



2024

Environmental, Social, and Governance (ESG) Report
Quectel Wireless Solutions Co., Ltd.

About This Report

The Report is the second Environmental, Social, and Governance (ESG) report published by Quectel Wireless Solutions Co., Ltd. for its stakeholders. It provides a detailed disclosure of the Company’s practices and performance in areas such as economic, environmental, social, and corporate governance responsibilities during 2024. The Report aims to facilitate effective communication with stakeholders and systematically respond to their expectations and requirements. The content of this report shall be ultimately governed by its Chinese version.

🕒 Reporting Period

The Report covers a period from January 1, 2024, to December 31, 2024. To enhance comparability and completeness, certain information may extend beyond this timeframe.

🔄 Reporting Scope

The Report covers Quectel Wireless Solutions and its subsidiaries, and discloses information on the Company’s economic, social, and environmental responsibilities, along with exemplary cases.

📄 Reporting Standards

Global Reporting Initiative (GRI) Standards 2021

United Nations Sustainable Development Goals (SDGs)

Rules Governing the Listing of Stocks on Shanghai Stock Exchange

Guidelines No. 1 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Standardized Operation

Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial), hereinafter referred to as the “Guidelines”

Guidelines No. 4 of Shanghai Stock Exchange for Self-regulation of Listed Companies—Sustainability Report Preparation

Chinese Academy of Social Sciences - General Framework of the China Corporate Sustainability Reporting Guidelines (CASS-ESG 6.0)

📖 Terminology and References

For ease of reading, the following abbreviations are used in this report:

Abbreviation	Full Name / Business Segment
Quectel Wireless Solutions, Quectel, the Company, We	Quectel Wireless Solutions Co., Ltd.
Quectel Changzhou	Quectel Telecom Technologies Changzhou Co., Ltd.
Hefei Yirui	Hefei Yirui Communication Technology Co., Ltd.
Quectel Guangdong	Quectel Telecom Technologies Guangdong Co., Ltd.
Quectel Guilin	Quectel Telecom Technologies Guilin Co., Ltd.

📄 Information Sources

The information disclosed in the Report is sourced from Quectel’s official internal documents, statistical reports, and financial statements. The data presented is derived from Quectel’s actual operations, annual financial data, internal statistical reports, third-party surveys, and third-party evaluations and interviews. The Company guarantees that the Report contains no false records or misleading statements and is fully responsible for its authenticity, accuracy, and completeness. All amounts involved in this report shall be uniformly settled in Renminbi (RMB).

📄 Access to the Report

The Report is available in electronic format. You can access the report on our official website (<https://www.quectel.com.cn/>) or on the Shanghai Stock Exchange website (www.sse.com.cn). For any questions or suggestions regarding the Report, please contact us via email at yiyan@quectel.com or call +86 21-51086236-6778.



Message from Our Chairman



As technological advancements surge forward and market dynamics continue to evolve, Quectel remains at the forefront of the industry as a global leading provider in comprehensive IoT solutions, and is committed to presenting customers with advanced integrated digital intelligence solutions. We recognize that in this era of transformation, customers have heightened expectations for product security, energy conservation, environmental protection, and innovation. With an unwavering commitment to excellence and a strong sense of responsibility, we continue to expand our business landscape, driving innovation to achieve sustainable development and win-win cooperation.

In terms of product research and development (R&D) and digital intelligence, we adapt proactively to market demands, stay at the forefront of industry trends, and drive sustainable innovation. We have established a product portfolio rooted in our core offerings while fostering synergy across diversified business segments. Leveraging advanced algorithms, we deliver customized digital intelligence solutions to our customers. Since our inception, product security and reliability have been our top priorities. We have consistently strengthened our compliance mechanisms to ensure superior product quality. Our modern manufacturing facilities integrate lean, automated, and digital production philosophies, optimizing resource allocation, enhancing automation, effectively reducing waste, and significantly improving

efficiency—laying a solid foundation for sustainable growth. In 2024, we were honored with numerous industry accolades, including the Global Ecosystem Partner Award, Best Innovation Solution Award, and AI Innovation Application Award.

In terms of talent development and employee well-being, we embrace a people-centric philosophy, valuing the contributions of our workforce and providing extensive career development opportunities and diversified incentive mechanisms. We emphasize employee growth by investing significant resources in training, achieving the total training hours for employees reached 280k hrs in 2024, fostering mutual development between employees and the Company. We regularly organize a variety of employee engagement activities and well-being programs, and establish multi-channel communication platforms that encourage employees to contribute ideas and suggestions for the Company's growth.

We remain deeply committed to corporate social responsibility, and steadfast in our mission to give back to society. We actively participate in public welfare initiatives and volunteering activities, with a particular focus on supporting vulnerable groups. In 2024, we donated 3,449 items to Shatou Town Primary School in Wuzhou City, Guangxi Province, and provided grants to Guilin University of Electronic Technology, contributing to education development and growth through concrete actions.

In response to environmental and climate challenges, we are dedicated to sustainable development, striving to minimize the environmental impact of our operations and safeguard ecological resources. In 2024, we conducted clean production audits, installed distributed photovoltaic systems, organized promotional campaigns on environmental protection, and implemented energy transition and low-carbon operational strategies. We continuously refine our environmental management system, rigorously comply with laws and regulations, and enhance environmental monitoring and governance to ensure green and compliant production.

Looking ahead, guided by customer needs and driven by technological innovation, we will continuously refine and enhance our products and services. We will deepen collaboration and exchange with partners across sectors, jointly driving the thriving development of the industry, while upholding our corporate social responsibilities, contributing to a greener, more efficient, and intelligent future. We sincerely appreciate your continued support and trust in Quectel. Let us join hands to forge a brilliant future together!

Quectel Wireless Solutions Co., Ltd.
Chairman&CEO | Penghe Qian

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QUECTEL

Quectel: Empowering a Connected World with Ambitions

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About Us

Company Profile

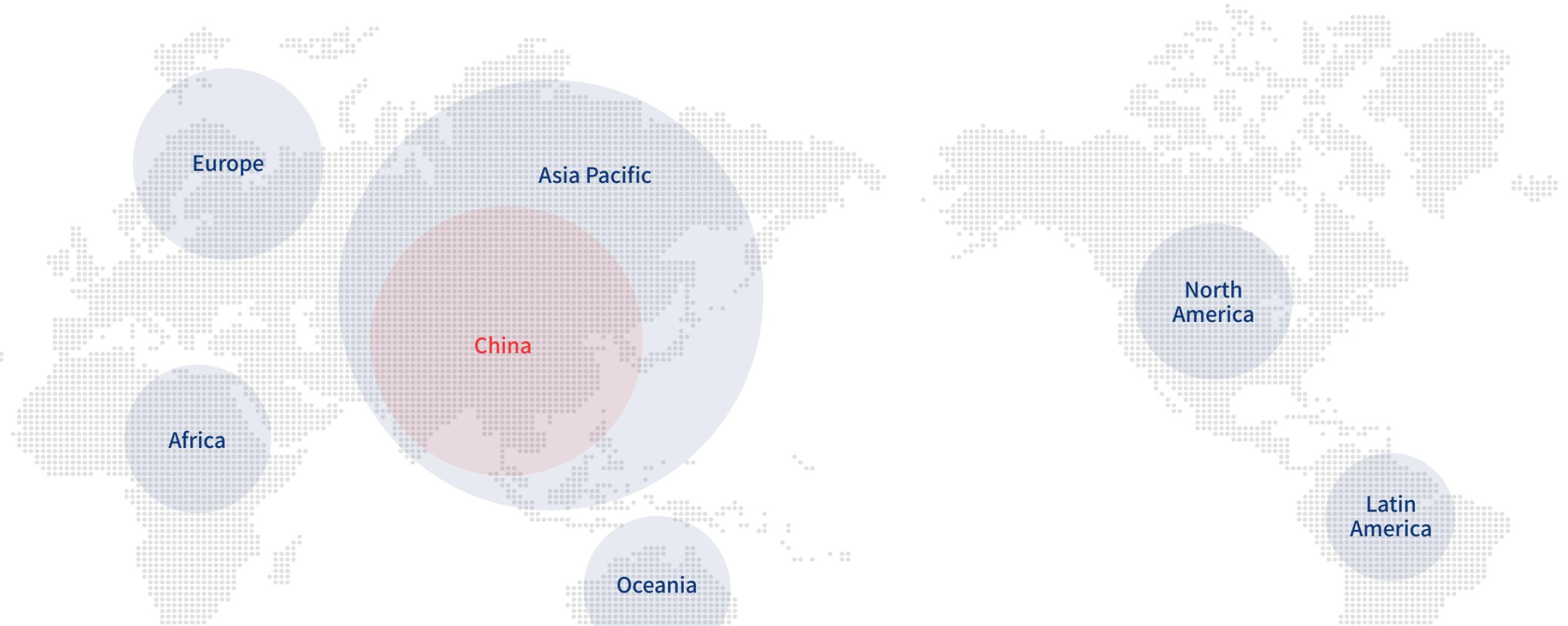
Quectel Wireless Solutions Co., Ltd., established in 2010 in Shanghai, is a global leading provider in comprehensive IoT solutions. The Company offers a comprehensive portfolio of IoT products and services, including cellular modules (5G/4G/3G/2G/LPWA), OEM in-vehicle modules, smart modules (5G/4G/edge computing), short-range communication modules (Wi-Fi & Bluetooth), GNSS positioning modules, satellite communication modules, and antennas. In addition to hardware, we provide services and solutions such as software platform services, certification and testing, industrial intelligence, and agricultural intelligence. With extensive industry experience, our products are widely applied in smart transportation, smart energy, financial payment systems, smart cities, wireless gateways, smart agriculture and environmental monitoring, smart industry, smart living and healthcare, and intelligent security.



We boast eight R&D centers worldwide, located in Shanghai, Hefei, Foshan, Guilin, Wuhan, Penang (Malaysia), Belgrade (Europe), and Vancouver (North America). We also have over 50 global sales centers, more than 90 sales partners, and over 5,800 employees, serving more than 7,000 customers worldwide.



Quectel's Global Locations



China

Headquarters in Shanghai

- Beijing
- Changsha
- Chengdu
- Chongqing
- Foshan
- Fuzhou
- Guangzhou
- Guilin
- Hangzhou
- Hefei
- Huizhou
- Jinan
- Kunming
- Nanjing
- Ningbo
- Qingdao
- Shenzhen
- Shenyang
- Suzhou
- Wuhan
- Xi'an
- Zhengzhou
- Zhongshan

Europe

- Czech Republic
- Denmark
- France
- Ireland
- Serbia
- Slovenia
- Spain
- Switzerland
- The Netherlands
- Turkey
- Germany
- Italy
- Poland
- U.K.
- Sweden

Africa

- South Africa
- Egypt

Asia Pacific

- Australia
- India
- Indonesia
- Israel
- Japan
- South Korea
- Malaysia
- Pakistan
- The Philippines
- Singapore
- Thailand
- Vietnam

North America

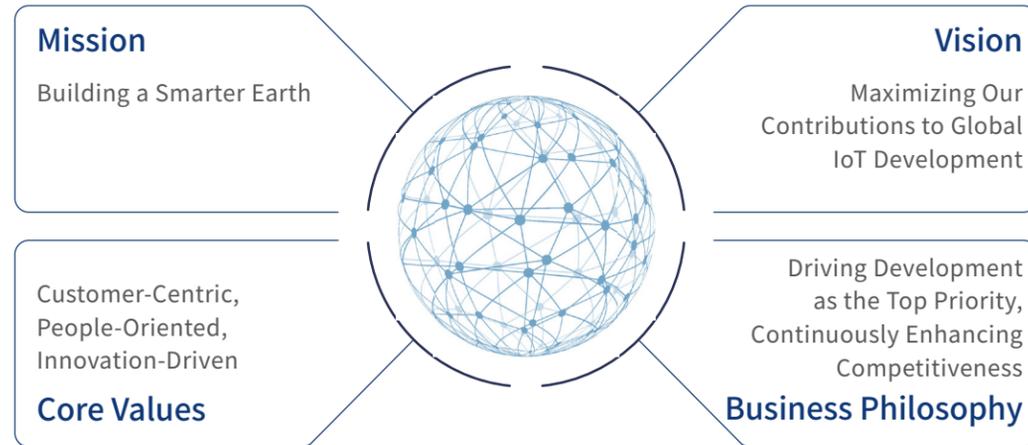
- The U.S.
- Canada

Latin America

- Argentina
- Brazil
- Mexico

For reference only. Not an actual map.

Our Culture

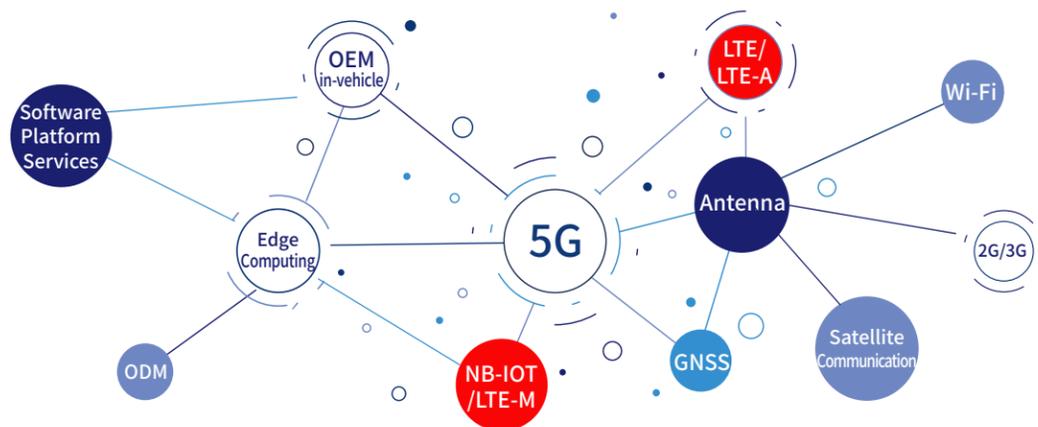


Our Business

Quectel specializes in the design, R&D, manufacturing, and sales of IoT wireless communication modules and IoT solutions, offer one-stop IoT solution encompassing wireless communication modules, antennas, and IoT software platform services. With a diverse product portfolio and comprehensive functionalities, we meet various needs of smart terminal markets. Our products can be widely applied in smart transportation, smart energy, financial payment systems, smart cities, wireless gateways, smart agriculture and environmental monitoring, smart industry, smart living and healthcare, and intelligent security.

World-Leading R&D Capabilities

Creating an Industry-Leading Portfolio of Module Products



- Focusing on the module market segment, providing one-stop IoT solutions centered around modules
- Leading innovations in products and technological innovations such as 5G, LPWA, smart modules, C-V2X, and satellite communication modules
- Global R&D Network with Eight Centers (Shanghai, Hefei, Foshan, Guilin, Wuhan, Vancouver, Belgrade, and Penang)

Our Products and Services

<p>Cellular communications</p> <ul style="list-style-type: none"> ○ 5G ○ 4G ○ LPWA ○ 3G/ 2G 	<p>Automotive</p> <ul style="list-style-type: none"> ○ 5G/ 4G ○ C-V2X ○ GNSS ○ Smart cockpits ○ Wi-Fi/ Bluetooth 	<p>Smart module</p> <ul style="list-style-type: none"> ○ 5G ○ 4G ○ Edge computing 	<p>Wi-Fi/ Bluetooth</p> <ul style="list-style-type: none"> ○ Wi-Fi 7 ○ Wi-Fi 6E ○ Wi-Fi 6 ○ Wi-Fi 5 ○ Wi-Fi 4 ○ BT 5.x ○ Sub-G (LoRa/HaLow)
<p>GNSS</p> <ul style="list-style-type: none"> ○ DR positioning ○ RTK positioning ○ Fusion positioning ○ Timing ○ Dual frequency positioning ○ Single frequency positioning ○ Integrated antenna ○ IMU 	<p>Satellite communications</p> <ul style="list-style-type: none"> ○ 5G NTN ○ Proprietary protocol 	<p>Antenna</p> <ul style="list-style-type: none"> ○ Embedded antenna ○ External antenna ○ Cables and Antenna Accessories ○ Automotive antenna ○ mmWave antenna 	<p>Services and Solutions</p> <ul style="list-style-type: none"> ○ Software platform services ○ Certification and testing services ○ QuecRTK ○ Smart intelligence ○ Smart agricultural solutions

A rich product portfolio provides you with one-stop IoT solutions



Product Application Scenarios



01 Intelligent transportation

- o IoV
- o CVI
- o Vehicle tracking
- o Asset tracking
- o Ship tracking
- o Fleet management
- o OBD
- o DVR
- o UBI auto insurance



02 Smart energy

- o Electricity meters
- o Gas meters
- o Water meters
- o Thermal meters
- o Smart grid
- o Wind generators
- o Solar power generation
- o Charging piles



03 Payment

- o Wireless POS
- o Cash registers
- o ATM
- o Vending machines
- o Top-up machines



04 Smart city

- o Street lighting
- o Traffic lights
- o Sharing economy
- o Elevator monitoring
- o Smart parking
- o Parking meters
- o Toll collection systems
- o Digital indicator
- o Advertising boards
- o Smart bins
- o LED landscape
- o Lighting controls



05 Wireless gateways

- o DTUs
- o Consumers routers
- o Industrial routers
- o VOIP
- o Servers
- o Wi-Fi hotspots



06 Intelligent agriculture & environmental monitoring

- o Food traceability
- o Farmland monitoring
- o Farm irrigation
- o Farm management
- o Meteorological stations
- o Environmental monitoring
- o Wildlife protection



07 Intelligent industry

- o Industrial PDAs/ scanners
- o Industrial PCs
- o Industrial computers
- o Pipeline monitoring
- o Robots
- o Flowmeters
- o Industrial refrigeration
- o Indoor air detection
- o Water valves/ pump controls
- o UVA



08 Smart life & healthcare

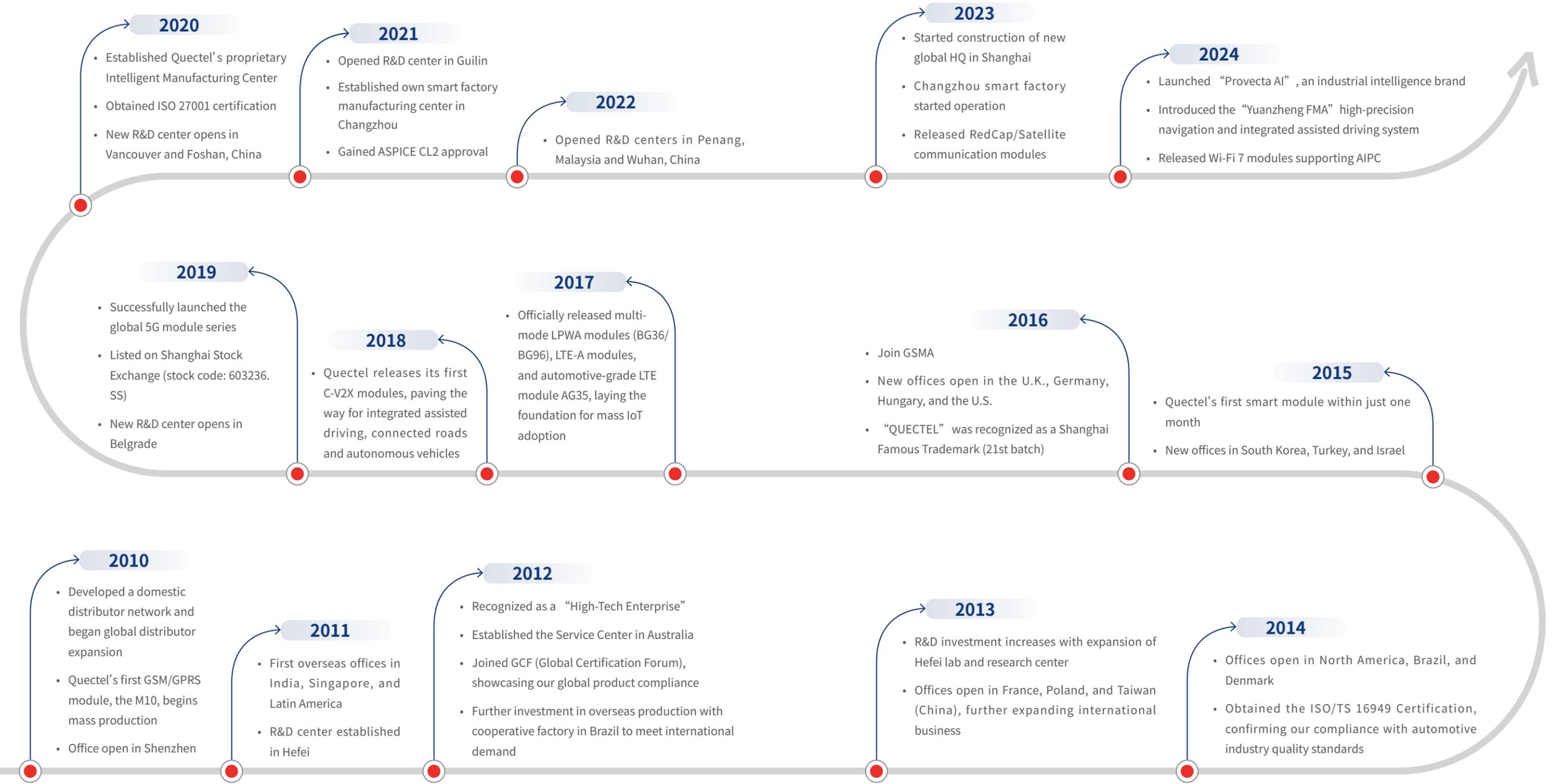
- o Personal trackers
- o Pet trackers
- o Wearables
- o Gaming consoles
- o Mobile PCs
- o Home automation
- o Elderly monitoring
- o Patient monitoring
- o Glucometers
- o Blood pressure monitors
- o Remote medical equipment



