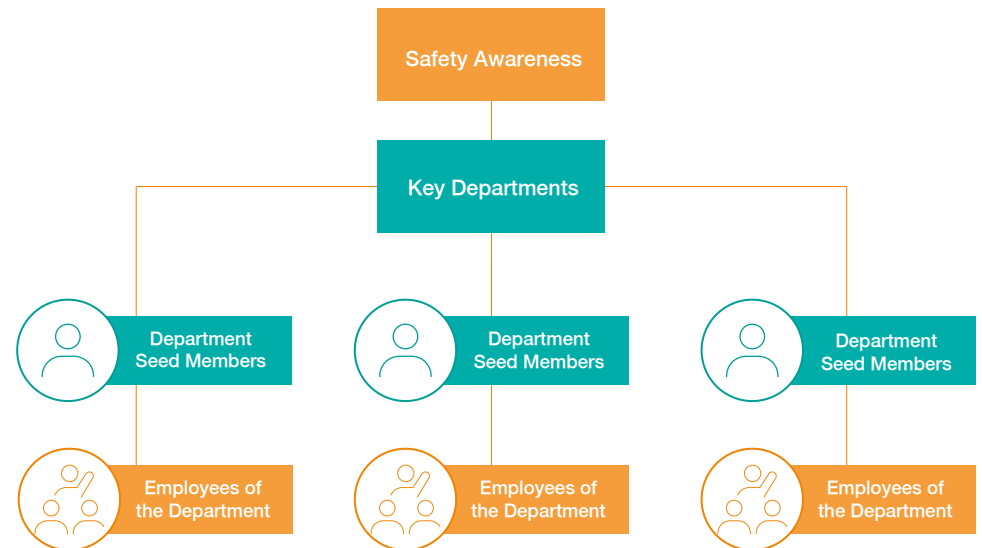
To enhance internal safety and health organization and connections, Moxa has designated "EHS Seed Members" in key departments to progressively build the company's safety culture. EHS Seed Members play a crucial role in advancing occupational safety and health within their respective departments. Their mission is to ensure the effective implementation of EHS-related activities, providing maximum protection for Moxa's internal environment, safety, and health, and minimizing negative impacts on employees in the workplace. This role helps achieve a seamless integration of safety and health activities from top to bottom.

Additionally, EHS Seed Members are invited to attend the Committee's quarterly meetings, where they provide timely feedback and suggestions related to their departments. Employees with other concerns can also use the internal "EHS Help Desk" platform to report safety and health issues either by name or anonymously, thereby strengthening communication between employees and EHS topics.

Moxa Advances EHS-related Initiatives Through Departmental EHS Seed Members

Moxa Occupational Health and Safety Committee

Location of operation	Chairperson	Total number of committee members	Number of employees representatives	Proportion of employee representatives
Xinzhuang Headquarters	GEB	15	6	40%
Bade Plant	GEB	13	5	38%

Moxa actively implements the "EHS Seed Member System", which connects occupational safety and health management units with key departments to implement safety and health management matters, spread safety awareness, and remind each other. Moxa thanked the seed personnel for attending various education and training activities, attending related conferences, and assisting in internal and external audits to enhance their safety and health-related knowledge and skills. As a result, the safety awareness of employees was raised successfully and the potential risks were reduced. To thank our seed members, Moxa created thank-you cards and badges, issued an internal newsletter, and recognized them in relevant meetings. Their selfless dedication and outstanding performance contribute to a safer and healthier work environment at Moxa.

Thank You Letter for ESH Seed Members

Thank You Card for EHS Seed Members

Thank You Card for EHS Seed Members

Appreciation Badge for EHS Seed Members

Occupational Health and Safety Management System

Moxa is committed to maintaining employee safety and health. The company has established the "Labor Safety and Health Work Rules" and 44 related procedures, outlining the safety obligations of employees. To ensure effective implementation, Moxa has introduced an occupational safety and health management system at its Xinzhuang headquarters and Bade plant. This system underwent a rigorous audit by the BSI Group and successfully achieved ISO 45001:2018 certification in August 2023, covering 100% of employees and non-employees.

Moxa ISO 45001 Certification Coverage

Location of operation	Number of employees	Number of non-employees[1]
Xinzhuang Headquarters	1,276	0
Bade Plant	298	1

Note1: Non-employees are those not employed by Moxa but working under Moxa's direction and supervision.

Occupational Hazard Prevention and Response

Occupational Hazard Identification and Risk Assessment

To identify potential workplace hazards, Moxa conducts hazard identification and risk assessments for operations, activities, products, and services. This includes routine tasks (e.g., maintenance or testing) and non-routine tasks (e.g., troubleshooting or temporary work) to determine occupational safety and health risks and improvement opportunities. The assessment covers employees and contractors, including anyone entering the facilities.

In accordance with the "Environmental Aspects and Hazard Identification and Risk Assessment Procedures," Moxa conducts annual risk assessments for relevant activities and services. In 2023, 819 hazards were identified at the XinZhuang headquarters and Bade plant, with no major risks reported. However, to reduce occupational safety and health risks and enhance employee safety, Moxa developed and implemented four management plans in 2023—covering public stair safety warnings, electrical safety improvements near water sources, chemical safety management, and electrical safety management—achieving a 100% completion rate. Additionally, regular themed inspections are conducted, with EHS seed members invited to participate. Themes include environmental facility safety, electrical safety, laboratory safety, and fire safety, aimed at identifying potential hazards. In 2023, 48 improvement suggestions were identified during inspections, all of which have been 100% completed with relevant corrective and preventive measures.