09 Smart safety

- o Alarms
- o Intrusion detectors
- o Smoke detectors
- o Gas detectors
- o Motion sensors
- o Asset protection

Our History



Honors in 2024



“2024 IoT Product of the Year Award” for Wi-Fi HaLow Module FGH100M



2024 CTTA Alliance Partner Market Performance Award – Gold Award for Pan-Smart Terminals
2024 Annual Excellence Award for Terminal Testing Quality



AIoT Xinwei Award – “Smart Leadership List and Outstanding Case List”



2024 6th Golden Award – China’s Top 100 New Automotive Supply Chain Companies and Best Global Expansion Practice Award



2024 “Global Ecosystem Partner Award” in the Automotive Supply Chain



2024 22nd IOTE Gold Award for Innovative Products



“Outstanding Component Supplier Award” of the China Agricultural Machinery Annual TOP50+ Awards



“2024 AIoT Innovative Technology Product Award” for High-Performance Intelligent Modules



2024 5G IoT Industry Leadership Award



2024 “New Quality Recommendation” Best Smart Edge Innovation Solution in the ICT Industry



AI Innovation Application Award for Industrial Intelligence Brand “Provecta AI”

ESG Performance Highlights

Economic Performance

Operating Revenue
RMB **18,594.06** million

Net Profit Attributable to Shareholders
RMB **588.22** million

Total Assets
RMB **12,980.19** million

Governance Performance

Visitors of Investors Received
87

Responses to e-Interactive Platform Inquiries
256

Female Representation on the Board
20%

Proportion of Female Managers
21.03%

Major Information Disclosure Violations
0

Social Performance

Total Employee Training Hours
279,778

Average Training Hours per Employee
58.6

Labor Contract Signing Rate
100%

Social Insurance Coverage
100%

Employees Receiving Our Assistance
81

Total Participants in Safety Training
3,878

Major Safety Incidents
0

R&D Investment
RMB **1.669** billion

Proportion of R&D Expenditure in Operating Revenue
8.97%

Proportion of R&D Personnel
71.04%

New Patents Granted in the Year
146

Supplier CSR Agreement Signing Rate
100%

Total Charitable Donations
RMB **0.8968** million

Beneficiaries of Our Charitable Contributions
1,824

Environmental Performance

Total Environmental Protection Investment
RMB **0.6444** million

Environmental Management System Certification
ISO14001 certified

Power Generation from Renewable Energy
432,000 kWh

Greenhouse Gas Emission Intensity
0.016 tCO₂e per RMB 10,000 of Revenue





QUECTEL

ESG Governance

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Sustainability Governance Framework

Quectel has established an efficient working mechanism, forming a sustainable development governance framework from top management to frontline employees. This structure effectively coordinates and responds to the demands of stakeholders, ensuring efficient and orderly ESG management operations.



ESG Decision-Making Body

Continuously drive the integration of ESG factors into daily operations as the highest decision-making body for ESG governance, approve and oversee ESG matters, strengthen ESG oversight functions, and ensure the effective implementation of ESG management strategies.



ESG Management

Responsible for the overall management and coordination of ESG-related work, the review and verification of ESG reports, provide recommendations on the formulation and execution of the Company's sustainable development plans and ESG-related initiatives, and ensure close communication and collaboration with stakeholders on ESG issues.



ESG Task force

The ESG task force, with heads of functional departments and subsidiaries as the execution team, assists the management in effectively implementing and advancing various ESG initiatives in daily operations.

Sustainable Development Management Mechanism

ESG Management Mechanism

To advance ESG governance effectively, the company has established a structured framework to periodically identify and systematically analyze environmental, social, and governance (ESG) risks and opportunities across operations. Cross-functional review sessions are convened with all departments and business units to assess material issues, followed by formal reporting to executive management. This enables agile optimization of sustainability-aligned management strategies, ensuring enterprise-wide integration of ESG practices into daily workflows and long-term decision-making.

ESG Information Reporting Mechanism

We continue to enhance our sustainability-related information governance framework, having established a preliminary structure where an ESG Task Force oversees daily data collection, analysis, and reporting. Moving forward, the preparation of annual sustainability reports will serve as the cornerstone for developing streamlined reporting mechanisms. Meanwhile, leveraging a dedicated ESG data aggregation platform, the company is implementing rigorous validation protocols to ensure transparency, accuracy, and completeness of disclosed information. This structured approach provides a robust foundation for advancing the organization's sustainability strategy while aligning with global ESG disclosure standards.

ESG Oversight Mechanism

The company has progressively established a structured governance framework to oversee the implementation of sustainability-related initiatives, focusing on role clarification and systematic daily oversight mechanisms. ESG-related performance metrics, such as environmental governance, pollutant emissions control, product quality assurance, supplier management, and customer satisfaction, are linked to the performance evaluations of relevant management personnel and teams across business units. We enforce a performance-based incentive and penalty system to recognize outstanding projects and individuals.

ESG Capability Enhancement

Quectel prioritizes ESG communication and professional skill development in sustainable development. Annually, we invite third-party organizations to conduct ESG training for our employees. In November 2024, Quectel commissioned an external professional organization to conduct internal ESG training, covering topics such as global and domestic ESG development trends, policy updates interpretations, and ESG indicator system development. The training was participated by more than 40 employees, who engaged in in-depth discussions on ESG priorities for different functional departments, effectively driving ESG implementation across all levels of the Company.

ESG Goals

Quectel has holistically integrated corporate social responsibility into our corporate development strategy. Throughout our growth journey, we prioritize close collaboration with stakeholders including suppliers and clients to achieve mutual benefits, and promote coordinated social, environmental, and economics progress across the industrial chain. In alignment with the United Nations Sustainable Development Goals (SDGs), we promote sustainability practices in governance, product quality, innovation-driven development, low-carbon operations, environmental protection, employee growth, digital intelligence development, and social contributions, continuously enhancing our ESG governance effectiveness.



Materiality Analysis

Double Materiality Analysis

Guided by the Double Materiality principle, we have identified and prioritized key issues based on our unique business model and operational status quo, as well as domestic and international sustainability disclosure standards, industry policy guidelines, and the key focus areas of authoritative rating agencies in the capital market such as MSCI. On this basis, we employ methods such as materiality surveys and in-depth one-on-one interviews with stakeholders to assess the importance of each issue from both its actual impact on business operations and its financial relevance. This ensures that we can focus on critical areas in our strategic planning and daily operations, driving sustainable development.



Stakeholder Communication

Quectel maintains sustained and proactive dialogue with stakeholders through robust communication mechanisms and diverse communication channels. The Company actively solicits and incorporates stakeholders' opinions and suggestions, and safeguards their rights to participate and be informed, thereby enhancing mutual understanding and fostering a shared sense of purpose aligned with our sustainability commitments.

Stakeholders	Key Concerns	Communication and Response
 Investors	Investment Returns Protection of Shareholder Rights and Interests Stable Performance Growth Information Disclosure Corporate Governance IPR Protection	Shareholders' Meeting Improving risk management Investor reception and communication Official website and announcements Investor hotline
 Regulators	Regulatory Requirements Tax Compliance Legal Publicity Business Ethics Responding to Development Policies	Cooperate with regulatory inspections Compliance with laws and regulations Daily Communication On-site Inspection Integrity
 Customers	Product Security and Quality Product R&D and Innovation Customer Services Customer Privacy and Security Digital Intelligence Development Smart Product Design	Customer service hotline After-sales service On-site communication Company mailbox Customer satisfaction survey Information security management
 Suppliers and the Industry	Contributing to the Development of Digital Intelligence Supplier Management University-Enterprise Cooperation Integrity and Reciprocity Business Ethics	Field visit surveys Responsible procurement and marketing Review and evaluation Cooperation agreements
 Employees	Remuneration and Benefits Protection of Rights and Interests Training and Career Development Mechanism Employee Care Democratic Management	Labor contracts Employee activities Feedback Training and activities Annual conference Opinion expression channels
 Community	Public Welfare Employment Promotion Rural Vitalization Smart Product Design	Official website Product R&D Local recruitment WeChat official account
 Media and the Public	Economic Performance Development Strategy Environmental Management Social Responsibility	Media interactions Disclosures WeChat official account Press conference

Conclusion of Materiality Assessment

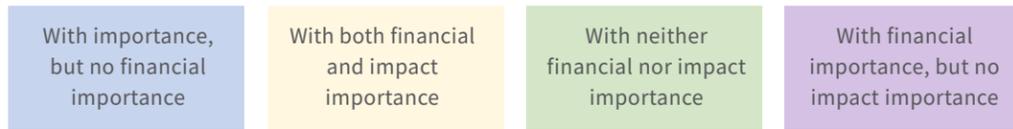
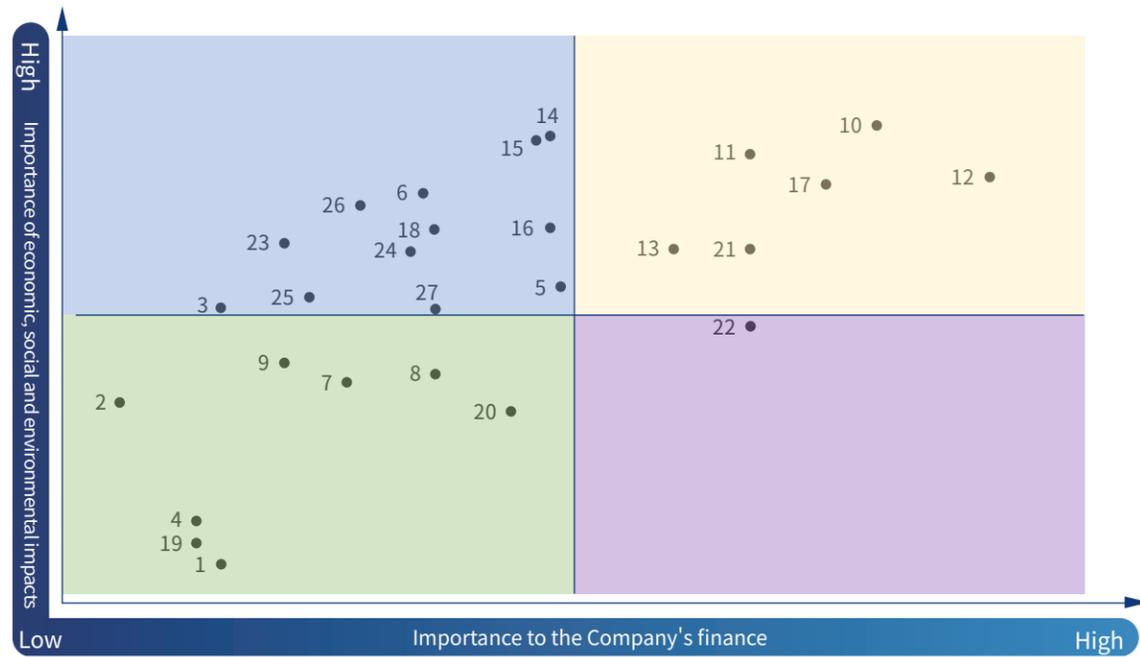
In 2024, the Company identified 27 material ESG issues based on policy benchmarking, industry analysis, and the 2023 ESG issues, including 9 environmental issues, 13 social issues, and 5 governance issues.

Issues in 2023	Issues in 2024	Change	Reasons for Change
—	Climate Change Response	New addition	Aligned with SSE Guidelines' 21 ESG issues
—	Pollutant Emissions	New addition	Aligned with SSE Guidelines' 21 ESG issues
—	Waste Disposal	New addition	
—	Ecosystems and Biodiversity	New addition	Aligned with SSE Guidelines' 21 ESG issues
—	Environmental Compliance Management	New addition	Aligned with SSE Guidelines' 21 ESG issues
Energy Conservation and Consumption Reduction	Energy Utilization	Adjustment	Some issues were modified and consolidated to better align with the industry's common expressions
—	Water Resource Utilization	New addition	Aligned with SSE Guidelines' 21 ESG topics
—	Circular Economy	New addition	Aligned with SSE Guidelines' 21 ESG topics
Green Office Green Products and Services	Green and Low-Carbon Operations	Adjustment	Some issues were modified and consolidated to better align with the industry's common expressions
Product Security and Quality	Product Security and Quality	—	—
Customer Service	Customer Service	—	—
Product R&D and Innovation	Innovation-Driven Development	Adjustment	Some issues were modified and consolidated to better align with SSE Guidelines' 21 ESG issues
IPR Protection			
Supplier Management	Supply Chain Management and Green Procurement	—	—
Employee Remuneration and Benefits	Employee Rights and Interests	—	—
Occupational Health and Safety	Occupational Health and Safety	—	—
Employee Training and Development	Employee Training and Development	—	—
Data Security and Privacy Protection	Data Security and Privacy Protection	—	—

Issues in 2023	Issues in 2024	Change	Reasons for Change
Industry Development	Contributing to Industry Development	—	—
—	Rural Vitalization	New addition	Aligned with SSE Guidelines' 21 ESG topics
—	Social Contributions	New addition	Aligned with SSE Guidelines' 21 ESG topics
Contributing to the Development of Digital Intelligence	Contributing to the Development of Digital Intelligence	—	—
Products and Designs to Improve Social Well-Being	Smart Product Design	—	—
Risk Compliance	Corporate Governance Compliant Operations	Adjustment	Some issues were modified and consolidated to better align with the industry's common expressions
Business Ethics and Anti-Corruption	Business Ethics and Anti-Corruption	—	—
—	Anti-Unfair Competition	New addition	Aligned with SSE Guidelines' 21 ESG topics
—	Protection of Investor Rights and Interests	New addition	Some issues were modified and consolidated



Assessment Results of Material Issues



Environmental Issues

- 1 Climate Change Response
- 2 Pollutant Emissions
- 3 Waste Disposal
- 4 Ecosystems and Biodiversity
- 5 Environmental Compliance Management
- 6 Energy Utilization
- 7 Water Resource Utilization
- 8 Circular Economy
- 9 Green and Low-Carbon Operations

Social Issues

- 10 Product Security and Quality
- 11 Customer Service
- 12 Innovation-Driven Development
- 13 Supply Chain Management and Green Procurement
- 14 Employee Rights and Interests
- 15 Occupational Health and Safety
- 16 Employee Training and Development
- 17 Data Security and Privacy Protection
- 18 Contributing to Industry Development
- 19 Rural Vitalization
- 20 Social Contributions
- 21 Contributing to the Development of Digital Intelligence
- 22 Smart Product Design

Governance Issues

- 23 Corporate Governance
- 24 Business Ethics and Anti-Corruption
- 25 Anti-Unfair Competition
- 26 Compliant Operations
- 27 Protection of Investor Rights and Interests

For issues with significant financial materiality, Quectel conducts in-depth analysis, respond to stakeholder expectations, identify potential impacts, risks, and opportunities. These findings are then systematically categorized and evaluated based on the unique attributes and characteristics of each issue, ensuring strategic prioritization and resource allocation.

Material Issues	Risk/Opportunity Impact Description	Financial Impact	Financial Impact Duration	Mitigation Measures
Product Security and Quality	Inadequate quality control of products and services may affect our reputation and may weaken our competitiveness in the market.	High	Short-, medium-, and long-term	Integrate procurement, R&D, production, sales, finance and other data to enhance execution and control capabilities in production and operations, continue to strengthen product production control, ensuring the growing demand for downstream orders, and providing global customers with products of reliable quality.
Customer Service	Customers increasingly shift toward green, low-carbon, and energy-efficient products. Failure to align product development with these evolving demands may result in losing market share and customer base, hindering long-term business growth.	Medium-high	Short-, medium-, and long-term	Establish a dedicated marketing and technical support team to enhance localized service capabilities in domestic and international markets. Strengthen collaboration with global telecom operators and chip suppliers to accelerate market expansion.
Innovation-Driven Development	Lengthy product development cycles, high capital investment, and complex, inconsistent hardware testing standards may lead to increased R&D costs.	High	Short-, medium-, and long-term	Continuously enhance technological innovation capabilities and invest in R&D and talent development; Develop new products based on market demand, optimize industrial collaboration, and refine our operational and management systems to strengthen brand value and competitiveness; Ensure fast growth in wireless communication modules while investing in antennas, software platform services, ODM solutions, industrial intelligence, and other business.
Supply Chain Management and Green Procurement	Market changes, industry developments, and other factors may lead to raw material shortages or rising procurement costs. If key raw materials become scarce or prices surge significantly, and we fail to pass these costs down the supply chain in time, it may impact our revenue and raise operational costs.	Medium-high	Short-, medium-, and long-term	Continuously monitor raw material market trends, optimize supply chain management, maintain close relationships with suppliers, and enhance supply chain resilience to mitigate market volatility risks.
Data Security and Privacy Protection	Poor cybersecurity management and employee lacking cybersecurity awareness may pose risks such as data breaches and privacy violations.	Medium-high	Short-, medium-, and long-term	Conduct regular information security audits and employee cybersecurity training, continuously strengthen security measures for IT management platforms, and enhance access control mechanisms, to defend against external cyber threats.
Contributing to the Development of Digital Intelligence	The rise of artificial intelligence and intelligent technologies is driving new IoT applications and accelerating industry transformation.	Medium-high	Medium-, and long-term	Strengthen investment in technology R&D and establish dedicated teams for smart scenarios, explore the innovation and integration of cutting-edge digital intelligence technologies in product design to continuously enhance smart product functionality and competitiveness.
Smart Product Design	Continuous investment in technology upgrades and talent development is required; failure to do so may result in elimination from the market due to underdeveloped technologies.	Medium-high	Medium-, and long-term	Provide internal digital intelligence training for employees to improve their capabilities and recruit top-tier professionals in the smart product domain to support corporate growth.



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Environment

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Climate Change Response

As a leader in the telecommunications industry, Quectel recognizes the urgent global challenge of climate change and is committed to pioneering sustainable pathways. Through cross-sector collaboration, we actively drive the implementation of climate action initiatives, contributing to global efforts to mitigate climate risks. Leveraging our technological expertise, Quectel provides innovative solutions that accelerate the energy transition and advance low-carbon development worldwide, delivering the “Quectel Approach” to a climate-resilient future.

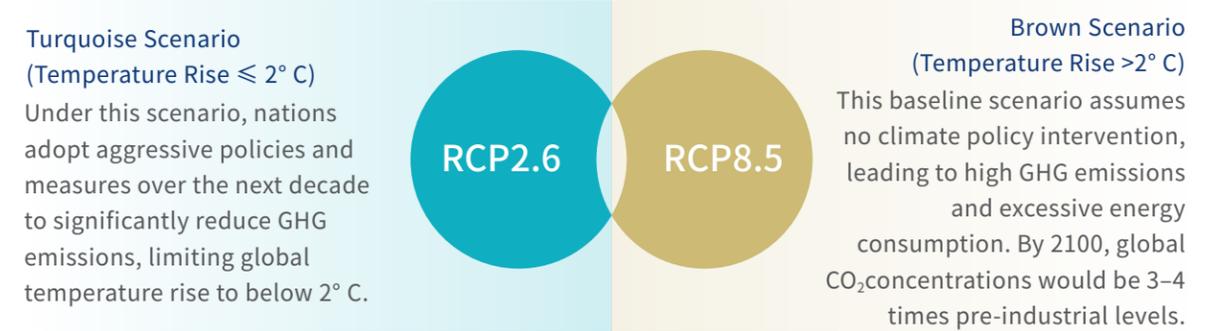
Climate Change Governance

Against the backdrop of global climate imperatives, we and our subsidiaries’ Environmental, Health, and Safety (EHS) Departments have spearheaded climate-aligned energy governance. Guided by policies such as the Energy Consumption Management System, we formulate energy management policies aligned with climate governance requirements, and systematically and promptly identify existing and potential climate-related risks affecting our operations. Each production facility, under the guidance of their EHS Department, establishes energy efficiency task forces and other organizational structures to propose green technology retrofit initiatives. Business units actively respond to EHS initiatives, working collaboratively to reduce energy consumption at the source and lower greenhouse gas (GHG) emissions. Through joint efforts, we strive to achieve emission reduction targets and contribute to climate change governance.

Climate Change Strategy

Climate Scenario Analysis

In recent years, extreme weather events such as heatwaves, heavy rainfall, typhoons, storm surges, and saltwater intrusion and seawater encroachment have become more frequent. Climate issues in regions such as the Yangtze River Economic Belt and the Guangdong-Hong Kong-Macao Greater Bay Area face compounded challenges where climate impacts intersect with population density, resource constraints, and environmental pressures, resulting in significant risk aggregation, cascading effects and amplification. Quectel and our subsidiaries operate primarily within these climate-vulnerable regions, we proactively assess climate-related impacts on our business operations. During the reporting period, we proactively conducted climate scenario analysis for two types of scenarios, namely the Turquoise Scenario (low emission), or RCP2.6, and the Brown Scenario (high emission), or RCP8.5, with reference to the recommendations of the TCFD Scenario Analysis Guidelines. The aim is to continuously improve our climate resilience strategies through science-based analysis, so as to better address the challenges brought about by climate change.



Identification of Climate Risks and Opportunities

Brown Scenario (RCP8.5)

Risk Type	Risk Description	Mitigation Measures	Impact Severity	Impact Duration
Physical Risks	Acute Climate Risks	Extreme weather events and climate-related disasters may damage facilities and buildings, endanger employee safety, and disrupt production, resulting in reduced asset value or shortened asset lifespan.	Moderate	Short-term
	Chronic Climate Risks	Long-term climate change and rising sea levels may pose threats to equipment; Global warming may lead to equipment overload, reducing service life and increasing electricity costs.	Low	Medium-, and long-term

Turquoise Scenario (RCP2.6)

Risk Type	Risk Description	Mitigation Measures	Impact Duration	Impact Severity
Transition Risks	Policy Risks and Opportunities	As China advances its “dual carbon” goals and environmental regulations become more stringent, our overall energy transition costs increase, along with mounting pressure to reduce emissions and improve resource efficiency. Our products exported overseas may face requirements and constrains in areas such as carbon tariffs, carbon footprint, and compliance with foreign ESG standards.	Short-term	Moderate
	Technology Risks and Opportunities	Upgrading to clean technologies and greener processes increases R&D complexity and may lead to asset impairment. Failure in investing in new technologies or equipment may cause us to lag behind our peers in the low-carbon transition.	Medium-term	High

Risk Type	Risk Description	Mitigation Measures	Impact Duration	Impact Severity
Market Risks and Opportunities	Market demand for high-energy-efficiency and green products is rising.	Continuously improve the R&D capabilities for new products and application scenarios, expand into smart vehicles, smart energy, ecological monitoring, the sharing economy, and other scenarios, and provide customers with effective low-carbon products and services to increase market share at home and abroad.	Medium-, and long-term	High
Transition Risks	The Company is under increasing scrutiny from regulators, investors, and the public. Poor performance in environmental or social responsibility may adversely affect financing opportunities, brand value, and corporate reputation.	Place strong emphasis on ESG practices, continually improve the business environment, and expand the service chain both upstream and downstream.	Medium-, and long-term	Low

Note: Short-term: within 1 year; Medium-term: 1-5 years; Long-term: over 5 years.

Climate-Related Impact, Risk, and Opportunity Management

Quectel prioritizes the proactive management of climate-related impacts, risks, and opportunities. Through various initiatives, such as supplier ESG governance, responsible procurement, R&D innovation, contributions to digital intelligence development, and environmental compliance frameworks, we actively enhance our resilience to climate risks while safeguarding operational stability and fostering sustainable growth.



Climate-Related Indicators and Targets

GHG Emissions Management

GHG Emissions Performance

指标	单位	2024 年
Scope 1 GHG Emissions	tCO _{2e}	38.80
Scope 2 GHG Emissions	tCO _{2e}	30,520.05
Carbon Reduction from Renewable Energy	tCO _{2e}	231.81
Total GHG Emissions	tCO _{2e}	30,327.04
GHG Emissions Intensity	tCO _{2e} per RMB 10,000 of revenue	0.016

Note: Scope 1 GHG emissions refer to direct emissions from gasoline consumption by the Company's business vehicles. Scope 2 emissions refer to indirect emissions from the consumption of purchased electricity and heat. Emission calculations are based on the *Guidelines for Accounting and Reporting of Greenhouse Gas Emissions in Electronic Equipment Manufacturing Enterprises*. The emission factor for purchased electricity is calculated with the national average electricity emission factor from the Announcement on the 2022 Electricity Carbon Emission Factor. The statistics cover energy consumption at Quectel headquarters, Quectel Changzhou, and electricity consumption of all global offices.

GHG Emissions Reduction Initiatives

Use of Renewable Energy

In October 2024, our rooftop distributed photovoltaic (PV) project was officially put into operation, reducing electricity consumption by approximately 432,000 kWh, equivalent to a decrease of approximately 231.81 tons of CO₂ emissions. The project is expected to reduce annual electricity consumption by approximately 2.4 million kWh in 2025, equivalent to a reduction of around 1,548 tons of CO₂ emissions. Our internal energy conservation management, participation in electricity market trading, energy-efficient air compression system upgrades, and other initiatives are expected to generate economic benefits of approximately RMB 1.544 million per year in 2025.

Energy Consumption Monitoring

Energy consumption and pollutant emissions across various units are monitored and reported quarterly, and relevant data is consolidated and reported regularly.

Energy-Efficient Equipment

Our dormitories are fully equipped with the 100% air-source heat pump and water heater system. These systems efficiently convert heat from ambient air to supply hot water, significantly reducing electricity consumption while meeting daily hot water needs in a green and low-carbon manner.



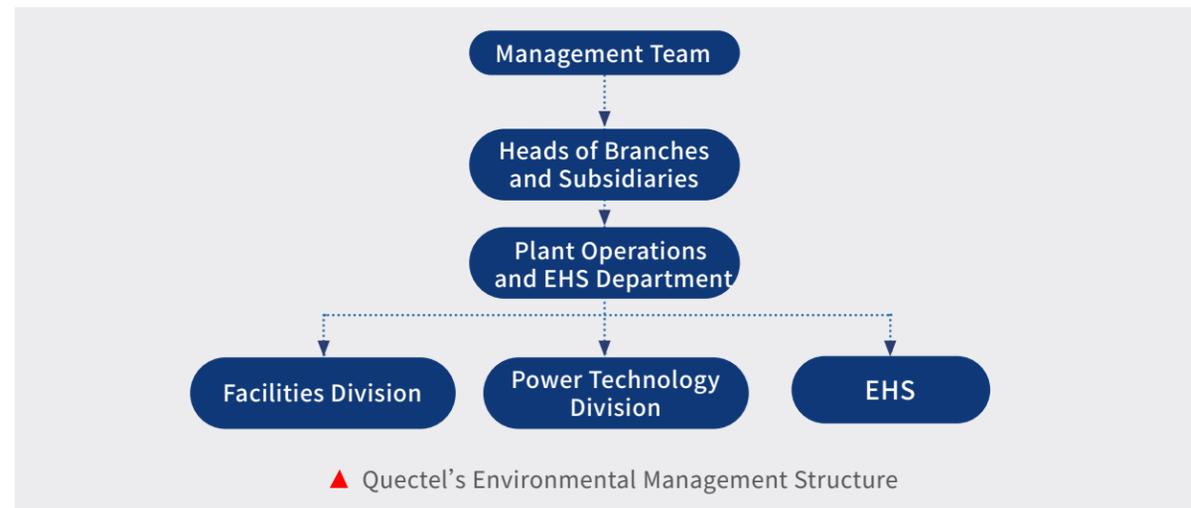
▲ Rooftop PV Panels at Quectel Changzhou

Environmental Compliance Management

Environmental Management Framework

Quectel strictly adheres to regulations across all operational jurisdictions and has developed environmental compliance framework including the Environmental Inspection and Monitoring Management Standards, and the Hazardous Chemicals Safety Management Protocols, and continuously enhancing our environmental management system.

Subsidiaries have established a three-tier environmental governance framework with clearly defined responsibilities at each level. The executive management team is responsible for oversight, while the heads of our branches, subsidiaries and business entities take charge of coordination. Under them, the Environmental Health and Safety (EHS) Department is tasked with executing environmental management at factories. The tripartite governance model ensures efficient environmental stewardship. Additionally, we have implemented a system of environmental stewardship. Environmental performance is incorporated into the annual performance appraisal of key management personnel, and a corresponding rewards and penalties mechanism has been established.



During the reporting period

- ✓ We invested RMB **0.6444** million in environmental protection, accounting for **0.0035%** of total operating revenue;
- ✓ Our factories, and partner factories **100%** pass ISO 14001 Certification



▲ ISO14001 Certification

Environmental Risk Assessment and Response

Environmental Emergency Response Management

To address potential environmental emergencies, we have established an emergency response team for environmental emergencies and developed a series of Emergency Response Plans for Major Incidents. As a company classified under general environmental risk, we are committed to minimizing environmental impact through well-structured emergency plans and rapid response.

Environmental Emergency Response Plans

Flood, Typhoon, and Earthquake Emergency Response Plan	Hazardous Chemical Spill Emergency Response Plan
Fire Emergency Response Plan	Radiation Emergency Response Plan
Water Supply Interruption Emergency Response Plan	Forklift Accident Emergency Response Plan
Power Outage Emergency Response Plan



Commander

Each department or area supervisor serves as the Commander. In the event of a chemical spill, the responsible person shall promptly establish a temporary emergency response team within their department or the region to facilitate emergency response efforts. They also cooperate with the Company or external emergency response entities to implement emergency rescue. Furthermore, they are responsible for promptly reporting to their higher-level department the status of on-site response actions, any personnel injuries, and the operational condition of equipment and facilities.

On-Site Emergency Response Team

This team is tasked with implementing on-site emergency response measures, such as blocking the source of a chemical spill. In case of an emergency, the team must promptly shut off power supplies, gas lines, and chemical leak sources at the scene to minimize damage to equipment and products, prevent injuries, and avoid escalation of the incident.

On-Site Emergency Medical Team

This team provides first aid to the injured at the scene, promptly notifies nearby hospitals and reports injury details to the Commander.

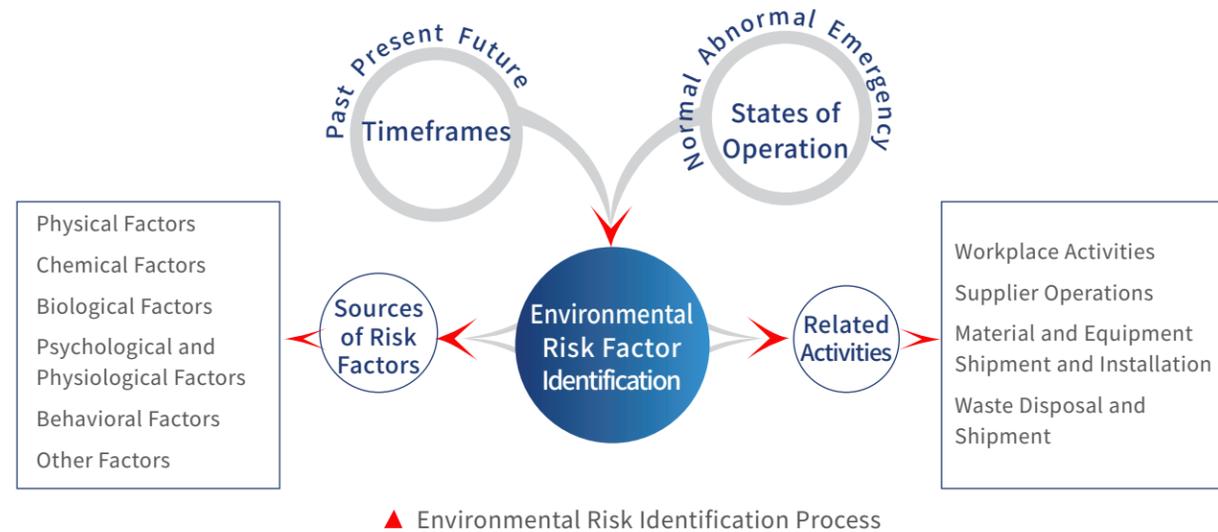
On-Site Emergency Communication Team

This team is in charge of executing both horizontal and vertical communication as instructed by the Commander. It is responsible for communicating instructions from higher-level authorities to team members, gathering and reporting employees' needs to higher-level authorities, and contacting other departments as required by the Commander.

▲ Emergency Response Team for Environmental Emergencies

Environmental Risk Identification and Control

We have developed the Environmental Risk and Opportunity Management Standard, identifying, assessing, and monitoring environmental impacts across our production and operational processes. We conduct comprehensive reviews and risk analyses, and develop tailored management plans with targeted controls to effectively reduce risks.



Environmental Risk Control Measures

Risk Assessment

To strengthen risk prevention and control, we have established the Risk Assessment Team. A five-tier risk rating system is used to classify potential risks as Minor, Moderate, Significant, High, or Extreme. Based on the quantitative assessment of these risk levels, corresponding control measures are implemented.

Hazardous Chemical Management



▲ Emergency Drill for Chemical Spill Response

Shipment Management: Shipment of hazardous chemicals strictly follows designated routes and timeframes. The safety status of vehicles is monitored to ensure secure and orderly transit.

Storage Management: Dedicated hazardous chemical storage zones are set up and managed based on chemical properties, ensuring incompatible substances are stored separately to prevent hazardous reactions.

Usage Management: Employees handling hazardous chemicals must strictly follow operational protocols and wear appropriate personal protective equipment (PPE) to minimize operational risks.

Management of Recycling, Discharge, Treatment and Destruction: Hazardous chemical recycling, discharge, treatment, and destruction processes are conducted in strict compliance with laws and regulations to eliminate environmental pollution.

Training and Drills: Regular training sessions on handling chemicals and hazardous substances are provided, covering topics such as safety knowledge, operational procedures, and emergency responses to chemical spills. Emergency drills are conducted to enhance employees' response capabilities and ensure the effective implementation of safety protocols.

Raising Environmental Protection Awareness

Quectel fosters a culture of environmental stewardship and resource efficiency by empowering employees to embrace eco-conscious responsibilities. We place strong emphasis on low-carbon practices and environmental education. Through a combination of environmental training, online and offline activities, group discussions, and themed campaigns, we actively promote knowledge on energy conservation and emissions reduction, continuously enhancing employees' awareness of sustainable practices and fostering a company-wide culture of low-carbon work and lifestyle.

2024 Environmental Protection Training

Total training hours

275

Total participants

1,106

Environmental Protection Training

The training covered interpretations of environmental regulations and client-specific environmental requirements, effectively strengthening employees' sense of environmental responsibility and their capacity for action, laying a solid foundation for our green development.

Environmental Protection Promotion and ESG-Themed Activities

We organized multiple campaigns and activities on topics such as energy conservation, low-carbon office initiatives, and protecting the planet through low-carbon actions. These initiatives enhanced employees' environmental awareness and encouraged active participation in environmentally responsible behaviors and low-carbon living.



▲ Environmental Design Show

Emissions Management

Quectel strictly adheres to China's environmental regulations, including the *Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste*, the *Atmospheric Pollution Prevention and Control Law of the People's Republic of China*, the *Water Pollution Prevention and Control Law of the People's Republic of China*, and the *National Catalogue of Hazardous Wastes*. We have established the Solid Waste Management regulations and hold a valid pollutant emissions permit. We have achieved remarkable results in pollutant emissions control, ensuring no adverse impacts on the surrounding environment or communities.

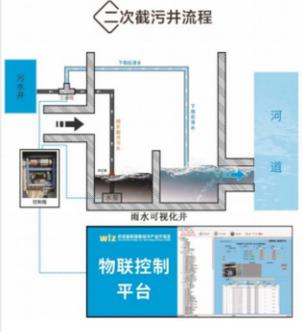
In 2024

We had **NO** environmental violations.

Waste Gas and Wastewater Management

Quectel rigorously implements environmental protection requirements and conduct regular monitoring of waste gas and wastewater emissions to ensure full compliance with regulatory standards. We optimize processes and adopt low-emission technologies to minimize emissions from our production activities.

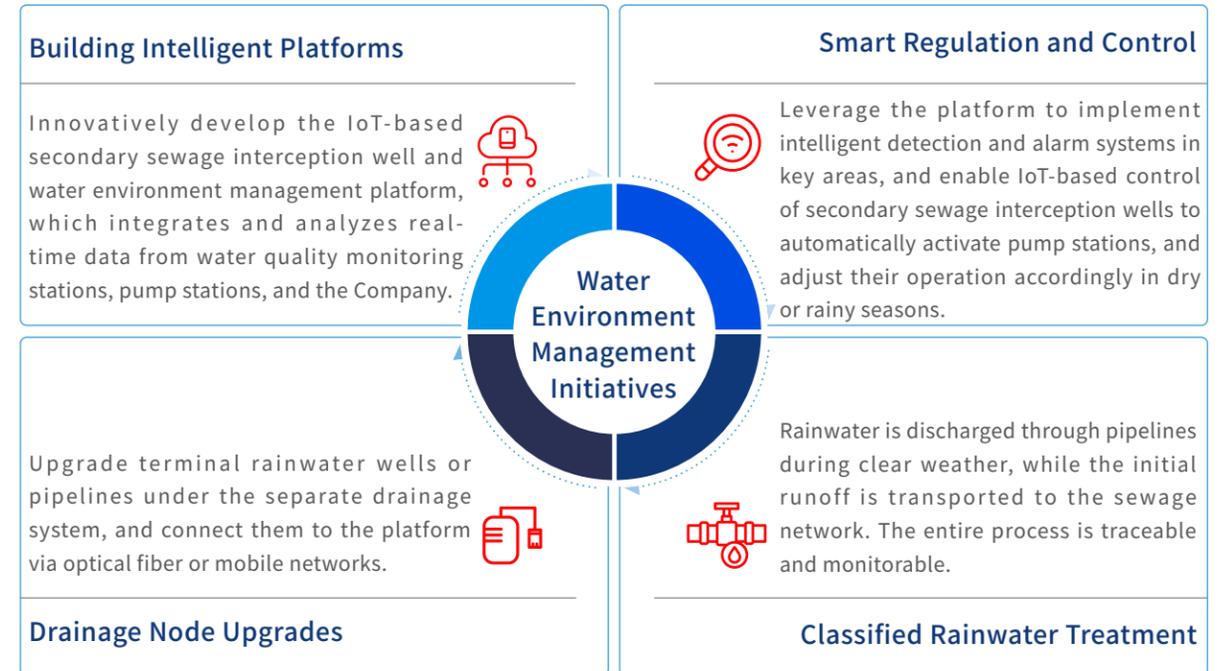
Primary Pollutants	Emission Type	Treatment Measures
 <p>Waste Gases</p>	<p>Volatile Organic Compounds (VOCs, including non-methane hydrocarbons), particulate matter, and tin dioxide)</p>	<p>Organized and unorganized emissions</p> <p>Dust removal facilities (baghouse dust collectors + secondary activated carbon adsorption) and VOC treatment facilities</p> <p>Routine maintenance and upgrades of emission treatment equipment</p>  <p>▲ Waste Gas Treatment Equipment</p>
 <p>Wastewater</p>	<p>Domestic sewage, Chemical Oxygen Demand (COD), ammonia nitrogen, suspended solids, etc.</p>	<p>Indirect discharge</p> <p>Domestic sewage is treated via anaerobic fermentation in septic tanks before being discharged to municipal wastewater treatment facilities.</p>



▲ Secondary Sewage Interception Well Process



▲ Upgraded Stormwater Well



Waste Gas and Wastewater Discharge

Indicator	Unit	2024
Waste Gas Emissions		
Particulate Matter (PM)	Tons	0.043
Volatile Organic Compounds (non-methane hydrocarbons)	Tons	0.994
Wastewater Discharge		
Total Wastewater Discharge	Tons	40,326.73
COD Chemical Oxygen Demand (COD)	Tons	20
Suspended Solids (SS)	Tons	16
Ammonia Nitrogen Discharge	Tons	1.8
pH Value	mg/L	6~9
Animal and Vegetable Oils	Tons	8.1
Wastewater Discharge Intensity	Tons per RMB 10,000 of revenue	0.02

(Scope: Quectel Changzhou)

Waste Management

Quectel places a high premium on the monitoring and management of waste emissions, regarding it as a critical component of our environmental protection efforts. We have established well-defined organizational structure for solid waste management with clear accountability, the factory General Manager oversees the pollution prevention and control of hazardous waste and strictly reviews and approves relevant prevention plans, the Plant Operations and EHS Department is responsible for drafting and revising solid waste management policies, supervising their implementation, conducting daily prevention and control work, maintaining accurate records, and ensuring timely disposal of hazardous waste, ensuring the steady progress of our waste management practices.