In addition to regular inspections, if an employee finds a potentially dangerous condition at work, he or she can immediately report it to the occupational safety and health department, nurse, or immediate supervisor. Employees can stop operations and evacuate to a safe place on their own and will not be penalized.

2023 Moxa Inspection Results

Topics	Number of Non-compliance Cases	Improvement Rate
Environmental Facilities	3	100%
Electrical Safety[1]	21	100%
Fire Safety[2]	14	100%
Administrative Management	5	100%
Equipment Safety	5	100%
Total	48	100%

Note1: Electrical safety inspection non-compliance items include daisy-chaining extension cords, damaged wires, abnormal batteries, and lack of clearance in front of electrical panel doors.
Note2: Fire safety inspection non-compliance items include non-illuminated emergency lights, improper placement or labeling of fire equipment, and fire zone marking issues.

Operating Environment Monitoring

To ensure that workplace environments comply with applicable legal requirements and health and safety standards, Moxa regularly implements work environment monitoring to grasp the reality of workers' work environments and assess worker exposure status. The work environment measurement organization regularly implements work environment monitoring. The monitoring items for chemical factors in the workplace include ethylene glycol monobutyl ether, methanol, toluene, isopropanol, carbon dioxide, etc. The monitoring results in 2023 did not exceed the legal tolerance standards. Additionally, Moxa upholds the highest standards by regularly monitoring hazardous substances with permissible exposure limits, such as acrylic acid, tin, and ethanol, beyond regulatory requirements. This ensures the exposure levels are checked periodically to maintain a safe working environment for employees.

Hazardous Chemicals Management

All hazardous chemicals used in the factory are handled in accordance with the "Health Hazards Chemicals Management", and all chemicals are included in the "Hazardous Chemicals and SDS Management List" for internal control. In addition, an assessment is made according to the change management to confirm the relevant hazards and preventive measures before purchase requisition. Hazardous chemicals are stored in specific places, and the storage sites and containers are labeled and managed according to the "Regulation of Labelling and Hazard Communication of Hazardous Chemicals" or the "GHS Chemicals". Safety Data Sheet (SDS) is placed in a visible place for personnel to read and handle in an emergency. New employees required to work with hazardous chemicals receive necessary hazard awareness training upon joining. This ensures they understand relevant chemical operation guidelines and precautions. Existing employees are also provided with necessary safety and health training to enhance their safety awareness.

MOXA

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Electrical Safety Management

Given that electrical power is a major part of Moxa's operational characteristics, preventing electrical safety issues is a top priority. Moxa has established "Electrical Safety Standards" to enhance the management and control of electrical safety. In terms of education and awareness, Moxa provides electrical safety training to EHS seed members and issues EHS newsletters to all employees, aiming to increase awareness of electrical safety. Additionally, Moxa has established a daily inspection mechanism to regularly check for potential electrical risks in the workplace and provide improvement recommendations, ensuring effective monitoring and management of electrical safety conditions. Moxa also conducts regular infrared inspections of electrical panels at its facilities using external resources. These inspections, performed without interrupting operations, help verify the normal functioning of equipment and wiring, as well as detect any overload or anomalies. These measures contribute to improving electrical safety in the workplace and safeguarding employee health and safety.

Infrared Electrical Panel Inspection

High Voltage Equipment Testing

Accident Investigation and Occupational Safety and Health Indicators

Moxa takes every accident seriously. When an accident occurs, Moxa follows the "Instruction on Accident Investigation" to conduct thorough investigations and analyses, identify the root causes, and develop preventive measures. The Occupational Safety and Health Management Department oversees and monitors the implementation of these measures to prevent similar incidents from occurring. Moxa also complies with legal requirements for occupational hazard reporting and statistics. In 2023, there were no workplace accidents or safety incidents at Moxa's sites, nor were there any violations of occupational safety and health regulations. Moxa successfully achieved its 2023 goals and continues to strive towards its target of zero occupational accidents and incidents.

Traffic accidents are unpredictable. In 2023, a total of 18 employee traffic accidents occurred, resulting in 10 lost days. Among these, motorcycle accidents accounted for 78%, with most incidents attributed to "other party fault." In response, Moxa has implemented defensive driving training and issued an EHS E-newsletter focused on defensive driving to increase employees' awareness of driving safety. The motto "Be aware of others' inattentiveness; be cautious of others' carelessness" serves as a constant reminder to employees to reduce traffic accidents during commutes or business trips. Moxa remains committed to accident prevention, advocacy, and management, continuing its efforts toward the goal of zero occupational accidents and incidents.

2023 Accident Statistics

	Employees	Workers other than employees
Total Hours Worked (hours)	2,897,128	7,456
Major Occupational Accident[1] (cases)	0	0
Occupational Accidents[2] (cases)	0	0
Workplace Accident[3] (cases)	0	0
Traffic Accidents (cases)	18	0
Disabling Injury Rate	0	0

Note1: A major occupational accident is defined according to Article 37, Section 2 of the Taiwan Occupational Safety and Health Act, which requires reporting to the labor inspection authority within eight hours. This includes incidents resulting in death, accidents involving three or more people, or accidents involving one or more people who require hospitalization.