Waste Management Goals

- ✓ All non-hazardous waste will be uniformly and compliantly handled by qualified third-party service providers.
- ✓ **100%** of hazardous waste will be treated and rendered harmless by third-party service providers.



Primary Pollutants

Treatment Measures

Non-hazardous Waste	Waste solder paste, household waste, baghouse dust, reverse osmosis membranes, and construction debris	Recycling and reuse of certain waste materials Centralized collection and transportation by qualified third-party providers
Hazardous Waste	Used activated carbon, waste cleaning solution, defective products, used rags, waste filters, packaging waste, and used cleanroom cloth	Comprehensive utilization after incineration or harmless treatment Entrusted to certified hazardous waste disposal service providers

Hazardous Waste Management Measures

- Install new waste gas purification equipment (secondary activated carbon filtration system) in hazardous waste storage areas to reduce VOC emissions.
- Standardized Labeling System: Use green labels for recyclable waste, and red labels for hazardous waste.
- Improved Collection and Record Management: Clarify the location of waste collection points, record in detail the transfer information and hazardous substances, and place hazardous waste identification signs in facilities and places where such waste is collected and stored.

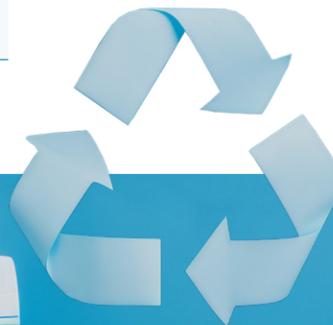


▲ Hazardous Waste Sorting and Recycling

Waste Generation

Waste Category	Unit	2024
Total Waste Generated	Tons	59.95
Hazardous (Dangerous) Waste Generated	Tons	59.68
Non-hazardous Waste Generated	Tons	0.27

(Scope: Quectel Changzhou)



Cleaner Production

Quectel actively promotes cleaner production by prioritizing the use of clean energy and adopting production processes and equipment with lower pollutant emissions. To ensure efficient implementation, a robust cleaner production supervision mechanism has been established, featuring regular inspections and assessments of all production stages to promptly identify and resolve potential issues. In 2024, 5 cleaner production proposals from Quectel Changzhou passed the cleaner production audit, achieving Level II (Domestic Advanced Level) certification in the electronic component manufacturing sector under China's Cleaner Production Evaluation System.

Key Cleaner Production Initiatives

✓ Stencil Squeegee Upgrade Project:

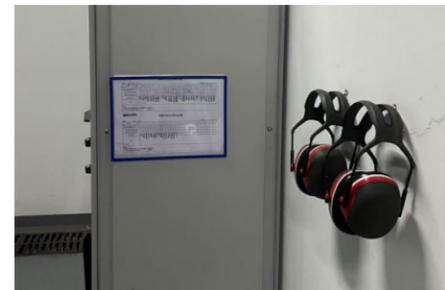
We launched a project to upgrade our stencil squeegees by replacing traditional solder paste printing blades. This significantly reduced solder paste waste, as well as the consumption of fresh water and cleaning agents, leading to an annual reduction of **0.888** ton of cleaning wastewater and an estimated economic benefit of RMB **1.55** million/yr.

✓ Cleaner Production Training:

We organize training sessions on cleaner production and equipment maintenance to improve employees' operational skills and environmental awareness, ensuring a green, stable, and efficient production process.

Noise Management

Quectel places great emphasis on noise management and control and strictly adheres to the *Environmental Noise Emission Standard for Industrial Enterprises at Boundary*. We have installed sound barriers and other noise-mitigation infrastructure to block transmission paths, and provide employees with professional personal protective equipment(PPE), and effective noise protection gear, to holistically reduce the impact of noise.



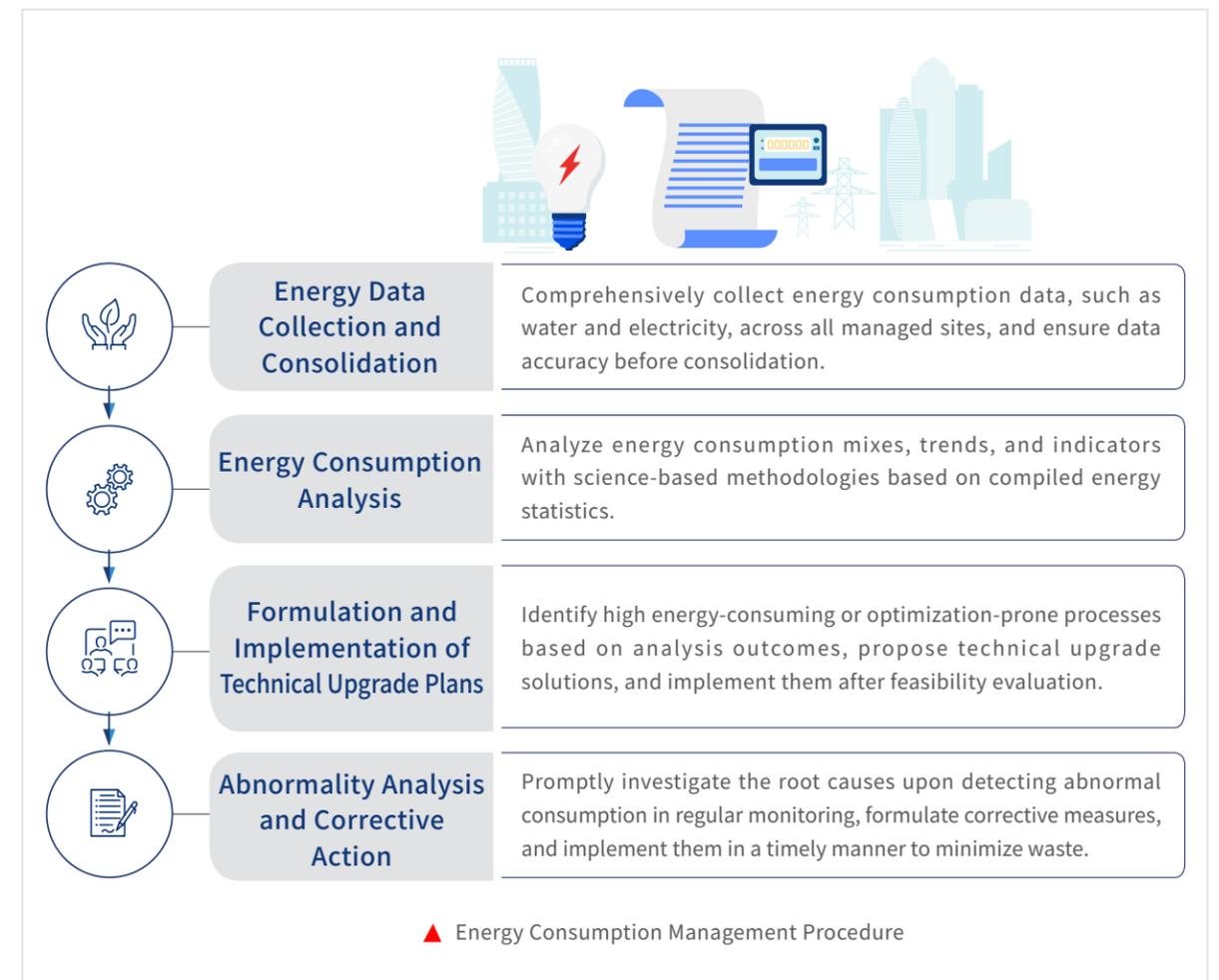
▲ Noise Protection Equipment



Optimizing Energy Management

Energy Consumption Management System

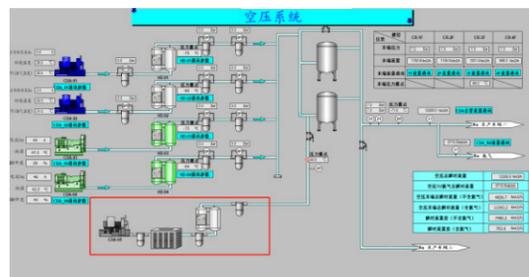
Quectel strictly adheres to the *Energy Conservation Law of the People's Republic of China* and other relevant regulations, and continuously improve our energy management system. We have formulated the Energy Consumption Management System, under which different business areas implement tailored energy conservation measures based on their specific operational characteristics. This helps standardize daily energy management across operations and production activities.



Energy Conservation and Consumption Reduction Measures

Energy conservation is a key aspect of Quectel's refined management approach. In 2024, we launched several energy-saving initiatives, leveraging technological innovation, equipment upgrades, process optimization, and management enhancements to fully tap into energy conservation potential and continuously improve energy efficiency.

System	Energy Saving Measures	Energy Saving Outcomes
Lighting System	Optimize corridor lighting in workshops and dormitories	Reconfigure the number and timing of existing lighting fixtures based on actual usage, saving approximately 53,000 kWh of electricity, and reducing electricity costs by around RMB 40,000
	Optimize the system logic and adjust air conditioner systems	Adjust the load of air conditioning units to avoid unnecessary high-load operations, helping reduce inefficient energy consumption.
Air Conditioning System	Implement production shifts to ensure the temperature and humidity level of the stereoscopic warehouse, and shut down unnecessary plant equipment and facilities	Precisely control cold storage energy use, helping eliminate unnecessary power consumption.
	Seal reserved ventilation openings in workshops with plastic film	Avoid energy waste caused by poor closure of ventilation openings reserved for workshop exhaust and air conditioning in the mezzanine.
	Optimize automatic control logic for heat recovery systems	We recycle heat in workshops in winter to raise hot water temperature by adjusting the load of heat recovery chillers. This is expected to reduce steam consumption by 60 days in 2025, generating a daily cost saving of RMB 9,000 while maintaining temperature and humidity levels required by production processes.
Innovative Air Compressor Management	Use low-power air compressor system for laboratory use during production shifts	Adopt low-power air compressors for laboratory use during shifts and holidays to avoid activating high-power equipment, leading to annual cost savings of approximately RMB 220,000.
Nitrogen Usage Management	Minimize liquid nitrogen consumption and increase reliance on nitrogen generators	Onsite nitrogen generation helps prevent energy loss during low-temperature storage and long-distance transportation of liquid nitrogen.
		Real-time adjustment of liquid nitrogen production helps reduce evaporation losses from storage.
Maintenance and Upkeep	Conduct regular inspections of air compressor and air conditioning pipelines to detect and repair leaks or insulation damage in a timely manner, reducing failure rates.	
	Monitor power compensation devices to ensure our power factor remains above 0.9.	
	Utilize BMS (Building Management System) to monitor energy and equipment in real time, enabling accurate tracking, analysis, and digital management of electricity, water, and gas consumption across facilities.	



▲ Use of Low-Power Compressors During Holidays



▲ Sealing of Reserved Ventilation Openings

Case Green and Energy-Efficient Dormitory Building

The supporting dormitory building for Quectel Changzhou wireless communication module facility adopts a thermal bridge design with composite insulation materials and Low-E glass for enhanced heat insulation performance. Built-in louver blinds also help regulate indoor lighting and temperature. Evaluations show the building meets the 65% energy-saving target of Jiangsu's residential building energy efficiency standard and fully complies with green building design requirements.



Energy Consumption Overview

Energy Mix	Unit	2024
Total Purchased Electricity	Million kWh	56.7793
Purchased Steam	Tons	1,423
Total Gasoline Consumption	Liters	17,232.21
Total Comprehensive Energy Consumption	Tons of standard coal	7,013.16
Energy Intensity	Tons of standard coal per RMB 10,000 of revenue	0.004
Total Renewable Energy Consumption	Thousand kWh	432
Proportion of Renewable Energy Consumption	%	1.1

Note: Renewable energy is derived from rooftop distributed photovoltaics, which began operation in October 2024. The statistics cover Quectel Headquarters, global offices, and Quectel Changzhou.



Enhancing Water Resource Utilization

At Quectel, we strictly comply with the *Water Law of the People's Republic of China* and other relevant laws and regulations, and have introduced various water resource management measures to strengthen management. A dedicated water resource management team has been established to effectively drive the implementation of water-saving initiatives. Our water resources are primarily sourced from municipal water supply and rainwater harvesting, and are used in both production and daily operations.

Water Conservation Measures

- Water Use Management**

Conduct regular inspections and maintenance of pipelines to minimize water loss due to any leakage. Water meters are installed for real-time monitoring and to evaluate water usage costs, helping reduce unnecessary consumption.

- Production Water Recycling**

Establish a closed-loop water circulation system between washing machines and rinse lines. When equipment is in normal operation and does not require maintenance, the system maintains continuous circulation to maximize water efficiency.

- Rainwater Harvesting and Reuse**

Rainwater is collected via dedicated pipelines and treated through first-flush and filtration systems before being stored in polypropylene (PP) rainwater tanks. After disinfection and purification, the treated water, being up to standard, is reused for landscaping irrigation, road spraying, and other applications.

Water Consumption

Indicator	Unit	2024 年
Total Water Consumption (Municipal Supply)	Cubic meters	192,677.69
Water Consumption Intensity	Cubic meters per RMB 10,000 of revenue	0.104
Recycled Water Volume	Cubic meters	700

(Scope: Quectel Headquarters, global offices, and Changzhou facility)



Promoting the Circular Economy

At Quectel, we adhere to the *Circular Economy Promotion Law of the People's Republic of China* and the *14th Five-Year Plan for Circular Economy Development*, continuously optimizing resource utilization and strengthening the recycling and reuse of materials.

Recycling of Waste Materials	Reusable Packaging Materials	Raw Material Management	Circular Awareness Fostering
Classify and recycle waste solder paste, reverse osmosis membranes, and other materials in collaboration with certified recycling providers to ensure proper reuse.	Continuously enhance the reuse rate of packaging materials such as cardboard boxes and pallets, standardize recycling processes for boxes through coordination with packaging providers, and maintain a pallet return log to regularly collect usage rates and promote reuse.	Systematically manage raw materials to ensure accurate tracking of inventory levels and consumption cycles, leverage the intelligent stereoscopic warehouse to enable real-time monitoring of raw material usage and storage ratios, and built the warning mechanism to prevent waste and overstocking.	Regularly organize activities themed around the circular economy, such as creative design contests, handcraft workshops to enhance employees' environmental awareness and encourage them to adopt sustainable practices.

▲ Circular Economy Initiatives

Case

“Recycling Everywhere – Let’s Go Green with Quectel”

In April 2024, in celebration of Earth Day, we launched a company-wide circular economy campaign. Employees were encouraged to use both sides of printing paper and reuse courier packaging materials, thereby improving resource efficiency. During the “Books for Veggies” event, employees exchanged second-hand books for vegetable packs, promoting both book recycling and obtaining dinner ingredients. The DIY upcycling activity and painting on old glass cups gave discarded items a new lease on life. Meanwhile, an “Eco Tips” check-in activity helped reinforce daily environmental protection awareness and fostered a strong culture of reuse and recycling within the organization.



▲ “Books for Veggies” Event

▲ DIY Upcycling Activity

Safeguarding the Ecological Environment

At Quectel, we uphold the philosophy of green development and strictly comply with the *Convention on Biological Diversity*, *China's Judicial Protection of Biodiversity*, and other relevant guidelines. We actively leverage our technological strengths to contribute to the protection of biodiversity and ecosystems.

Measures for Ecological and Biodiversity Protection

<p>Project Site Selection and Construction</p>	<p>Strictly observe ecological redlines and refrain from developing any projects within redline zones or ecologically sensitive areas, including water sources, wetlands, and agricultural land.</p> <p>Strictly comply with the <i>Environmental Impact Assessment Law of the People's Republic of China</i> and all applicable international and local laws on forest resource protection, and adhere to green construction practices to minimize the environmental footprint of our infrastructure projects.</p>
<p>Environmental Restoration</p>	<p>Upon project completion, we initiate ecological restoration efforts focused on surface topography, soil, and vegetation. In the event of an environmental pollution incident, we promptly manage and mitigate the impact and restore the environment according to the Environmental Emergency Response Plan.</p> <p>Actively promote the greening of our factories by planting native species, maintaining landscaping regularly, increasing vegetation coverage, and supporting ecological balance in areas where we operate.</p>
<p>Technology-Empowered Biodiversity Protection</p>	<p>Leverage our technological capabilities, our communication modules, in wildlife tracking and geographic research. These solutions enable precise monitoring of endangered species' migration routes and activity ranges, support biological data collection in extreme environments, and provide valuable insights for biodiversity conservation efforts.</p>

Case Wildlife Guardians: Safeguarding Safe Rewilding

We are committed to unlocking the potential of technology to inject strong impetus to wildlife protection. By leveraging our advanced modules, including LTE, LPWA, GSM, and GNSS, we power a range of devices such as animal collars, infrared cameras, and bird trackers. These devices serve as “personal bodyguards” for wild animals, enabling real-time data collection and transmission for species such as the Amur tiger, sika deer, wild boar, roe deer, raccoon dog, Chinese rural dog, crested honey buzzard, and common kestrel. We continuously support the development of innovative IoT terminal devices to precisely safeguard wildlife and biodiversity, and strengthen the foundation of ecological protection with the power of science and technology.



Green and Low-Carbon Operations

At Quectel, we actively promote the green office philosophy. By raising awareness of energy conservation and low-carbon initiatives, office-based water and electricity conservation measures and efficient resource utilization, we continuously enhance employees' awareness of green office initiatives and low-carbon life.

Green Office Action

- Institutional Support**

In September 2024, we released the Office Code of Conduct aimed at enhancing the quality and experience of the workplace environment.
- Remote Collaboration and Low-Carbon Commuting**

Equipped with a global video conferencing system, we enable seamless remote collaboration across regions, significantly improving efficiency while reducing the environmental impact of business travel. In June, we also introduced bicycle repair tools to encourage green commuting among employees.
- Promoting Low-Carbon Office Practices**

Employees' environmental awareness of green office initiatives is promoted through signage, posters, and sustainability-related campaigns.
- Advancing Paperless Workflows**

Various digital systems have been introduced, including the visitor management system, electronic business cards, and workspace reservation platforms. Digital nameplates are also used to welcome important guests, replacing traditional printed versions.
- Enhancing the Office Environment**

Hefei Yirui piloted a greenery plant renewal program to increase the variety and quantity of plants in public areas, enhancing the office ambiance. We also rolled out a nationwide summer office cleanliness campaign to improve workplace comfort.