Note2: An occupational accident is defined as a recordable occupational injury resulting in more than one lost workday (excluding commuting accidents).

Note3: A workplace safety incident refers to any accident that causes property damage within the plant.

Online Training
Through professional instructors, teach the concepts of defensive driving and remind colleagues of the precautions they should take to avoid causing traffic accidents due to inattention.

Offline E-newsletter
Through the issuance of newsletters, continuously reinforce traffic safety among colleagues, reminding them that driving safety is not a matter of luck but depends on their own vigilance.

2023 Traffic Safety Online and Offline Promotion

Emergency Response Management

Fire prevention is the top priority for business operations. For emergency response, Moxa conducts self-defense fire squadron training and evacuation drills every six months. Due to the Xinzhuang headquarters being on high floors, special attention was given during fire safety and response team training to the two main teams: the "Evacuation Guidance Team" and the "Safety Protection Team." The main task of the evacuation guidance team is to "shout out and guide" colleagues in front of the escape elevators for safe evacuation. The main task of the safety protection team is to be responsible for the evacuation. Control the use of smoke gates and elevators to prevent the spread of fire and ensure smooth escape routes.

Demonstration Videos

Onsite Demonstration

Evacuation Guidance Team Provide On-site Assistance

During the first half of 2023, it was observed that team members were unclear about their roles and responsibilities during drills. As a result, post-drill corrective measures were developed, including the creation of demonstration videos and on-site practical drills. The training videos featured employees demonstrating scenarios and explaining each role's tasks in detail. During the practical sessions, participants were led to the drill area after the course explanation to practice and undergo random testing. By the second half of 2023, it was observed that team members were able to promptly and accurately reach their designated positions and fully perform their assigned roles, resulting in smoother and faster emergency response processes. All employees successfully conducted evacuation drills.

In 2023, Moxa completed 17 plant evacuation drills and training sessions, with a total of 2,569 participants. Additionally, due to the presence of a logistics warehouse and kitchen at the Bade plant, focused fire drills were conducted in these areas. Scenarios simulating potential fire incidents were developed for each area, allowing team members to engage in practical exercises to enhance their emergency response capabilities and reduce the likelihood of confusion in actual emergencies.

2023 Emergency Drill and Training Statistics

Training items	Location	Content	Drills and Training Sessions	Completion Rate
Drill	i-Tower	Evacuation drill	2	570
	HonHui Plaza	Evacuation drill	2	1,232
	Bade Plant	Evacuation drill	2	469
	Bade Plant	Fire simulation in the charging area	1	12
	Bade Plant	Kitchen fire simulation	1	7
Training	i-Tower	Group training	2	53
	HonHui Plaza	Group training	2	129
	Bade Plant	Group training	2	91
	HonHui Plaza	FM200 Automatic Fire Protection System Education and Training	1	6
Total			17	2,569

Evacuation Drill Of The Bade Plant

Charging Area Simulation At The Terminal

Kitchen Oven Fire Simulation

Fire Extinguisher Hands-On Drill

Fire Hose Operation

FM200 Automatic Fire Protection System Training

Contractor Occupational Safety and Health Management

Moxa values contractor collaboration and hopes to leverage our influence to help them raise their safety awareness and effectively control the quality of their contractors. Moxa has established the "Instruction on Contractor Management", which outline the safety and health requirements of contractors to ensure their safety and health management capabilities and prevent occupational injuries. Additionally, Moxa incorporates relevant safety and health requirements into its contract specifications. Before commencing work on-site, all contractor personnel must complete an online "Contractor Site Hazard Awareness Training" course and sign in. Moxa's supervisors or managers confirm completion before allowing site entry. This training ensures that contractor personnel understand site-specific regulations to maintain safety during operations. In 2023, Moxa successfully completed training for 81 contractor personnel.

Furthermore, Moxa regularly holds agreement organization meetings to reiterate site requirements and discuss recent occupational injury cases. Currently, 77 contractors are part of the agreement organization. Moxa aims to improve contractor safety and health management by leveraging larger contractors to mentor smaller ones, thereby fostering a robust management system among contractors.

To ensure contractor safety across various types of construction work, Moxa classifies construction activities into general operations and high-risk operations. High-risk operations include activities such as hot work, elevated work, lifting, confined space, and fire protection systems. Contractors are required to submit a "Construction Safety Plan" before starting work to ensure safety during operations. In 2023, there were a total of 269 construction applications, of which 25 were high-risk operations, accounting for 9.3%. All these operations were completed safely through close collaboration between Moxa and the contractors.

Entry Hazard Safety Online Training   Entry Hazard Safety Online Training

Occupational Safety and Health Education and Training

To ensure that every employee is familiar with local safety and health regulations and Moxa's operational safety standards, safety and health training courses have been planned. In 2023, a total of 1,840 employee participants attended safety and health training courses, accumulating over 2,596 hours of training. Additionally, 81 contractors participated in training, with a total of 40.5 hours of instruction. Beyond formal training, monthly EHS e-newsletters are issued to enhance employee safety awareness and improve safety and health concepts, aiming to prevent occupational accidents. In the future, e-Learning courses and other training programs will be developed to further build a strong safety culture among employees.

2023 Occupational Safety And Health Education and Training

	Course Items	Number of trainees	Training hours (hour)	Number of training hours (person-hours)	Participants
Employees	• New Employee General Safety and Health Training	327	3	981	New employees
	• Labeling, and Educational Training on Hazard Communication	45	3	135	Personnel using chemicals
	• Hazard Identification And Risk Assessment Training	25	1.5	37.5	EHS seed members
	• Electricity Safety Training	25	1	25	EHS seed members
	• Traffic Safety Training	55	1	55	Relevant employees
	• Workplace Unlawful Infringement	1,363	1	1,363	All employees
Contractors	• Hazard Communication Training	81	0.5	40.5	Contractors

Future Outlook and Goals

Moxa is dedicated to providing a safe and healthy work environment for all employees and partners. The focus is on continuously optimizing management systems, strengthening safety awareness among seed members, and building a safety culture through training. The goal is to achieve a zero-accident and create a comfortable, safe workplace.

Occupational Safety and Health Management Goals

Near-Term ———————— Mid-Term ———————— Long-Term

Near-Term
- Continuously Optimize Occupational Safety And Health Management System
- Establish Safety And Health E-learning Courses
- Reduce The Incidences Of Traffic Accidents

Mid-Term
- Enhance Employee Training And Promote Safety Awareness

Long-Term
- Accumulate Record of Zero Occupational Injury Hours
- Strengthen Employee Safety Culture
- Create A Friendly Workplace

5.5 Social Enagement

5.5.1 Social Engagement Strategy

The MOXA Foundation (hereafter referred to as the Foundation) was fully funded and established by Moxa in 2003. Guided by the philosophy of "people-oriented, starting from the heart," the Foundation leverages the collective strength of corporate volunteers, combining compassion and resources to enhance the quality of education for the next generation. By promoting natural ecology education programs, providing long-term support for rural children, and offering capacity-building courses for frontline teachers, the Foundation deepens understanding and care for the local environment and society. This approach amplifies the impact of volunteers, collectively giving back to society while improving the quality of life, spirit, and work for the volunteer community.
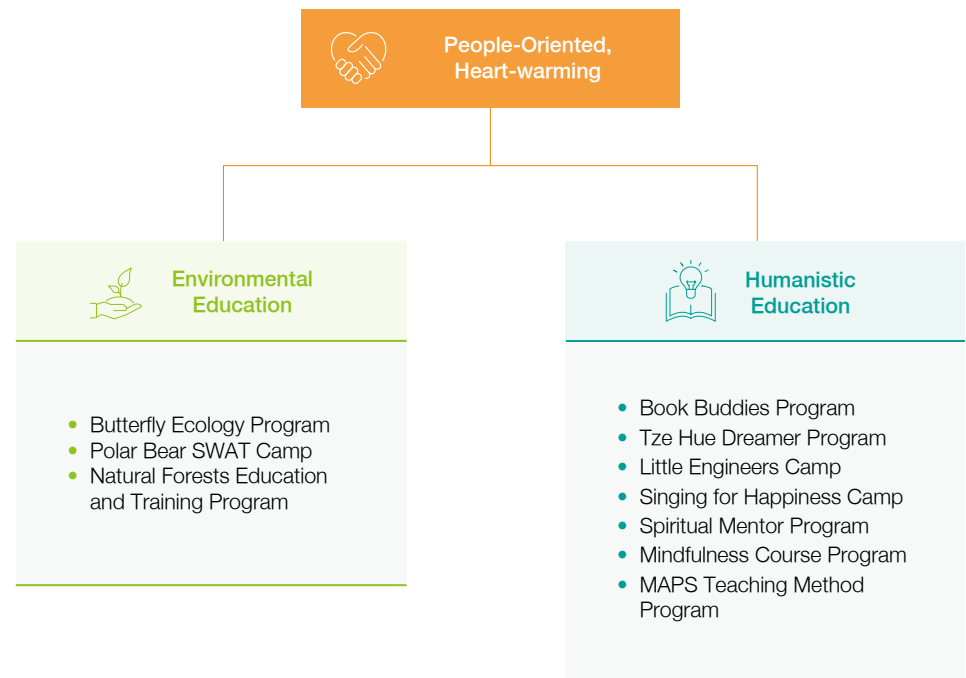
The programs promoted by the foundation are centered on "Environmental Education" and "Humanistic Education". It works closely with schools to support the learning and growth of rural and disadvantaged children and provides capacity-building courses for teachers. These two main pillars encompass six volunteer camps and four course programs, totaling ten key activities.

To embody the "people-oriented, starting from the heart" philosophy, the Foundation harnesses the collective power of Moxa's corporate volunteers. Through the compassion and actions of Moxa volunteers, various service activities are planned. These activities act as catalysts to gather like-minded partners and design diverse courses to serve schools, all aimed at improving the quality of education for the next generation.

Moxa volunteers are proactive and enthusiastic, forming groups to participate in services and consistently dedicating long-term efforts to assist rural and disadvantaged students. They inspire children through reading, fostering independent thinking and self-expression, and establish reading habits and critical thinking skills through various themed activities. Volunteers use their expertise to plan programming courses that develop problem-solving abilities and thinking skills in students. Through music, they convey love and care, collaborating with children to perform concerts, creating opportunities for them to build a sense of achievement. For disadvantaged students from dysfunctional families, Moxa volunteers provide long-term companionship and care, offering a rich variety of services and hiring professional psychologists to conduct group counseling sessions, allowing students to explore themselves from different perspectives and bravely pursue their dreams.