▲ Electronic Visitor System Training



▲ Electricity Saving Signs



▲ Paper Saving



▲ Bicycle Repair Tools



▲ Shared Office Supplies



▲ Greenery Renewal

QUECTEL Society

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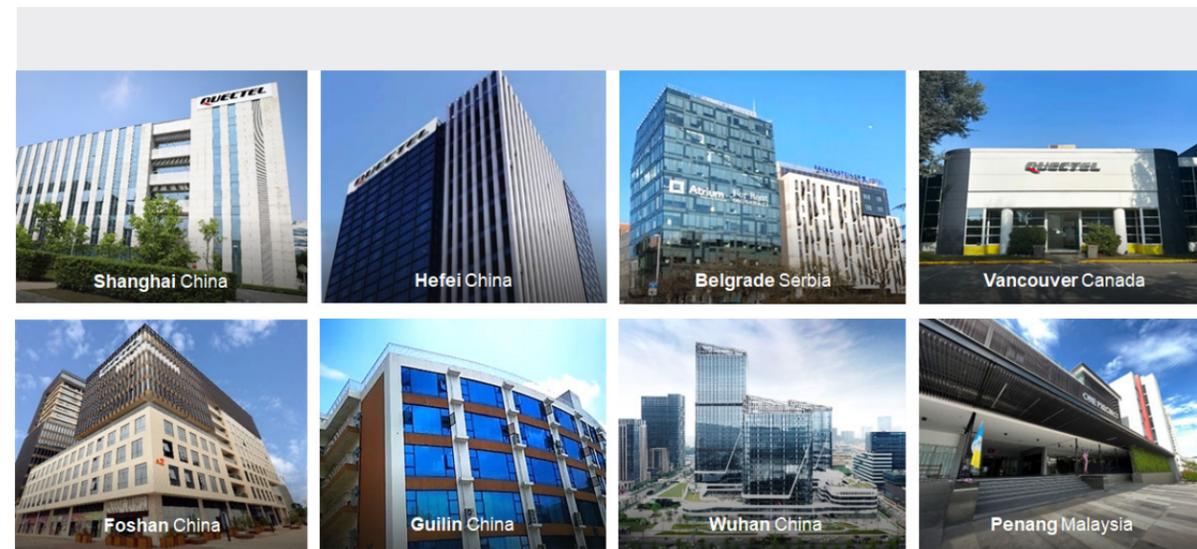
Driving R&D Innovation

Governance of R&D Innovation

Quectel regards R&D innovation as its cornerstone and continuously improves its R&D management system to foster the development of new technologies, products, and services. We have formulated the R&D Innovation System, the Project Development and Management Procedures, and the Guidelines on Key Customers' Project Development and Management. We actively uncover emerging technologies, expand product applications, conduct thematic research projects, and steadily increase investment in scientific research and talent development to further enhance our R&D capabilities and overall market competitiveness.

R&D Platforms Development

We have **9** subsidiaries certified as the High-Tech Enterprise



▲ Our 8 Major R&D Centers

R&D Strategy

At Quectel, "Innovation-Driven Development" is not only our core value, but also our key competitive edge. With the mission of "providing comprehensive IoT solutions to customers," we continue to consolidate our cellular module business while expanding into high-potential, large-scale markets. We adopt two strategic R&D approaches: customized R&D and forward-looking R&D, to meet the diverse demands of global customers and unlock the vast potential for industrial innovation. We embrace new quality productive forces such as artificial intelligence, big data analytics, and edge computing, ensuring our leading position in a rapidly evolving market and contributing to a greener, smarter, and more efficient future for society.

R&D-Related Impact, Risk, and Opportunity Management Talent Development in Science and Technology

Quectel has built a strong team of technical professionals with robust R&D capabilities. The Company cultivates a new generation of talent through both internal training and external recruitment.

In terms of recruitment, we continuously optimize our hiring model to align with our strategic planning, business needs, and product positioning, and promptly replenish the required talents to ensure that the team's science and technology projects are carried out in an orderly manner. In terms of talent development, we provide specialized technical training, customized courses, and both online and offline learning platforms. We also select in-house lecturers to build overall capabilities within the R&D team. Our R&D team had recruited a large number of high-level tech professionals.

Training Hours for R&D Personnel

219,500hrs

Proportion of R&D Staff Trained

91.5%

Encouraging R&D and Innovation

Innovation is essential for a company to achieve sustaining growth and stay competitive. To encourage innovation, we have issued the Internal Innovation Incentive and Management Policy and established an annual "Innovation Bonus Pool". We recognize employees who propose innovative ideas in areas such as technology innovation, creations and patents, technology upgrades, and workflow improvement through the annual Innovation Award program. To foster a culture of innovation, senior management leads by example, actively engaging in innovation initiatives and encouraging employees to take risks and challenge themselves, creating a strong atmosphere for scientific and technological innovation.

In the 2024 Innovation Award program, we received **84** innovation project submissions from departments worldwide. Following a rigorous review process, **40** outstanding projects in areas such as technology, marketing, and work innovation stood out, showcasing our employees' innovation strength and injecting fresh momentum into our future development.

Case "Innovation Arena" – Creating a Future Through Innovation

In 2024, we hosted **8** sessions of the "Innovation Arena" themed program, collecting over **40** product ideas and business proposals. After preliminary and final reviews, **3** projects were successfully incubated, with **1** already translated into a signed product contract. This initiative continuously transforms creativity into tangible results, tapping into employees' innovative potential.



Industry-University-Research Collaboration

We work closely with universities, research institutions, businesses and other third-party platforms, collaborating deeply with innovation entities. Together with many universities, we have jointly developed internship and training bases to cultivate talent that meets market demand. Additionally, we collaborate extensively with universities in project R&D, market expansion, and other areas, integrating resources from all parties to achieve complementary advantages. Together, we foster industry innovation and upgrades, and make continuous strides in industry-university-research collaboration.

R&D Innovation Achievements

We regard technological breakthroughs as our cornerstone, supported by intelligent production, driven by data, and extended through ecological cooperation, to systematically advance the development of new quality productive forces through technological innovation. Our products are widely used in key industries such as electricity, petroleum, manufacturing, automotives, logistics, and healthcare, driving their high-end, intelligent, and green development. This contributes to the convenience and efficiency of people's lives and helps create a better life.

We actively participate in scientific research projects, develop strategies based on practical conditions and steadily advance our research efforts. In 2024, we applied for multiple scientific and technological development research projects, aiming to showcase our technological advantages and contribute with our strengths.

In 2024

We developed **832** new products.

R&D Innovation-Related Indicators and Targets

Key R&D Innovation Indicators in 2024

Indicator	2023	2024
Number of R&D Employees	4,158	4,184
Proportion of R&D Employees in Total Workforce	74%	71%
R&D Investment (RMB billion)	1.604	1.669
R&D Investment as a percentage of revenue	11.57%	8.97%

Key R&D Innovations in 2024



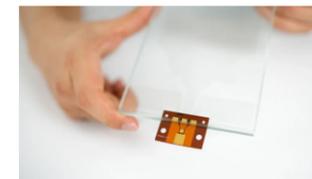
Next-Generation Smart Module with Edge Computing Capabilities

The SG368Z series, based on the Rockchip RK3568 platform, is equipped with an ARM high-performance quad-core Cortex-A55 CPU, ARM Mali G52 GPU, 2GHz clock speed, and 1T NPU. It runs deep learning algorithms, providing applications and algorithms for various scenarios such as face recognition and safety helmet testing. It has been widely used in daily life. Additionally, it supports 8M ISP, HDR, 4K@60fps video decoding, and triple-screen independent display, making it suitable for complex image processing and data computing across various fields, including home automation and digital signage.



AI PCs-supporting Wi-Fi 7 Module

The new NCM8x5 series Wi-Fi 7 and Bluetooth 5.4 two-in-one module is designed for wireless PC connectivity. It introduces high-frequency concurrent multi-connection technology to enhance connection stability, enabling high data transmission rates with low latency, offering users a high-speed, highly stable wireless experience.



Unlocking "Innovation Password" in Transparent Antennas

The 5G transparent antenna adopts a transparent film material, which is lightweight, flexible, highly transparent and environmentally compatible. It is particularly suitable for smart connected vehicles, ensuring wireless signal quality and communication performance without affecting vehicle aesthetics or aerodynamic resistance, effectively solving the shortages of traditional antennas.



High-Precision GNSS Positioning Module Featuring "Full-System + Full-Frequency-Band"

The high-precision GNSS positioning module has 1,040 tracking and capture channels, capable of receiving multiple full-frequency-band signals from global satellite systems such as GPS and GLONASS simultaneously, maintaining stable positioning in complex environments. It includes built-in interference signal detection and a NIC narrowband interference-resistant unit, effectively suppressing multiple narrow-band interference and significantly improving signal reception in complex electromagnetic environments. It is widely used in areas such as intelligent robotics, precision agriculture, surveying, and mapping.



Next-Generation 5G-A Module

We launched the next-generation 5G-A module RG650E and RG650V series, compliant with the 3GPP R17 standard, excelling in data transmission, network capacity, and other aspects. These modules easily meet the high-performance 5G demands of CPE, HD live streaming, and other FWA or eMBB applications, accelerating the comprehensive application of 5G. We also released a multi-platform-based 5G RedCap series module, offering a good balance among size, cost, and performance, and providing an ideal solution for smart grids, industrial automation, and other scenarios.

IPR Protection

IPR System Development

The Company has always emphasized the importance of intellectual property rights (IPR) protection and strictly adheres to relevant laws and regulations such as the *Patent Law of the People's Republic of China*, the *Copyright Law of the People's Republic of China*, and the *Trademark Law of the People's Republic of China*. We continuously improve our IPR management system and has established systems such as the Patent Application System and the Trademark and Copyright Management Measures. These systems facilitate IPR creation, management, application, and protection, and ensure high-quality, full-process management. In 2024, our IPR management related to the R&D and sales of wireless communication modules was certified under the GB/T 29490 IPR Compliance Management System. We were honored with the title of “National IPR Advantageous Enterprise” and designated as a key IPR protection enterprise in Songjiang District, providing strong support for our technological innovation.



▲ IPR Compliance Management System Certification

▲ National IPR Advantageous Enterprise

▲ Key IPR Protection Enterprise in Songjiang District

IPR Management Measures

We place great importance on IPR's strategic development. Through continuous innovation and rigorous management, we ensure effective IPR creation, application, and protection.

IPR Strategy

We adopt a defensive strategy to prevent infringement risks and implement an offensive strategy by applying for patents to deter competitors. Meanwhile, we focus on marketing, technological project declarations, and new product development. We have formulated and implemented a patent application strategy to maximize IPR value, enhance market competitiveness, and improve brand influence.

Key IPR Management Measures

IPR Rewards	To encourage employees to apply for patents with their inventions and creations in their work, we have established the Patent Reward Measures and provide financial rewards quarterly. In 2024, we distributed a total of RMB 553,000 as rewards.
Patent Technology Analysis and Infringement Defense	We conduct comprehensive technical analysis of the patents involved with several major patent holders, providing strong defense against infringement claims, effectively protecting our rights and interests and our customers, and preventing significant financial losses.
Promoting Patent Development in the Industry	We participated in 6 working group meetings of the 3rd Generation Partnership Project (3GPP) this year, actively engaging in discussions on 5G and future communication technology patents and contributing important insights for industry patent deployment and technological innovation.
IPR Digital Management	We have built a digital IPR management platform, enabling full-process management from application, acceptance, and authorization to termination.

Case

Patent Writing Training at “Quectel Academy”

We place a high premium on the cultivation of IPR talent. We regularly invite external lecturers to deliver IPR training sessions, including IPR applications, patent writing, and software copyright writing. This enhances the team's ability to generate IPRs and fosters awareness of IPR protection.



In 2024

we granted **146** patents, a **10.6%** increase compared to 2023, effectively protecting our core technologies. As of the end of the reporting period, our IPR performance is as follows:

Indicator		Value
Valid Patents During the Reporting Period		568
Inventions Patents Applied to Main Business		199
Patents under Application and Acceptance		440
Copyrights		303
Trademarks		363
Granted Patents in 2024	Granted Design Patents	7
	Granted Utility Model Patents	51
	Granted Invention Patents	88

Adhering to Technological Ethics

In the field of artificial intelligence, we deeply understand the importance of technological ethics and moral principles throughout the stages of project initiation, development, and application.

From a project's preparation to implementation, we organize professionals to assess the potential impact of AI projects on society and users, striving to align with ethical standards and public values. During the technology development phase, we uphold the principles of fairness and transparency, collect data through multiple channels to reduce algorithm bias, and use explainable AI technology to ensure that AI projects comply with technological ethics standards, continuously driving innovation and application of AI and IoT technologies. During the technology application phase, we conduct security and reliability testing on AI systems and make timely adjustments and optimizations.

Meanwhile, we always prioritize data privacy protection. Throughout the entire process from data collection to usage, encryption measures are strictly implemented in accordance with the principle of least necessity, ensuring user privacy and security.

In addition, we actively engage in industry communication and cooperation, partnering with many enterprises and institutions to jointly discuss key issues such as technological ethics and AI applications. We contribute to technological ethics governance and help create a healthy and sustainable R&D environment in the industry.

During the reporting period

We had **NO** violations against technological ethics.

Contributing to Digital Intelligence Development

Digital Intelligence Development Governance

In the governance of digital intelligence development, our departments work closely together under the coordination of dedicated personnel to drive the full process of digital products from development, implementation, to marketing, injecting strong momentum into our development in the digital intelligence era. The R&D team deeply understands customer needs and is responsible for building the core development of digital intelligence products by combining cutting-edge research results with innovative thinking. The Project Department precisely controls project progress, coordinates resources, and ensures that digital solutions are implemented smoothly and systematically. The Intelligent Manufacturing Center leverages advanced systems to transform R&D results into high-quality products. The Sales Department, with its keen insight into market demand, implements precise marketing strategies to promote digital products to target customers.

Digital Intelligence Development Strategy

At Quectel, we focus on the long-term, integrating digital intelligence development into our strategic deployment. Leveraging our comprehensive advantages, we actively explore various intelligent application scenarios. We continuously strengthen our ability to perceive and respond quickly to market needs, aiming to break through the existing framework of comprehensive IoT solutions and move steadily forward in the wave of the digital intelligence era.

Management of Impacts, Risks, and Opportunities Related to Digital Intelligence Development

Intelligent Manufacturing and Management

Intelligent manufacturing and management play an irreplaceable role in the development of smart factories. We achieve refined control of production processes by building a systematic, IT-based management platform. While continuously improving product quality, we significantly enhance our production efficiency and competitiveness.

Digital Production System

- The SAB system, as the core hub, collaborates various processes to ensure smooth information flow.
- The warehouse management system (WMS) precisely controls the incoming and outgoing materials, significantly improving storage efficiency and reducing operational pressure by 50%.
- The quality management system (QMS) rigorously controls product quality during production, improving the product pass rate.
- The MES production line system monitors production progress in real-time and allocates resources, helping improve worker efficiency by 30%.
- The use of automatic guided vehicles (AGVs) reduces labor intensity and enhances operational safety.

Smart Factory Security

The security, monitoring, and parking management across our factories have been automated, ensuring security and orderly operations.

Smart Product Design

At Quectel, we are committed to advancing the design of smart products that are adaptable to more application scenarios. Our products cover a wide range of fields such as smart transportation, energy, and agriculture. By leveraging cutting-edge technologies such as intelligent algorithms, sensors, and the internet, we customize intelligent solutions for various industries. Through innovation, we actively drive industry upgrades, deeply empower the development of new quality production forces, and fully serves people's aspirations for a better life.

Achievements in Digital Intelligence Development

	Smart Industry	Our industrial intelligent brand “Provecta AI” integrates cutting-edge technologies into industrial scenarios. A series of products have been launched to lower the AI usage threshold and promote intelligent upgrades.
	Smart Agriculture	The Beidou Navigation Agricultural Machinery Assisted Driving System, combining Beidou high-precision positioning, satellite-inertial navigation, 4G communication, automatic control, and IoT platforms, enables centimeter-level positioning and covers the full agricultural process of “plowing, planting, management, and harvesting”, which helps increase agricultural productivity.
	Smart Home	The launch of the Matter One-Stop Solution includes services such as IoT modules, mobile app services, Matter certification, and production line upgrades. This solution supports interconnectivity among home lighting, appliances, and electrical devices based on the Matter protocol, offering a high-quality home living experience.
	Smart Transportation	Our automotive-grade 5G modules, smart cabin modules, and vehicle antennas meet the demands of vehicle safety, assisted driving, and intelligent transportation systems. These products enhance the comfort, intelligence, and entertainment of smart connected vehicles, improve the driving experience, reduce traffic accidents, and regulate driver behavior. So far, these products have been used by major global automotive brands.



Case “Provecta AI” Industrial Intelligence Brand Drives the Efficient Deployment of AI Technology

In 2024, we launched the “Provecta AI” industrial intelligence brand, focusing on applying cutting-edge technologies like artificial intelligence, edge computing, machine vision, and software algorithm platforms to multiple industrial scenarios, such as defect detection, AGV robot loading and unloading, and automated testing lines for finished products. To accelerate the application of AI technology, “Provecta AI” introduced the AI algorithm platform “Jiangxin”, the visual deployment tool “Jiangzhun”, and tools for “0 code” development with graphical interaction, drag-and-drop operation and visualization configurations, all with algorithm acceleration capabilities. These tools help customers apply and deploy AI, significantly lowering the barriers to using AI technology.



Case RG255C Modules Support Data Transmission and Energy Efficiency

In 2024, Quectel's MBB product team partnered with a globally recognized chip platform and developed a new low-power 5G chipset RG255C, optimizing algorithms and hardware design. This helps customers increase data transmission speeds while significantly reducing energy consumption.

- **Economic Impact:** The product improves energy efficiency, helps customers reduce operational costs, enhances market competitiveness, and drives a 30% increase in order volume, boosting our revenue growth.
- **Social Impact:** It contributes to the development of smart cities, empowering urban infrastructure and improving residents' quality of life.
- **Environmental Impact:** It saves about 20% in annual electricity consumption, potentially reducing thousands of tons of CO₂ emissions.



Case 5G Empowers Trams for Green Travel

Based on Quectel's RG200U module, the tram is equipped with a 5G CPE that fully leverages the advanced technology of 5G LAN private networks. This enables the tram to transmit real-time vehicle data during its journey, interacting with real-time driving data through the 5G+system. The system provides drivers with information such as speed, and distance. In special cases, it can also detect and alert drivers to obstacles in front of the tram, significantly enhancing the assisted driving experience.



Digital Intelligence Development-Related Indicators and Targets

At Quectel, we continuously enhance the intelligent and digital manufacturing capabilities of our modules, achieving efficient data collection, deep integration of edge computing and AI, and the creation of a low-power, highly reliable, and extensively connected smart terminal ecosystem. This supports industrial intelligence, smart cities, and vehicle-to-everything, among other scenario applications, driving the digital upgrade of the entire industry chain. We aim to establish an open and collaborative IoT ecosystem, ultimately achieving the intelligent interconnectivity of everything, data empowerment, and the reconstruction of industry value.

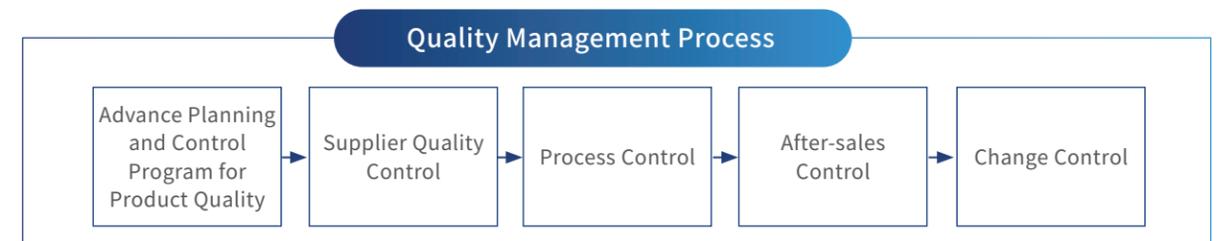
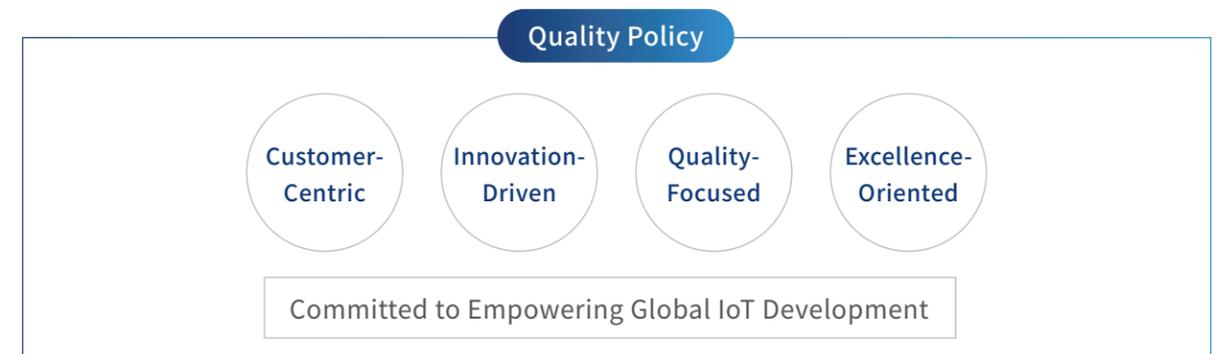


Product and Service Quality

Product and Service Quality Governance

At Quectel, we strictly adhere to the *Product Quality Law of the People's Republic of China* and other relevant local laws and regulations. In accordance with the requirements of the ISO9001 Quality Management System, we continuously improve our quality management organizational structure. We have established systems such as the Quality Manual, the Project Process Quality Management Procedures, and the Quality Abnormality Handling Process, and implement quality control and improvement initiatives to provide high-quality products and services to customers.

We have obtained certifications of ISO9001, IATF16949, and other systems, maintaining these certifications consistently. Additionally, we closely monitor the quality certification status of our contract manufacturers and overseas factories, ensuring that relevant certifications remain valid.



Quality System Development

First and Second-Level System Documents

97

Third-Level Standard System Documents

696

Third-Level Product Operation Manuals

420



▲ Quectel's ISO 9001 Quality Management System Certification



▲ Hefei YiRui's ISO 17025/CNAS Laboratory Certification



▲ Quectel's CMMI DEV V2.0 Maturity Level 3 Certification



▲ Quectel Changzhou's IATF 16949 Automotive Quality Management System Certification

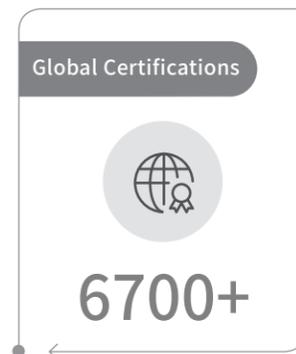
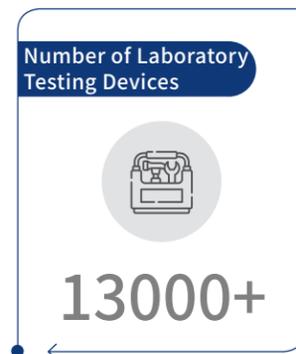
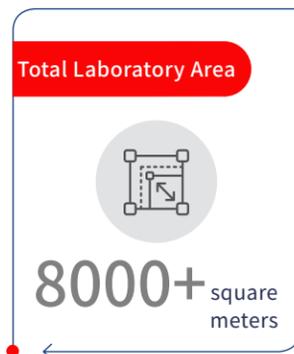


▲ Quectel's ISO 26262 Automotive Functional Safety Certification

Quality Platform Development

Advanced Laboratory Equipment

Fully automated production lines effectively ensure product quality.



- Our Intelligent Manufacturing Center works with manufacturing partners to ensure a stable supply chain.
- Advanced testing equipment ensures comprehensive testing coverage with strict testing criteria, and the stability of customer applications.
- Global certification coverage accelerates the internationalization of customer products.

Product and Service Quality-Related Strategy

At Quectel, we have always upheld the core value of “Customer-Centric” and have built a comprehensive risk control mechanism for product and service safety and quality. With our core value in mind, we have established a product and service safety quality risk management system, to identify, control, and evaluate risks throughout the entire product lifecycle. We are committed to creating high-quality products and services. Moving forward, we will continue to deepen our technological expertise, comprehensively improve product quality, further strengthen the marketing and technical support teams, keep up with technological trends and market demands, and provide more competitive, high-quality products and services to continuously expand market share and better meet customer needs.

Impact, Risk, and Opportunity Management Related to Product and Service Quality

Ensuring Product and Service Quality

Through diversified measures in project management, supplier management, and production management, we enhance product quality, build customer trust, and establish a solid foundation for our long-term development. For different customer groups (automotive-grade, industrial-grade, consumer-grade), we implement a tiered management approach covering product requirements, design processes, production processes, quality standards, and after-sales service to ensure that specific customer needs are met with precise service quality.

Ensuring Product Quality

Project Quality Risk Management

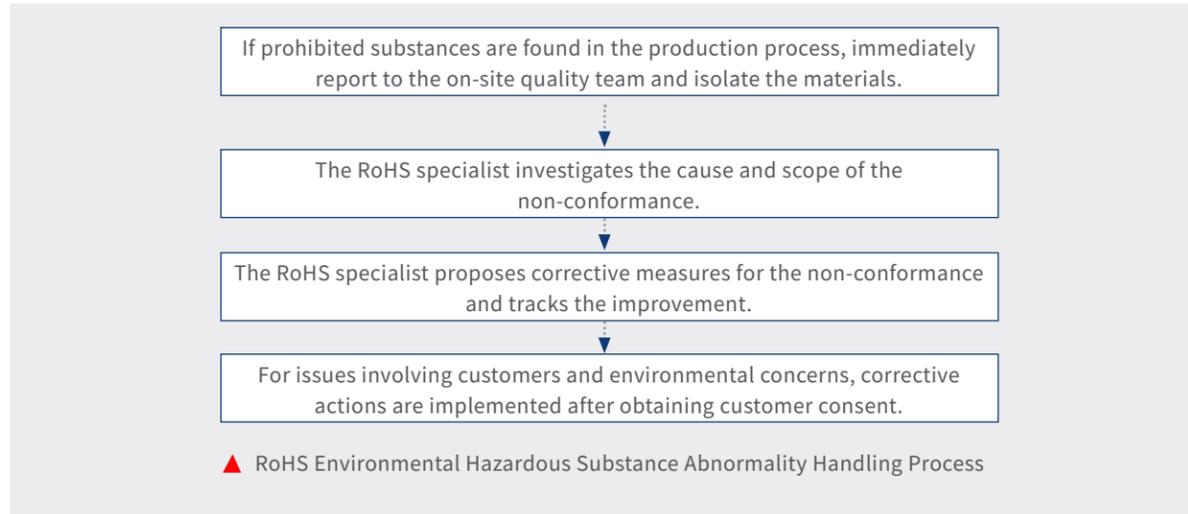
- Develop detailed project quality plans, clarify quality targets for each phase, and provide clear guidelines for project quality control.
- Implement lifecycle tracking across “R&D – Production – Sales – Use”, conduct internal evaluations, accurately identify deficiencies, and rectify them promptly.
- Organize project reviews to effectively identify risk factors during the project process, and identify, control, and evaluate product process risks to reduce quality risks. In 2024, we identified and analyzed 27 process risks for identification and control.

Production Quality Management

- Employ the Statistical Process Control (SPC) technology during production to monitor and analyze product quality in real-time, promptly identifying quality fluctuation factors and reducing product quality variation.
- Establish a quick response mechanism to address quality issues arising on site and customer feedback promptly, reducing the impact of quality issues.

Supply Chain Product Quality Management

- Strictly evaluate and select suppliers to ensure they have qualified quality control capabilities, ensuring the quality of raw materials and components from the source. We have developed the Management Standards on Prohibited Use of Hazardous Substances to reduce the use of toxic and harmful substances and rigorously inspect the raw materials provided by suppliers, requiring compliance with RoHS and other standards to prevent the flow of substandard toxic and hazardous materials into production.
- Establish a supplier quality feedback mechanism to promptly report quality issues to suppliers, encouraging them to optimize production processes and service workflows, thereby improving supply quality.



Case The Failure Analysis Laboratory Prevents Post-Production Risks

The Failure Analysis Laboratory employs various advanced instruments to conduct comprehensive product testing throughout the project lifecycle, assessing product conformity. Based on monitoring data and analysis results, the laboratory delves into potential risk points and proactively develops and implements targeted preventive measures, effectively reducing quality risks after product production and ensuring stable and reliable product quality.

- **Before a project's mass production:** Evaluate factors such as benchmark products, new components, layered structures, reserved process dimensions, and reliability capabilities, enriching the internal design experience library to enhance project design efficiency and reliability.
- **During a project's mass production:** Assist the project team in precisely locating the root causes of complex abnormalities in the production process, such as foreign objects in the PCB layers, accurately identifying the scope of anomalies to prevent issues from reaching the customer, and collaborating with the factory to implement preventive measures.
- **After a project's mass production:** Work with technical support to analyze after-sales issues in the market, summarize internal lessons learned, and create training materials for continuous improvement to prevent the recurrence of similar problems.



Development of a Quality Culture

The Company regularly organizes employee training activities to enhance employees' awareness of quality responsibility and professional skills, and make sure that they have a profound understanding of the quality control process, thus ensuring the efficient execution of all quality-related tasks.

In 2024

- The Quality Department organized **41** quality culture training sessions, covering topics such as product mechanisms, failure phenomena, quality prevention, and suggested measures, empowering quality personnel and improving product pass rates.

Protection of Customer Rights and Interests

At Quectel, we have always adhered to the principle of "serving customers better". We have established systems such as the Customer Satisfaction Control Procedure and the Customer Issues Management Process for the Technical Support Department, and committed to providing customers with timely and high-quality products and services. We provide 24/7 uninterrupted service to meet customers' needs at any time, aiming to deliver high-quality and efficient service experiences to customers.

In 2024

Domestic and overseas customer support engineers achieved a service satisfaction rate over

99%

Customer Technical Support Service System



Customer Technical Support Channels



Comprehensive Service Support to Enhance Customer Satisfaction

Empowering Customer Support Personnel

- In 2024, we conducted large-scale training sessions covering 41 topics, with a total of 1,907 participants, significantly enhancing the technical capabilities of the relevant personnel.
- Focus on strengthening engineers' English-speaking skills and promoting group learning models, aimed at providing better support for overseas customers.
- For new employees, a comprehensive training system has been established, covering everything from basic process knowledge to advanced technical skill development, standardizing their ability to interact with customers.

Optimizing Customers' Issue Tracking

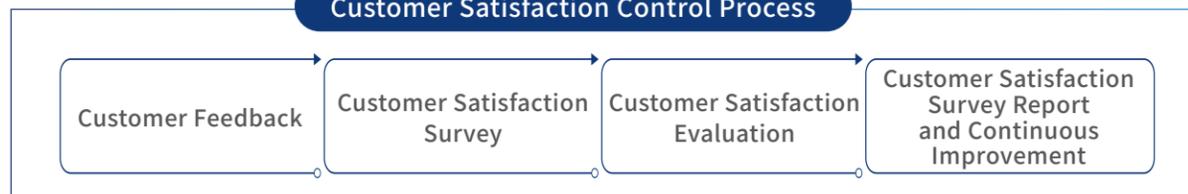
- The online digital tracking system has been implemented for overseas and domestic customers respectively, to monitor and track their issues.

Expanding Support Channels

- Through the "Customer Support" system, we regularly send the latest firmware and documentation to customers, providing timely technical support and resources.
- A technical BBS has been set up, and a Chatbot was added to our official website, broadening our communication channels with customers and enabling quick responses to customer inquiries.

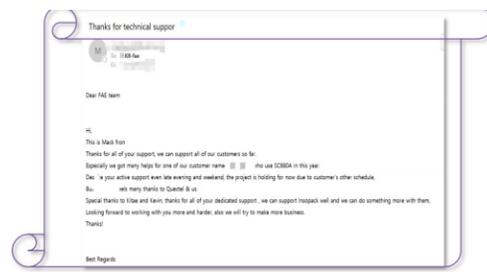
We insist on conducting customer satisfaction surveys both domestically and internationally, regularly collecting and analyzing customer satisfaction results. The surveys cover 14 perspectives, including quality, service, and product, and gather customer feedback from various aspects. In 2024, both domestic and international customer satisfaction improved compared to 2023, meeting our customer satisfaction targets.

Customer Satisfaction Control Process



Case Customers' Thank You Letters

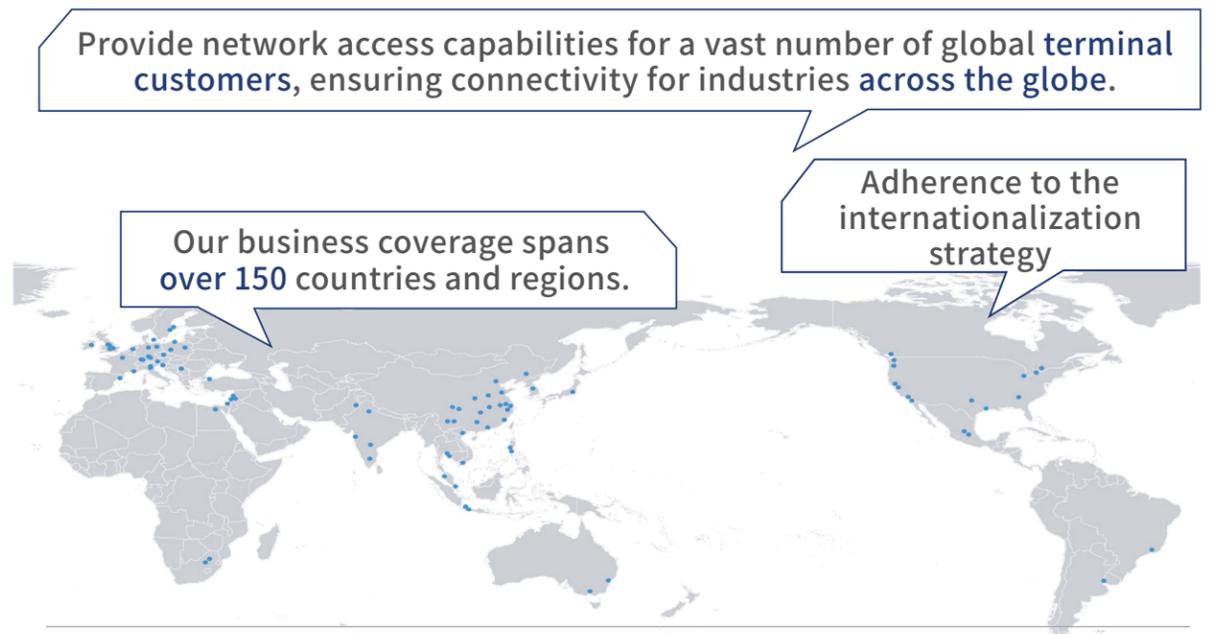
In 2024, our Customer Technical Support Department received letters of appreciation from 15 customers across different countries, recognizing the Quectel team's effort.



▲ Customer's Thank You Letter

Responsible Marketing

To effectively ensure strict compliance with our marketing requirements, and to practice responsible marketing across the board, the Company has established several systems, including the Quectel Brand Management Standards, Quectel Marketing PR Standards, Quectel Brand VIS Management Measures, and Quectel Exhibition, Seminar and Offline Brand Activity Management Guidelines, to standardize product promotional activities by adhering to the fundamental principles of accuracy, objectivity, and rigor. Furthermore, we have established a strict marketing material review mechanism, specifying that all promotional content must be approved by authorized personnel within the Company prior to external release, ensuring that all promotional materials fully comply with legal and regulatory requirements.



- Our sales channels cover China, Europe, North America, Asia, Africa & Latin America, and other regions across the globe.
- Our strong brand presence and sales channel advantages drive the rapid development of new business.
- We maintain close collaboration with global mainstream operators and other industry chain partners.

To effectively assist our employees and relevant personnel in mastering product knowledge, improving product accessibility, and laying a strong foundation for product promotion, application, and business expansion.

In 2024

- We organized **16** product knowledge training sessions, covering more than **1,200** participants.

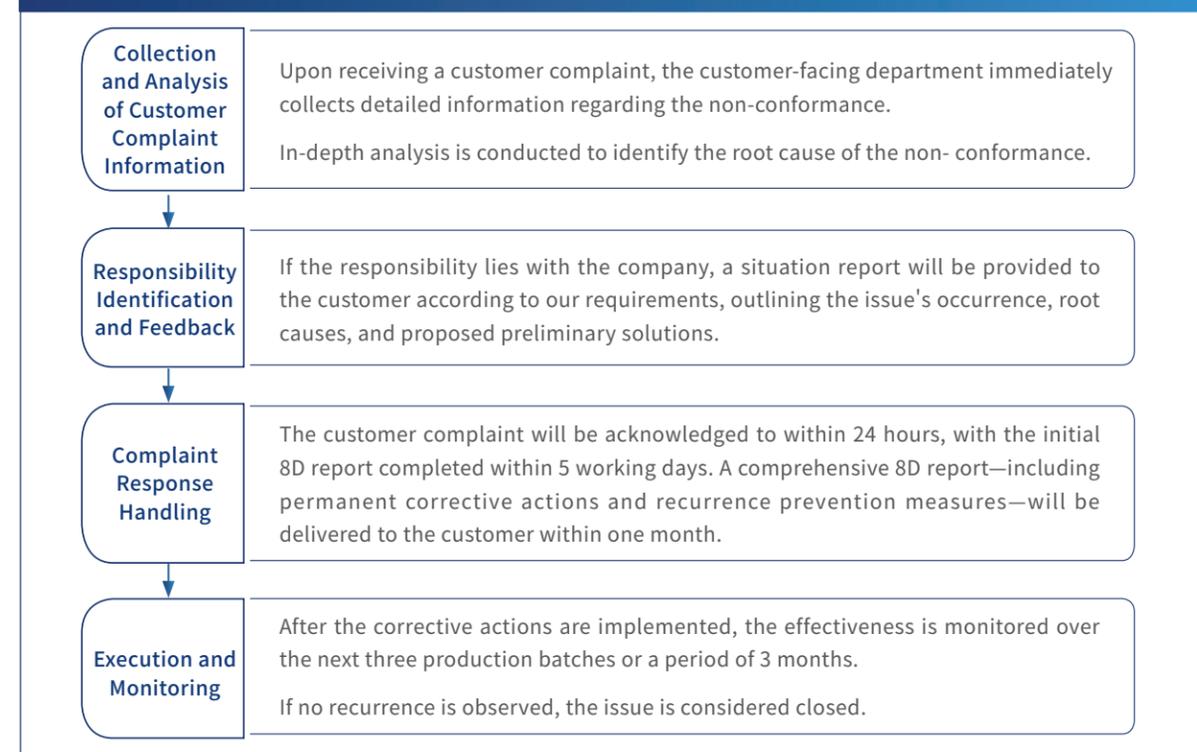
Product Knowledge Popularization

<p>Domestic and Overseas Employees</p>	<ul style="list-style-type: none"> ● Offline Knowledge Lectures: Senior product managers and technical experts deliver comprehensive lectures covering product features, application scenarios, and competitive advantages. ● Offline Learning Platform: The platform features a rich collection of product knowledge resources, including video tutorials, documentation, and online tests, enabling employees to learn product knowledge flexibly and autonomously.
<p>Domestic and Overseas Distributors and Customers</p>	<ul style="list-style-type: none"> ● We conducted 34 customized product technical training sessions for domestic and international distributors through onsite training, online meetings, and video tutorials for our distributors and customers. This helps them understand the methods for product operation and maintenance, further improving the product usage experience.

Customer Complaints and Handling

We have established a comprehensive complaint handling process for customer feedback and complaints. Through layered handling process involving by the technical support team, quality technicians, and R&D and design personnel, we ensure prompt a quick response to customer feedback and effective mitigation of potential adverse impacts.