In terms of environmental education, Moxa volunteers use experiential activities to connect children with the land and environment. Through educational inheritance, they promote environmental improvement, striving to leave a better living environment for the next generation. Moxa encourages employees to give back to society through concrete actions, offering each employee 32 hours of paid volunteer leave per year. Additionally, it encourages managers and employees to form cross-departmental teams to participate in public service together. In 2023, the volunteer team conducted 105 volunteer activities, benefiting over 3,800 people.

MOXA Foundation Programs

People-Oriented, Heart-warming

Environmental Education

- Butterfly Ecology Program
- Polar Bear SWAT Camp
- Natural Forests Education and Training Program

Humanistic Education

- Book Buddies Program
- Tze Hue Dreamer Program
- Little Engineers Camp
- Singing for Happiness Camp
- Spiritual Mentor Program
- Mindfulness Course Program
- MAPS Teaching Method Program

2003

Butterfly Ecology Program

The "Butterfly Camp" is one of the earliest volunteer camps established by the Moxa Volunteer Team. It aims to create opportunities for children to connect with the land and ecological environment through experiences, sharing, and educational activities.

2016

Polar Bear SWAT Camp

To promote beach cleanup activities and environmental education programs in schools, conveying and practicing environmental conservation concepts to ensure a better living environment for publics and future generations.

2018

Mindfulness Course Program

The goal is to help teachers learn to take care of their own mental and physical well-being through "mindfulness." By doing so, teachers can effectively apply these practices to students, enhancing student focus, reducing anxiety and depression, and minimizing interpersonal conflicts and problematic behaviors.

2023

Natural Forests Education and Training Program

For elementary school teachers who are interested in outdoor education but lack wilderness skills, a two-year mountain forest program is offered. This program aims to develop their abilities in exploring outdoor biological resources and designing teaching activities, enabling them to guide students outside the classroom.

2004

Book Buddies Program

Empowering Moxa volunteers to leverage their influence, this initiative aims to inspire children through reading, fostering their independent thinking and self-expression skills. Additionally, through diverse thematic activities, it helps establish reading habits and enhances children's critical thinking abilities.

2008

Tze Hue Dreamer Program

Caring for the disadvantaged students at Pingxi Junior High School, this program aims to support these vulnerable children through long-term companionship and care from volunteers, helping them courageously pursue their dreams.

Spiritual Mentor Program

This program trains teachers within schools to become "Mindfulness Mentors" for children and adolescents, with the goal of further promoting "Positive Education" throughout the campus.

MAPS Teaching Method Program

By strengthening teachers' application of reading instruction strategies to enhance their classroom reading practice skills, enabling students to better prepare for the future.

2019

Singing for Happiness Camp

By recruiting Moxa volunteers passionate about music, this program aims to utilize their musical talents to convey love and care to the elderly, disadvantaged groups, and children in rural areas.

Little Engineers Camp

Leading disadvantaged children in programming instruction activities, inspiring interest in programming through guided teaching, and developing problem-solving skills and critical thinking.

5.5.2 Social Engagement Impact

Highligh 1: Butterfly Ecology Program

Volunteers design and implement engaging butterfly ecology courses, guiding students through real-life butterfly observations to learn to notice and appreciate the beauty of nature, thereby creating opportunities to connect with the land and ecological environment.

Program Introduction

The Foundation began promoting butterfly ecology education in 2003, assisting 49 elementary schools in the five major cities to establish on-campus butterfly gardens and advance butterfly ecology education. However, the Foundation aims not only to invest resources but also to make a tangible impact through employee involvement and experience sharing.

Therefore, the Moxa Volunteer Team, comprising employees interested in ecology, formed the Butterfly Camp to promote butterfly ecology education in elementary schools. The core team designs hands-on observation courses, recruits volunteers to conduct butterfly ecology education at Tur Ya Kar Elementary School and Shalun Elementary School, and helps maintain the on-campus butterfly gardens, serving as a base for butterfly ecology education. This initiative creates opportunities for children to connect with the ecological environment.

The butterfly garden at Shalun Elementary School, established by the Foundation in 2003.

Conduct teaching activities in the herbivorous plant area at Shalun Elementary School

2023 Outcomes

- A total of 61 volunteers participated, providing a total of 241 hours of service.
- Assisted the school in completing 8 ecology courses, benefiting a total of 238 students.

Social Impacts

- Students' interest in natural ecology has significantly increased, with the butterfly ecology course designed by Moxa volunteers becoming one of the most anticipated classes.
- Through the course training, students are more inclined to engage with nature.

Highlight 2: Polar Bear SWAT Camp

Volunteers designed and implemented marine education courses and led the students in beach cleanup activities, allowing them to experience the issue of marine debris firsthand. Internally, the company promotes and practices green living, actively protecting the environment.

Program Introduction

Through beach cleanups and marine environment courses, students at Rui-Bin Elementary School have become more aware of marine environmental issues. In class, they can clearly explain the sources of marine debris and the harm it causes to wildlife. After the courses, volunteers accompany students to the North Coast for beach cleanups, allowing them to engage with marine environmental issues through hands-on activities. Additionally, large-scale beach cleanup events are organized, leading volunteers to the North Coast to collect marine debris. These events are aligned with New Taipei City's "Beach Cleanup Cooperative" policy, gathering experienced volunteers for small-scale cleanups in difficult-to-access areas and discussing related issues after the cleanups.