Customer Complaint Handling Process



Customer Complaint Resolution Rate	Customer Complaint Response Rate	Average Customer Complaint Response Time	Average Customer Complaint Resolution Time
91.6%	100%	8 Hours	40 Hours

Product and Service Quality-Related Indicators

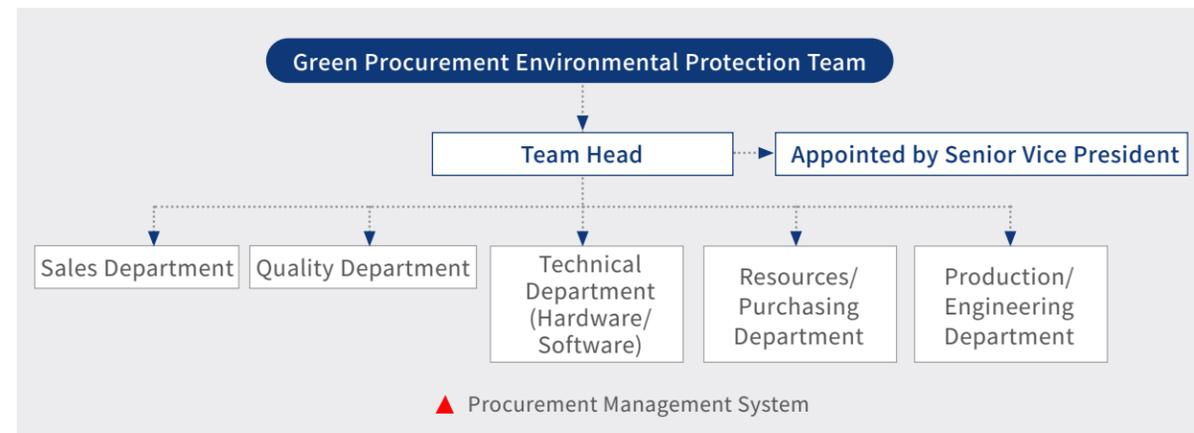
Indicator	Target	Progress in 2024
Product Pass Rate	Achieve established target	Product pass rate was 99.86%, target achieved
Product Compliance Certification	To ensure that our products comply with international market requirements, we have obtained both domestic and international market access certifications based on the market and customer needs for different product models.	In 2024, we successfully completed 900 regulatory certifications, including domestic certifications such as China CCC, NAL, and SRRC, as well as international certifications like EU CE, U.S. FCC, Canada IC, Japan JATE, TELEC, South Korea KC, and Brazil ANATEL. Of these, approximately 205 certifications were domestic, and 695 were international.
Major Safety and Quality Incidents Related to Products and Services	None	Achieved
Marketing Compliance Violations	None	Achieved
Customer Satisfaction Rate	Over 90%	Overseas: 93% Domestic: 91%



Supply Chain Management

Supply Chain Management-Related Governance

We have formulated and implemented procurement management systems such as the Procurement Control Procedure, the Production Material Procurement Tender Management Regulations, the Procurement Department Operating Standards, and the Resource Procurement Anti-Corruption Standards, to better standardize procurement activities. These measures ensure that procurement is efficient, transparent, and fully compliant. We have also established the Green Procurement Environmental Protection Team to strengthen management responsibilities, fully identify supply chain procurement risks, eliminate the use of hazardous substances, closely monitor changes in regulations and policies, and promote the compliance and sustainable development of both the Company and its supply chain partners.



Management

The team is led by an appointee of the Senior Vice President, who serves as the sole authorized signatory for external environmental-protection agreements. This leader organizes and coordinates the green procurement process to ensure smooth operation, eliminate environmental risks in our products, and guarantee customer satisfaction.

Sales Department: Learn about eco-friendly materials, identify customer environmental requirements, and provide internal feedback, collaborate with the Quality Department to provide necessary environmental protection data.

Quality Department: Update the hazardous substance management methods in a timely manner, work with R&D, sales, and resource departments to evaluate and record customer environmental requirements, review and manage the environmental qualifications of suppliers' materials, and assess the environmental status of our projects.

Technical Department (Hardware/Software): Lead new-product development, and ensuring that product development complies with customer regulatory requirements.

Resource/Procurement Department: Source suppliers that meet environmental protection requirements and collect testing reports for materials such as ROHS, and halogen-free reports. Conduct environmental protection investigations on existing suppliers and create a list of qualified green suppliers.

Production/Engineering Department: ① Monitor incoming materials for environmental compliance, review reports and packaging proofs; if necessary request third-party testing reports such as ROHS, REACH, and halogen-free reports when necessary. ② Inspect eco-friendly materials, immediately isolate the material and stop the relevant production line if there is no eco-label, and promptly report to the superior. ③ Monitor whether the shipments are eco-friendly, ensuring that the shipment labels and packaging meet ROHS certification. ④ Verify that production auxiliary materials and recycled materials are environmentally friendly.

At Quectel, we place great emphasis on supply chain responsibility management. Especially during the supplier admission process, we incorporate ESG performance into evaluation criteria. To ensure the standardized and sustainable supply chain management, we have developed systematic documents such as the Supplier Development and Management Standards and the Supplier Management Manual, which regulate the daily supplier admission and termination management mechanisms.

We have formulated a series of agreements, including the Supplier CSR Agreement and the Supplier Environmental Protection Agreement, to constrain and regulate supplier behaviors from multiple perspectives, including social responsibility, environmental protection, and business ethics, providing strong assurance for sustainable supply chain management.

ESG Requirements for Suppliers		
Environmental	Environmental Protection	Suppliers must comply with all environmental laws and regulations, including chemical management, waste disposal, wastewater and waste gas control, and meet our additional environmental requirements by providing proof of non-hazardous material products.
	Forced Labor	The employment of any type of forced or involuntary labor is prohibited.
	Prohibition of Child Labor	The employment of child labor is prohibited. Apprenticeship programs are supported, provided they comply with all applicable laws and regulations for such programs.
	Remuneration and Benefits	Suppliers must comply with all applicable salary and working hour laws and provide legally required benefits.
Social	Working Hours	Suppliers must adhere to local statutory working hours and compensate for overtime. Weekly working hours (including overtime) must not exceed 60 hours (in exceptional cases, employee consent is required; lower standards apply in regions with lower working hour limits), and employees must be guaranteed at least one day of rest per week.
	Non-Discrimination and Respect	Discrimination based on race, religion, gender, or any other factor is prohibited in recruitment. Fair treatment of all employees must be ensured. Employee rights shall be respected, and any form of corporal punishment, threats of violence, or harassment is strictly forbidden, in order to maintain a safe and respectful working environment.
	Health and Safety	Suppliers must establish health and safety standards for occupational health safety and implement corresponding management systems.
Corporate Governance	Business Ethics	Suppliers must strictly comply with all laws and regulations related to bribery, corruption, and prohibited business practices.
	Corporate Oversight Records	Suppliers must comply with our code of conduct, provide relevant documents and grant access as required, and respond promptly to our reasonable inquiries from our representatives regarding its implementation.



Supply Chain Management-Related Strategy

At Quectel, we continuously deepen close collaboration with our suppliers and upstream and downstream partners in the value chain, establishing a more robust and efficient collaborative mechanism. From raw material procurement to finished product delivery, we exercise comprehensive control over the production process to ensure product supply stability and lay a solid foundation for steady business expansion. In the development of the industrial ecosystem, we are enhancing cooperation with operators and core suppliers and integrate resources from various parties to jointly conduct technological innovation and application exploration, and promote a more competitive and innovative industry ecosystem.

Supply Chain-Related Impact, Risk, and Opportunity Management

Supplier Risk Control Mechanism

At Quectel, we continuously enhance our supply chain risk management mechanism to ensure its safety and stability of our supply chain. We actively strengthen risk identification, evaluation, and monitoring systems and improve our supply chain backup strategy. We require suppliers to sign the Long-Term Supply Assurance Agreement and the Long-Term Cooperation Agreement to reinforce partnerships and enhance the resilience and reliability of the supply chain.

Risky Supplier Admission Control	For high-risk suppliers requiring urgent introduction, a strict evaluation and special approval process is enforced. The Supplier Concession Introduction Application must be submitted through the BPM system, and may only proceed after approval by multiple departments.
Regular Review and Dynamic Monitoring	Every quarter, the supplier list undergoes comprehensive review and risk assessment to identify potential risks, and update risk levels, ensuring the compliance and security of the supplier pool.
Risk Warning and Emergency Response	A real-time monitoring mechanism is established. Once a risk event is triggered, an alert is immediately initiated. Relevant departments collaborate to formulate solutions within 24 hours to minimize business impact.
Risk Constraints and Responsibility Enforcement	High-risk suppliers are required to sign legally binding supply assurance agreements and provide performance guarantees, with clear breach clauses to enhance accountability.
Optimization of Supply Assurance Strategy	We prioritize a multi-source supply mechanism to avoid reliance on a single supplier. Alternative resources must be available for key materials to enhance the resilience of the supply chain.
Risk Isolation and Regional Control	Suppliers identified as high-risk are not allowed to be introduced into overseas projects to prevent spread of compliance risks to international business operations.
Encouraging Suppliers to Conduct Self-Risk Assessments	Suppliers are required to establish internal risk assessment and issue escalation mechanisms, covering areas such as safety compliance, financial risks, product safety, process stability, and supply risks. They must also develop emergency response and escalation procedures to ensure early detection, timely alerts, and prompt resolution of risks.

Supplier Audits

At Quectel, we continuously strengthen supplier audit management and optimize supplier resource allocation. We have established the Annual Supplier Audit Plan and coordinate multiple departments to conduct on-site supplier evaluations, performance assessments, and other tasks. Supplier information is recorded in real-time on our supplier management platform to ensure transparency and traceability.

Supplier Audit Measures

 <p>Comprehensive Evaluation</p>	<ul style="list-style-type: none"> We conduct comprehensive supplier evaluations through the Supplier Evaluation Form, which covers various dimensions, including quality systems, R&D capabilities, quality control, process management, warehousing and transportation, after-sales service, safety management, environmental protection, and human rights. Suppliers involved in major negative events or those ranked at the lowest levels in evaluations are subject to termination of partnerships. In 2024, we conducted performance evaluations for 164 production suppliers, all of whom met the qualification standards.
 <p>Guidance on Quality Improvement</p>	<ul style="list-style-type: none"> For issues such as defective materials and quality non-conformance, we assist suppliers in traceability, root cause analysis, and corrective action. Suppliers are required to submit a correction report and improvement measures within the specified time frame to effectively enhance the maturity of the supply chain's social responsibility system. In 2024, we provided correction feedback to 10 production suppliers, and all identified issues were rectified.

Responsible Procurement

At Quectel, we adhere to a win-win philosophy based on mutual interdependence, ensuring product quality and actively fulfilling social responsibility through an optimized procurement process and strict governance of supplier collaboration. We aim to deliver core value to the industry chain, establish a fair and open cooperation platform, and work closely with industry partners to drive industry development, achieving mutual benefits and sustainable growth.

Responsible Procurement Measures

Full-Process Management	Through the procurement system platform, we implement refined end-to-end management for required production raw materials.
Strengthening Standardized and Efficient Procurement	We have thoroughly reviewed issues in the procurement process, implemented targeted improvement measures, and clarified departmental responsibilities to further standardize our procurement operations.
Transparent Procurement Management	To ensure transparency in the procurement process, we require all suppliers to sign and strictly comply with the Supplier Integrity and Honesty Commitment, firmly prohibiting any form of commercial bribery, improper benefit transfer, or other unethical behavior.
Empowering Procurement Skills	We emphasize empowering procurement personnel by organizing quarterly and monthly training sessions, featuring internal and external experts. The training covers topics such as procurement data analysis, raw material and product introductions, negotiation skills, and customs clearance operations, effectively improving their professional capabilities. In 2024, we organized 45 procurement-related training courses, with 100% of procurement personnel participated in sustainable procurement training.

Avoiding the Use of Conflict Minerals

At Quectel, we continuously improve our conflict minerals management system and processes, to ensure that the raw materials we use comply with the Conflict-Free Sourcing Initiative (CFSI) standards. We have established the Conflict Mineral Declaration with a clear commitment not to directly or indirectly procure any materials containing “conflict minerals” to avoid funding or providing benefits to armed groups in the Democratic Republic of the Congo or its neighboring countries.

To further enhance supply chain transparency, our suppliers are strictly prohibited from using conflict minerals as raw materials. We also ensure that all direct suppliers comply with environmental laws and regulations, including but not limited to RoHS 2.0 directive, the REACH Regulation, the Battery Directive, the Packaging Directive, and the POPs Regulation. Additionally, we sign the Supplier REACH Compliance Declaration with direct suppliers to increase the transparency of supplied products and are committed to avoiding the use of hazardous substances in the production process, driving the development of a sustainable supply chain.



▲ Quectel's Declaration of Conflict Minerals



▲ Quectel's RoHS Declaration of Conformity

Ensuring Supply Chain Security

To optimize supply chain business operations and enhance supply chain stability, we have obtained the Authorized Economic Operator (AEO) certificate. The AEO system, advocated by the World Customs Organization, is crucial for promoting global supply chain security and trade facilitation. The AEO certificate has significantly optimized our trade facilitation and market competitiveness.

Priority Clearance for Improved Efficiency: We enjoy priority clearance privileges, allowing our goods to quickly enter the market, significantly shortening waiting times for goods, and accelerating trade flow.

Reduced Inspection for Lower Costs: The reduced inspection rate effectively minimizes the risk of cargo delays, lowering logistics costs, and improving trade efficiency.

Stabilizing the Supply Chain for Development: The enhanced brand influence helps us stand out in international market competition, further ensuring the stability and reliability of the supply chain.



▲ Authorized Economic Operator (AEO) Certificate

Supply Chain Management-Related Indicators and Targets

Quectel's Supplier Target Management in 2024

Total Number of Suppliers		Number of Suppliers that Have Undergone Annual Evaluations
409		164
Supplier CSR Agreement Signing Rate	Supplier Environmental Protection Agreement Signing Rate	Proportion of Suppliers Signing the Sustainable Procurement Charter/Supplier Code of Conduct
100%	100%	88.75%

Promoting Industry Progress

At Quectel, we fully leverage our strengths to actively participate in the industrial chain development, contribute to industry development, and build a positive industry ecosystem. We are committed to establishing sound cooperative relationships with customers, suppliers, and other partners, engaging in exchanges with peers, and promoting mutual benefits, technological exchange, and joint responses to the market. This ultimately aims to promote the sustainable development of the entire industry.

Industry Affiliations

- Member of the Global Coalition on Telecommunications 3GPP (3rd Generation Partnership Project)
- Member of the China Communications Standards Association (CCSA)
- Member of the Groupe Speciale Mobile Association (GSMA)

Case In-depth Participation in 3GPP Standard Setting to Advance 5G-A Technology

From February to November 2024, we actively participated in the 3GPP working group meetings attended by representatives from multiple countries worldwide, engaging in in-depth technical discussions and solution development for global communication standards. Leveraging our technical advantages, we successfully promoted our technological solutions to be adopted in the 5G-A standards, making it a vital component of the global 5G cellular communication standards. This achievement has been widely applied in various vertical industries, such as new energy vehicles, smart agriculture, smart factories, smart healthcare, and smart homes, providing strong support for the industry's digital transformation and technological advancement. It further solidifies our leadership in global communications technology and contributes significantly to the industry's development.

As of the end of the reporting period, we had submitted nearly **56** technical proposals for 5G communication standards to the 3GPP organization.

Case

Years of Participation in the Partner Conferences Hosted by China Mobile, China Unicom, and China Telecom

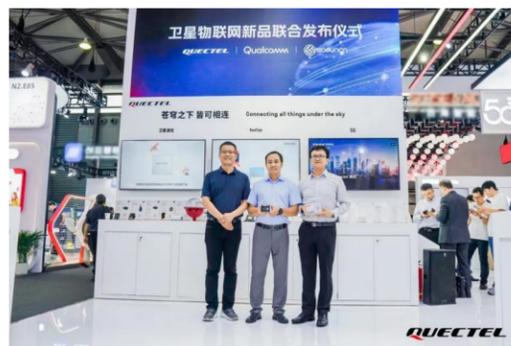
From October to December 2024, the Partner Conferences hosted by China Mobile, China Unicom, and the Digital Technology Ecosystem Conference hosted by China Telecom took place in succession. We participated in these events with our nine major product lines and over 100 products and terminals, showcasing excellent products and customer terminals in fields such as 5G, RedCap, edge computing, intelligent cockpits, and satellite communications. We collaborated with various parties to explore the possibilities in the “AI+ era” .



Case

2024 MWC (Mobile World Congress) – Quectel Lights Up the Overseas Digital Blue Ocean

As one of the leaders in the global IoT industry, we participated in multiple exhibition areas at the 2024 Mobile World Congress (MWC) held in Barcelona, Las Vegas, and other locations. Our high-performance smart module products and related solutions have widespread applications in industrial intelligence, including Wi-Fi 7 and Bluetooth 5.4 combo modules. In collaboration with Qualcomm, we also released the industry’s first asset tracker that supports both “NTN satellite communication” and “multi-mode cellular communication” functionalities, making significant contributions to the technological advancement and digital transformation of the global communications industry. This further reinforces our technological leadership position in the international market.



Case

Quectel Supports Various Sectors by Participating in Multiple Exhibitions



China International Gas, Heating Technology and Equipment Exhibition

We showcased diverse Matter products and solutions to empower the smart home industry, driving intelligent upgrades and fostering ecosystem collaboration.



2024 Hong Kong International Lighting Fair

We displayed modules and smart lighting solutions supporting the Matter protocol and Amazon ACK SDK, advancing smart home interoperability.



Electrical Instruments and Meters Exhibition

We launched modules and RedCap technology solutions for the power industry, accelerating the application and sharing of cutting-edge technologies in the energy sector.

Equal Treatment to SMEs

In our industry chain collaboration, we uphold the principle of integrity and treat all small and medium-sized enterprise (SME) partners equally. We have built a rigorous procurement order execution mechanism, strictly adhering to the delivery acceptance standards and timelines specified in cooperation agreements. By leveraging standardized process management, we ensure timely receipt of goods and clear settlement of payments, strictly avoiding any unreasonable delays or withholding of payments. We actively alleviate financial pressure for SMEs, providing stable business continuity support, helping SMEs advance steadily, and jointly creating a trustworthy, orderly, and win-win business environment.

During the reporting period

We had **NO** overdue payments to SMEs.