Moxa employees, influenced by the Polar Bear SWAP Camp long-term promotion of green living actions, have gradually increased their environmental awareness. To encourage green consumption practices, the Foundation designed a survey in 2023 to identify environmentally friendly businesses around the company. These businesses were then introduced to employees, encouraging them to support these establishments when needed.

Beach cleanup with children of Rui-Bin Elementary school

2023 Moxa Beach Cleanup

2023 Outocmes

- A total of 84 volunteers participated in beach cleanups and campus education promotion activities, with a total service hours of 428 hours.
- A total of 93 students benefited from the courses and beach cleanup activities.
- A total of 232 kg of marine debris was removed from the beach.

Social Impacts

- Through the courses and beach clean-up activities, students have become more aware of ocean waste issues. After multiple sessions, students' knowledge about ocean environmental issues has significantly improved.
- Achieved tangible positive impacts on the environment through beach cleanup activities.
- Employees have become more awareness on sustainability issues and are actively taking green actions, such as reducing plastic use in daily lives.

Highlight 3: Natural Forests Education and Training Program

Managed Moxa Forest in Beipu as an ecological education and environmental protection base, with progressive short-, medium-, and long-term goals.

Program Introduction

In 2023, the foundation leased a piece of forest land, "Moxa Forest" in Beipu Township, Hsinchu County, Taiwan, as an ecological education base. Moxa volunteers organized "Forests Volunteer Actions" and "Ecological Workcations" to create an environment suitable for ecological teaching and wildlife habitation. Additionally, the Foundation collaborated with ecological experts for field surveys and infrared camera monitoring to assess the forest's ecological condition, gather educational resources, and track ecological changes. Moxa volunteers will continue to actively engage in environmental maintenance and prepare for short-, medium-, and long-term natural forest education programs.

- **Short-term goal:** To create an excellent teaching environment, organize a series of natural education courses, and and train forest education teachers with expert instruction.
- **Medium-term goal:** Continue to provide training courses and allow trained teachers to bring their classes for field trips to Moxa Forest.
- **Long-term goal:** Open Moxa Forest to schools nationwide for ecological education and foster community partnerships to extend its impact.

Moxa Forest volunteer actions

Ecological workcations

2023 Outcomes

- Organize three Moxa Forest environmental maintenance volunteer activities to assist with planting native species, clearing trails, and removing invasive plants like Mikania micrantha.
- A total of 28 volunteers participated, providing a total of 140 hours of service.

Social Imacts

- Ecological conservation and environmental monitoring in the Moxa Forest have identified protected species such as the Leopard Cat, Crab-eating Mongoose, and Taiwan Hill Partridge.
- Enhancing teachers' capabilities through Natural Forests Education Training Programs, and subsequently fostering a passion for nature and concepts of ecological conservation in every child.

Highlight 4: Book Buddies Program

Providing stable and long-term companionship, designing diverse activities to cultivate the learning, thinking, and expression abilities of rural students, enriching educational resources in rural elementary schools, and injecting more vitality and hope into rural education.

Program Introduction

Due to the numerous challenges faced by rural students, including a shortage of educational resources, imbalances in learning abilities, and limited learning opportunities, long-term companionship can provide a stable support system to help students overcome these obstacles. In the summer of 2018, Moxa volunteers began a long-term companionship service at Rui-Bin Elementary School, conducting three sessions every Wednesday afternoon.

At Rui-Bin Elementary School, the long-term companionship provided by Moxa volunteers is not only a form of support but also an inspiration. Through academic tutoring and the design of various themed activities, along with timely reading activities, students are able to explore, engage in hands-on practice, and experience diverse learning opportunities, thereby acquiring different knowledge and broadening their horizons. Moxa volunteers offer emotional support and encouragement, allowing students to feel cared for and valued.

Hsing-Yuan Chen, the director of the Counseling Division at Rui-Bin Elementary School, stated that the courses provided by Moxa volunteers are well-planned and designed, integrating learning into games. This approach brings diverse and rich resources to the children, including new perspectives, insights, and wisdom. It also allows children to demonstrate their inspired energy throughout the activities.

Popular science activities

Picture book reading activities

2023 Outcomes

- A total of 212 volunteers participated, providing a total of 1,060 hours of service.
- Approximately 60 students have benefited.

Social Impacts

- Through activities, subtly influence and change rural students, giving them more courage to face challenges.
- Design of life-oriented activity themes to compensate for the lack of life experiences among rural students.
- Enhance rural students' learning experiences through exploratory and experiential activities.
- Establish rural students' spirit and attitude of self-discipline through well-planned activities.

Highlight 5. Tze Hue Dreamer Program

Through diverse activities, volunteers accompany disadvantaged students at Pingxi Junior High School. Professional psychologists are also invited to the school to conduct psychological group counseling sessions, allowing students to explore themselves from different perspectives and encouraging them to bravely pursue their future dreams.

Program Introduction

In 2008, the Foundation launched the Tze Hue Camp, primarily targeting disadvantaged students from families with disabilities at Pingxi Junior High School. The program provides long-term companionship and care activities such as study groups, special lectures, sports exchanges, English immersion learning, visits to Moxa, and more. It also offers sponsorship for club funds, rewards for participating in off-campus competitions, three-year scholarships for high school and vocational school, and psychological group counseling sessions. These initiatives help these disadvantaged children develop a healthy self-concept, gain the courage and motivation to face life, create independent and self-reliant careers, and bravely pursue their dreams.

Reading club activities

English situational learning

2023 Outcomes

- A total of 222 volunteers, providing a total of 846 hours of service.
- Approximately 100 teachers and students have benefited.

Social Impacts

- Encourage students to believe that they can become capable individuals who can help others in the future.
- Help students successfully complete their high school education through scholarships.
- The long-term companionship of volunteers, combined with professional psychological group counseling sessions, helps stabilize students' mental and emotional well-being, allowing them to feel the societal love from Moxa.

Highlight 6: Little Engineers Camp

Using programming materials co-created by volunteers, children are guided to design their own stories and games with Scratch and unplugged courses. The hands-on nature of these courses inspires students' interest in learning and fosters their problem-solving skills and thinking.

Program Introduction

The Little Engineers Camp is the first camp initiated and promoted by employees of Moxa. Volunteers continuously refine the self-developed teaching materials and conduct programming lessons at Rui-Bin Elementary School. In 2023, for the first time, the camp collaborated with the Xinzhuang Social Welfare Center to hold one-day camps during winter and summer vacations, supporting disadvantaged children in Xinzhuang. The program includes Scratch courses and unplugged lessons, guiding children to design story animations and games. The aim is to inspire students' interest in learning through programming content and to cultivate their problem-solving skills and thinking.

One-day camp in Xinzhuang Social Welfare Center

Unplugged course

2023 Outcomes

- A total of 63 volunteers person-times, providing a total of 420 hours of service.
- Approximately 75 students have benefited.

Social Impacts

- Inspire students' interest in learning programming courses.
- Cultivate students' logical thinking and problem-solving skills and mindset.

Highlight 7: Singing for Happiness Camp

Plan music activities to convey the power of music, with the core spirit of service learning being "altruism," actively using music to connect with society and spread love.

Program Introduction

Formed by a group of Moxa volunteers who love music, the "Singing for Happiness Camp" believes that music can bring warmth and joy to people of all ages and backgrounds. The camp gathers Moxa partners passionate about music to accompany disadvantaged groups through music, illuminating lives and spreading love and joy. The volunteers serve elders, disadvantaged groups, and rural students. In 2023, music concerts were held at Rui-Bin Elementary School and the Chong-Ai Development Foundation for rural students and developmental delay children.

Rui-Bin Music Concert

Accompany rural students with music

2023 Outcomes

- A total of 37 volunteers person-times, providing a total of 136 hours of service.
- Approximately 150 students and disadvantaged groups have benefited

Social Imapcts

- Provide the stage for students and assist them in completing performances to enhance their sense of achievement.
- Use music to ignite joyful emotions in disadvantaged groups, showcase friendly and caring emotional exchanges, embody the beauty of music, generate positive influence, and bring emotional and joyful experiences to people.

Highlight 8: Spiritual Mentor Program

Based on Adlerian psychology, a series of courses is planned to train elementary school teachers in core strategies and techniques for classroom management, and to cultivate positive beliefs and skills in interacting with students, allowing "positive education environments" to take root in schools.

Program Introduction

Plan a 2-year training program consisting of 108 hours, integrating topics such as classroom management, child counseling, and parent-teacher communication to enhance teachers' counseling effectiveness. The goal is to help students develop self-confidence, build discipline, respect teachers, and follow community life. Additionally, provide ongoing education for participants who have completed the Moxa "Positive Education Environments" program, offering support for yearly continuation plans proposed by willing seed teachers. This assistance aims to localize counseling expertise and evolve the "Self-Learning Team" into a "Supportive Group." This approach allows members to continuously improve their counseling skills, enhance their abilities, and contribute to both the school and society.

Teachers actively participate in the Spiritual Mentor Program

On-site Spiritual Mentor Program

2023 Outcomes

- The total course duration is 54 hours, with seed teachers participating in over 48 hours of local teacher community group activities.
- Over 60 teachers have benefited, impacting more than 2,000 students.

Social Imapcts

- Transform teachers to cultivate student discipline and proactive learning through positive education methods, creating a win-win situation for both "teaching" and "learning" to achieve maximum effectiveness.
- Teachers learn to use mutual respect and collaboration to help children develop self-discipline and enhance learning effectiveness under gentle yet firm guidance.

Highlight 9: Mindfulness Course Program

The goal is to cultivate more seed teachers for mindfulness courses in elementary schools, with the hope that not only will more teachers benefit personally, but they will also promote mindfulness to students. This will enable students to develop better focus and the ability to manage emotional stress.

Program Introduction

Enable teachers to understand and apply mindfulness, learning mindfulness-based methods for physical and mental well-being, and integrate them into their teaching. Teachers will learn methods for mindfulness in campus teaching, core concepts, and lesson plan design to promote students' physical and mental health development. Through extensive practice, discussion, and revision, teachers will be assisted in self-care, deepening their foundational mindfulness concepts, and developing mindfulness training programs suitable for their own classrooms. This approach effectively enhances students' focus and emotional regulation skills. Group supervision and individual mentoring will be used to improve leadership abilities and facilitate mutual learning.

Assist teachers in learning the concept of mindfulness

Teachers lead students in experiencing mindfulness

2023 Outcomes

- The total course duration was 74 hours, benefiting 21 teachers.
- Approximately 1,030 students have benefited.

Social Impacts

- Enable teachers to learn how to use mindfulness for self-care and to develop the ability to lead students in experiencing mindfulness courses.
- Effectively reduce teachers' own stress and emotional issues while enhancing self-awareness, improving teacher-student relationships.
- Help students learn to use mindfulness techniques to stabilize their emotions and improve their focus in classroom learning.

Highlight 10: MAPS Teaching Method Program

The goal is to strengthen teachers' use of reading instruction strategies and enhance their practical knowledge of classroom reading teaching by understanding the content, significance, and procedures of the MAPS teaching method.

Program Introduction

Through hands-on beginner workshops and advanced courses on the MAPS teaching method, enable teachers to effectively help students learn how to learn, thereby equipping students with better skills to face the future.

Teachers actively participate in MAPS teaching method courses

Guide teachers in strengthening reading instruction strategies

2023 Outcomes

- The total course duration is 43 hours, benefiting 80 teachers.
- Approximately 1,600 students have benefited.

Social Impacts

- Teachers learn to use reading instruction strategies that enable students to become active learners, developing skills in thinking, questioning, and expressing themselves, and experiencing the beauty and power of learning.
- Teachers create an open and collaborative classroom environment where everyone benefits selflessly.

High-Concern Children Accompaniment Activities

In 2023, the Moxa Volunteer Team also attempted to recruit volunteers to serve high-concern children. Collaborating with Daxi Grass Book House, volunteers provided weekly services to accompany them through various activities. The children, who had experienced physical and emotional trauma, felt warmth through the volunteers' companionship, which also contributed to more stable learning conditions at school. In 2023, a total of 75 volunteer participations were recorded, contributing a cumulative 300 hours of service.

Appendix

About this Report

This report is the first sustainability report issued by Moxa and will be published annually in the future. In 2024, Moxa will set up a "Sustainability" section on its official website, aiming to allow stakeholders interested in Moxa to gain a better understanding of Moxa's efforts and achievements in sustainability through the sustainability report and the sustainability section.

Reporting Period and Scope

The information disclosure period for this report is from January 1, 2023, to December 31, 2023, covering Moxa's specific practices and sustainability performance data across economic, governance, social, and environmental aspects. The report includes data from Moxa's global locations. If any data does not encompass all global locations, the scope of disclosure will be noted in the relevant data statistics.

Reporting Guideline

This report has been referenced to the "Global Reporting Initiative (GRI) Standards 2021" and the "Sustainability Accounting Standards Board (SASB) standards".

Report Management Process

The content structure of this report is planned by the Environmental and Sustainability Management Department, which convenes a "Sustainability Report Editorial Task Force" with representatives from relevant departments. Each department is responsible for compiling and editing sustainability information and data. The completeness and accuracy of the content are initially reviewed by the department heads, then coordinated by the Environmental and Sustainability Management Department for further verification, editing, and revision. The finalized report is submitted to the "ESG Committee" for review and, upon approval, is published and disclosed.

Information and Data Quality

Financial Report	Deloitte Touche Tohmatsu Limited
Environmental Management	ISO 14001 : 2015 (bsi)
Greenhouse Gases	ISO 14064-1 : 2018 (bsi)
Product Carbon Footprint	ISO 14067 : 2018 (bsi)
Occupational Safety and Health	ISO 45001 : 2018 (bsi)
Information Security	ISO 27001 : 2013 (SGS)
Quality Management	ISO 9001 : 2015 (AFNOR)

Report Publication

Moxa publishes Sustainability Report on an annual basis

Current Version: Published in August 2024

Next Version: Published in August 2025

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Employee Diversity and Inclusion	TC-HW-330a.1	Percentage of gender and ethnic group represented by (1) management personnel (2) technical personnel and (3) all other employees.	No disclosure due to confidentiality constraints.
Product Life Cycle	TC-HW-410a.1	Percentage of Revenue from Products Containing Substances Disclosed in IEC 62474	No disclosure due to information unavailable /incomplete
	TC-HW-410a.2	Percentage of qualified products meeting EPEAT registry requirements or their equivalents (by revenue)	No disclosure due to information unavailable /incomplete
	TC-HW-410a.3	Percentage of qualified products meeting ENERGYSTAR® standards (by revenue)	No disclosure due to information unavailable /incomplete
	TC-HW-410a.4	Weight and recycling percentage of recycled scraps and electronic waste	Most products are B2B, and there are difficulties in collecting information.
Supply Chain Management	TC-HW-430a.1	Percentage of Tier 1 supplier facilities that passed the RBA Validated Audit Process (VAP) or its equivalent (a) for all facilities and (b) high-risk facilities	Moxa has not yet conducted the RBA Validated Audit Process (VAP) for 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 nonconformities and (b) other nonconformances	Moxa has not yet conducted the RBA Validated Audit Process (VAP) for suppliers.
Material Procurement	TC-HW-440a.1	Description of the management of risks associated with the use of critical materials	4.1.2 Sustainable Supply Chain Management
Activity Indicator	TC-HW-000.A	Quantity of Production Units by Product Category	No disclosure due to confidentiality constraints.
	TC-HW-000.B	Area where the production equipment is located	No disclosure due to confidentiality constraints.
	TC-HW-000.C	Percentage of production at own facilities	No disclosure due to confidentiality constraints.

MOXA

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