Data Security and Privacy Protection

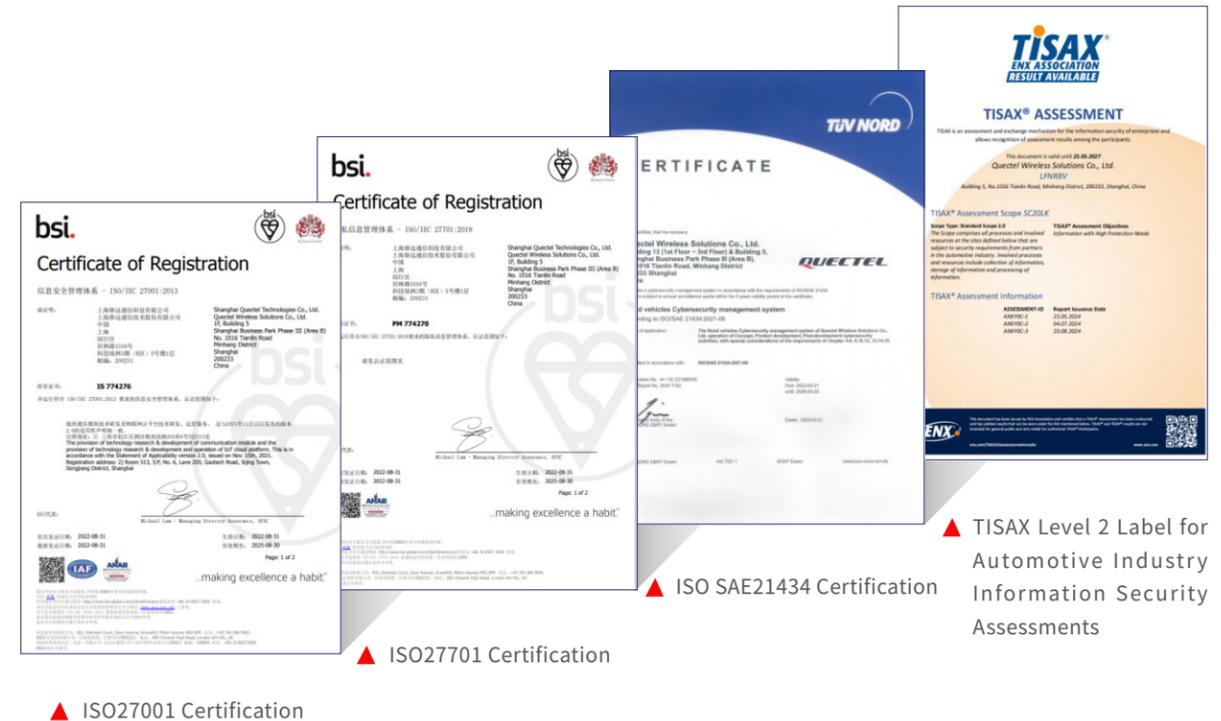
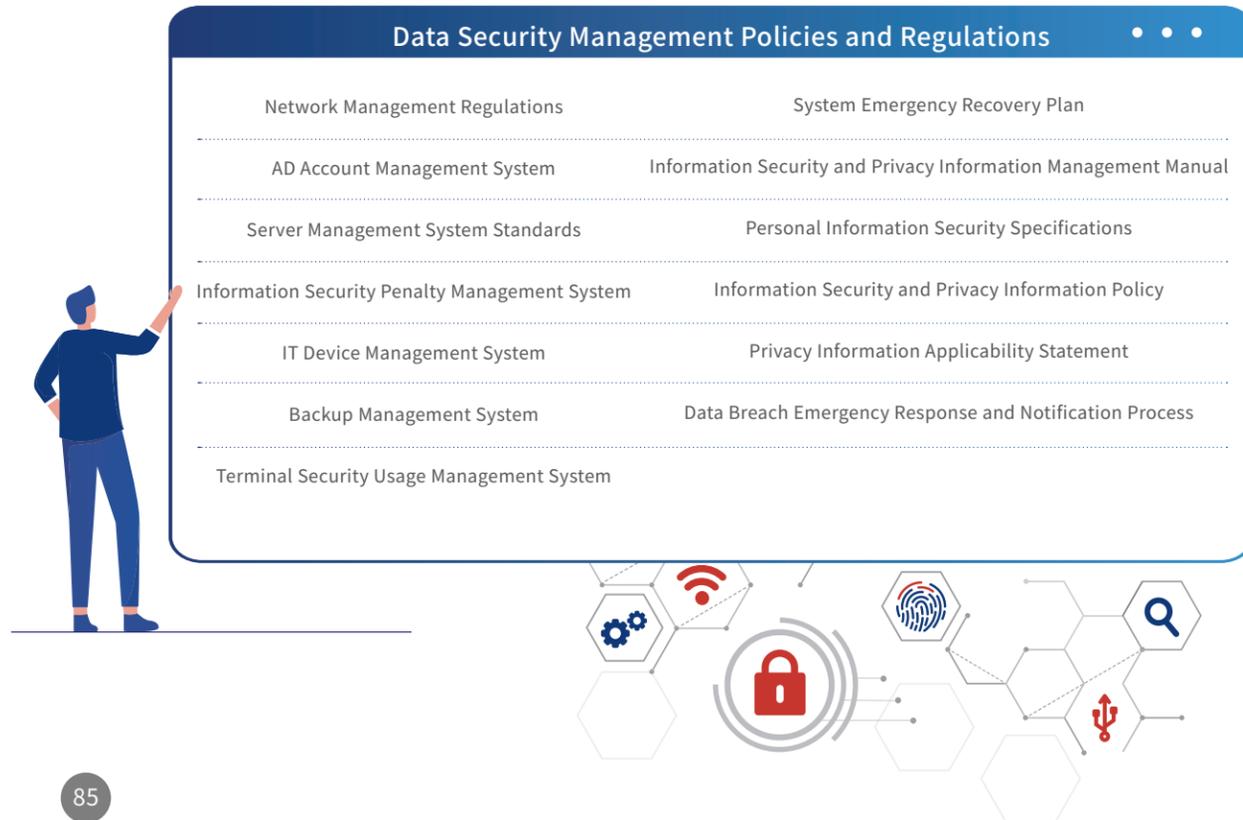
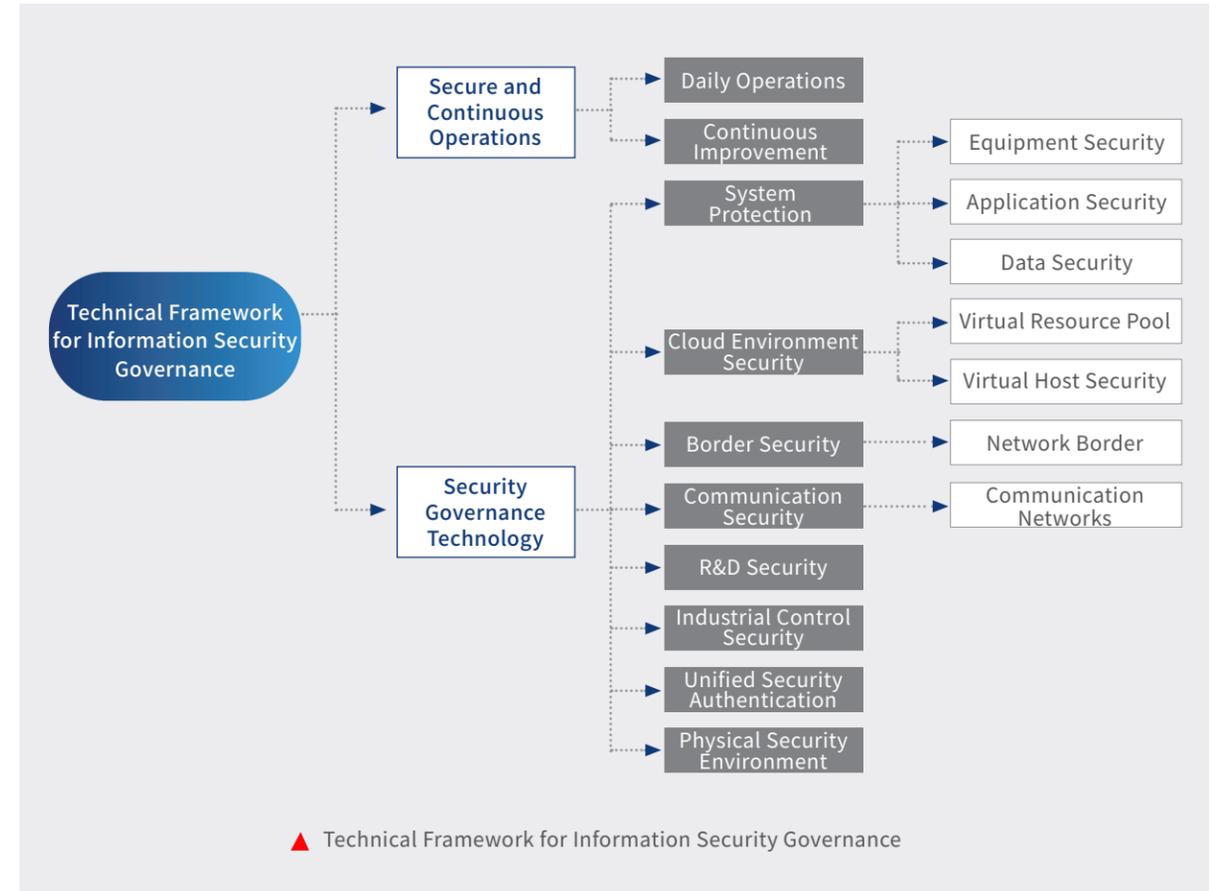
Governance Related to Data Security and Privacy Protection

Data Security System Development

We are committed to complying with the *Cybersecurity Law of the People's Republic of China*, the *Data Security Law of the People's Republic of China*, the *Personal Information Protection Law of the People's Republic of China*, and other information security and privacy regulations. We continuously improve our information security management mechanisms, and have developed various information security management policies, emergency response policies, and operational process manuals to ensure the stable operation of our information systems, effectively guard against all types of information security risks, and establish a robust security defense for steady business development.

We have received the ISO/IEC 27001 Information Security Management System Certification (for fields such as communication module technology R&D and IoT cloud platform technology R&D, and operational services), ISO 27701 Privacy Information Management System Certification, ISO 21434 Road Vehicles Cybersecurity Management Certification, and the TISAX Level 2 label for automotive industry information security assessments.

The IT Department has established an information security team that regularly conducts information security audits, promptly rectifies any identified issues, and continuously enhances the information security management system in response to technological developments and changes in business needs.



Data Security and Privacy Protection-Related Strategy

Data is our core asset. We actively improve our security strategy, continuously raise security awareness, enhance privacy protection, respect personal privacy, assume social responsibility, and continuously refine our system to ensure the provision of secure, efficient, and sustainable products and services to our customers.

Impact, Risk, and Opportunity Management Related to Data Security and Privacy Protection

Daily Data Security Management

We implement a comprehensive information security strategy, accurately identify risks, regularly conduct data backup drills, strengthen network control, employ professional tools to detect and fix vulnerabilities, and enhance employee training to jointly build a robust information security defense.

Data Security Management Measures	
Data Transmission	<p>Cross-department Transmission: Adopt various data transmission methods such as shared drives, cloud storage, FTP, AISHU, SharePoint, and OneDrive to meet the needs of different departments and business scenarios, and back up data to address various information security incidents..</p> <p>Overseas Cross-Border Transmission: Conduct PI assessment for data transfers involving foreign colleagues and strictly restrict cross-border data flow.</p> <p>Confidential Transmission: Establish the Data Transmission Operational Guideline to safeguard sensitive data during network transmission, preventing data leakage and or tampering.</p>
Data Leakage and Backup Emergency Drills	Led by the IT department, we conduct key data backup and recovery drills in accordance with emergency response plans for data leaks, and strictly adhere to the backup management system, ensuring regular backups and drills to maintain data security and recoverability.
Classification and Vulnerability Management	Domestic and overseas data is categorized, with whitelists and blacklists established for classification management. Every two months, open-source POC scanning tools are used to detect risk exposure and vulnerabilities. The scan results are sent to business departments for rectification.
Employee Privacy	Update and revise the Quectel Employee Privacy Statement to strengthen the protection of employee privacy and ensure the security of employees' personal information.
Comprehensive Data Management	Advance full-scope project management, implement proactive attack detection, comprehensive log management, and data-level analysis to enhance information security protection capabilities.
Information Security Awareness Training	Organize data compliance and information security training sessions, seminars, and other activities that cover topics such as the popularization of information security policies and regulations, office and daily security norms, security rule summaries, and interactions discussions. These activities aim to raise employees' awareness and response capabilities regarding information security.

Information Security Training Performance in 2024

- ✔ Total number of information security training sessions: **6**
- ✔ Information security and business secret training exam pass rate for new employees: **100%**
- ✔ Total participants in information security exam: **4,000**; and the pass rate: **100%**



Data Security Governance Results

Coverage of Business Areas with Data Security Certifications

90%

Sensitive Data Encryption Coverage

100%

During the reporting period, we had **not faced** any penalties from relevant authorities due to violations of information security and privacy protection laws and regulations.

Protection of Customer Privacy

At Quectel, we strictly adhere to data protection laws and regulations such as the *EU General Data Protection Regulation (GDPR)* and other domestic and international privacy protection laws. Through the implementation of both technical and management measures, we continuously improve our customer privacy complaint handling mechanism, ensuring that when customer privacy rights and interests are violated, customers can receive timely and effective solutions. Additionally, privacy protection measures are fully integrated into the service lifecycle, providing global customers with secure, reliable, and trustworthy service experiences.

In 2024

No customer privacy breach incidents occurred.

Customer Privacy Protection Measures

Confidentiality Agreements	Decentralized Customer Information Management	DIPAs
We sign confidentiality agreements with individuals, companies, and customers, clearly defining the confidentiality obligations of both parties regarding sensitive information through legal documents.	We implement decentralized management of customer information, ensuring that only authorized personnel have access to and can process customer data, effectively preventing unauthorized access and leakage.	We conduct Data Protection Impact Assessments (DIPAs) to systematically identify and evaluate the impact of data processing activities on customer privacy. Based on the assessment results, appropriate measures are implemented to prevent any compromise of customer privacy.

Data Security and Privacy Protection-Related Indicators and Targets

Data Security Management Targets and Progress					
Indicator	Target	Progress in 2024			
		Q1	Q2	Q3	Q4
Information Security Incidents	0	0	0	0	0
Data Leaks	0	0	0	0	0
Long Business Interruptions (30+ minutes)	0	0	0	0	0
New Vulnerability Fix Rate	100%	98%	97%	98%	96%
Information Security Training (Times)	100%	1	3	1	1



Safeguarding Employee Rights and Interests

Employee Employment

We adhere to the principle of “merit-based selection, public recruitment, internal promotion first, and hiring the most qualified candidates”, and have established a series of employee recruitment policies to standardize the recruitment process. At the same time, we strictly follow the Interviewer’s Handbook to shape the professional image of interviewers and conduct recruitment according to the Employer Branding Action Plan, ensuring a fair and just recruitment process.

Compliant Employment

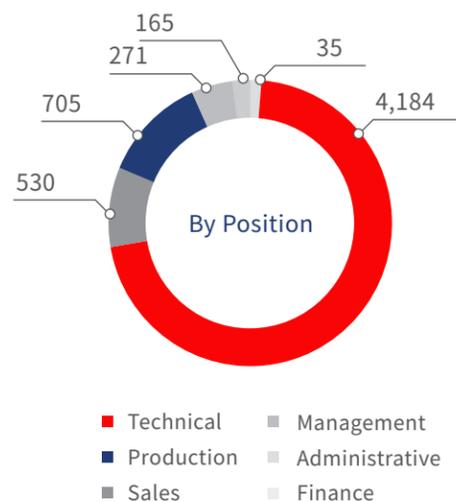
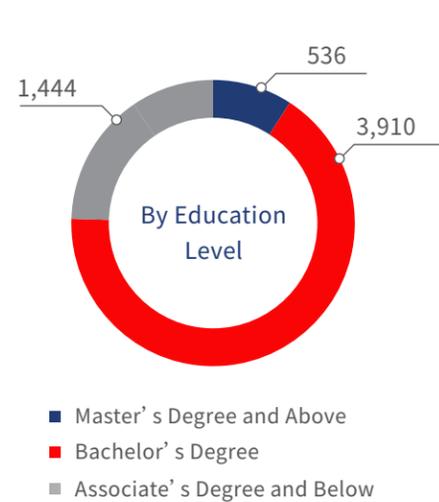
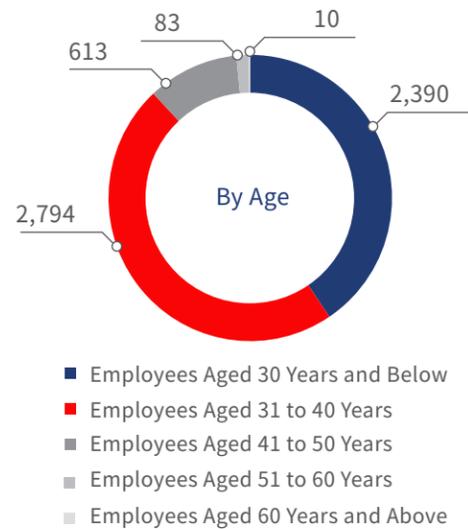
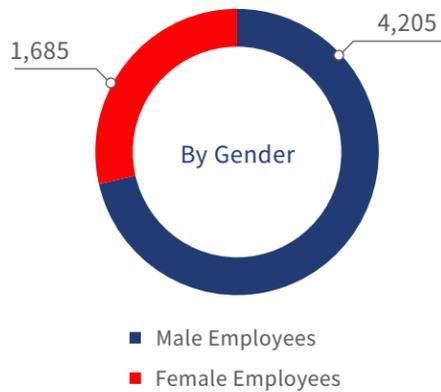
We implement a compliant and transparent recruitment policy, adhering to a science-based process management approach throughout the recruitment and employment process. We have established internal management systems such as the Recruitment Management Measures, the International Talent Recommendation Guidelines, the International Recruitment Management Regulations, and the Employee Handbook, to standardize the recruitment procedure. We require that all employees meet the legal employment age requirements, preventing child labor from the source. Additionally, we prohibit any form of forced labor, and all employees’ work is voluntary, with the right to terminate the employment relationship in accordance with the law.

	Labor Contract Signing Rate	Social Insurance Coverage Rate
	100%	100%
During the reporting period, we had no incidents of child labor or forced labor.		

Diversity, Equality, and Inclusion

We actively implement a diversified employment philosophy, considering diversity, equality, and inclusion (DEI) as core value as our business operations. We have established policies such as the Anti-Discrimination Policy and the Workplace Bullying Prevention Procedure, explicitly prohibiting discrimination, insults, or offensive behavior based on race, color, age, gender, sexual orientation, ethnicity, disability, pregnancy, religion, political affiliation, and marital status. Employees are encouraged to file complaints regarding discrimination or bullying in writing or orally. We will handle and publicly announce the issues in accordance with the Employee Complaint Control Procedure.

Employee Composition



Talent Acquisition

We leverage multiple channels for talent acquisition, including online recruitment, headhunting, internal referrals, social recruitment, campus recruitment, university-enterprise collaboration, and overseas recruitment. These efforts cover various positions in software, hardware, testing, technical support, functions, operations, sales, and other areas, ensuring solid talent support for our stable development.

We adhere to a strategy of prioritizing local talent recruitment. Through regional functional departments both domestically and internationally, we organize recruitment activities locally, providing diverse career development opportunities for local residents. During the reporting period, we were awarded the “Top 100 Private Enterprises for Job Creation in Anhui Province”, highlighting our contribution to employment.



▲ Top 100 Private Enterprises for Job Creation in Anhui Province

Case

Deepening University-Enterprise Cooperation to Empower Local College Graduate Employment

In 2024, we actively participated in university-industry cooperation, collaborating with institutions such as Guilin University of Electronic Technology, Guilin University of Aerospace Technology, and Guangxi Normal University. We engaged in activities such as company visits, university visits, campus job fairs, and promotional events to assist university students with internships and job placements, effectively alleviating local employment pressure and promoting stable employment.



▲ 2024 Campus Recruitment Fair

In 2024

New Employees

271

Employee Turnover Rate

13.59%

Labor Dispute Resolution

We are committed to building a legal, compliant, harmonious and stable labor relationship, reducing the likelihood of labor disputes by strengthening labor management, and creating a stable and harmonious workplace environment.

Strengthening Labor Management Measures	
Continuous Update of Labor Contract Terms	Ensure that all labor contracts comply with the latest labor laws, clearly defining the rights and obligations of both parties, to reduce disputes arising from unclear contract terms.
Enhanced Legal Compliance Review	Conduct strict legal compliance reviews at all stages, including onboarding, employment, and termination, to ensure that all actions adhere to legal and regulatory requirements and to avoid potential legal risks.
Labor Law and Regulations Training	Organize training sessions on labor laws and regulations for employees and management, to enhance their understanding of labor rights and interests protection, strengthening legal compliance awareness, and foster a harmonious workplace environment.



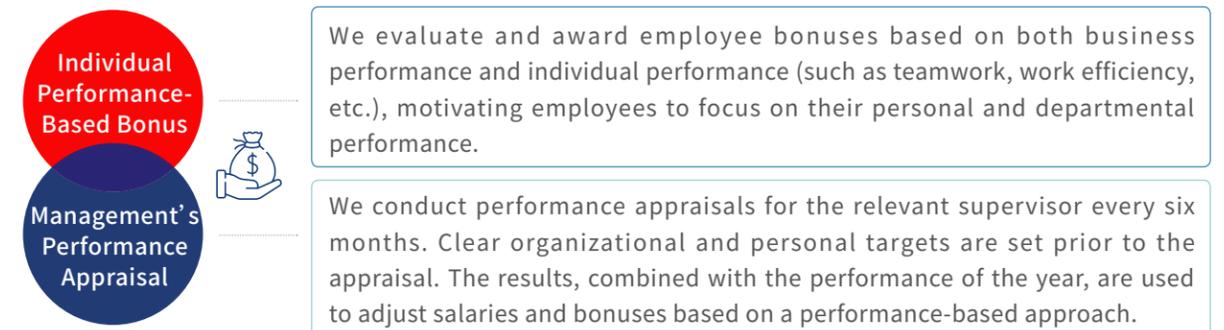
In 2024

- ✓ We had **3** labor dispute cases, all of which were resolved through mediation or in accordance with legal procedures.

Remuneration and Benefits

Remuneration System

In accordance with national laws and regulations, we have formulated internal policies such as the International Performance Management Policy and established a comprehensive compensation system that includes employee salary structures, performance appraisal systems, and welfare programs. We take employee capabilities and performance appraisals as the primary basis for adjusting fixed income and performance-based bonuses, ensuring competitive remuneration in the market.

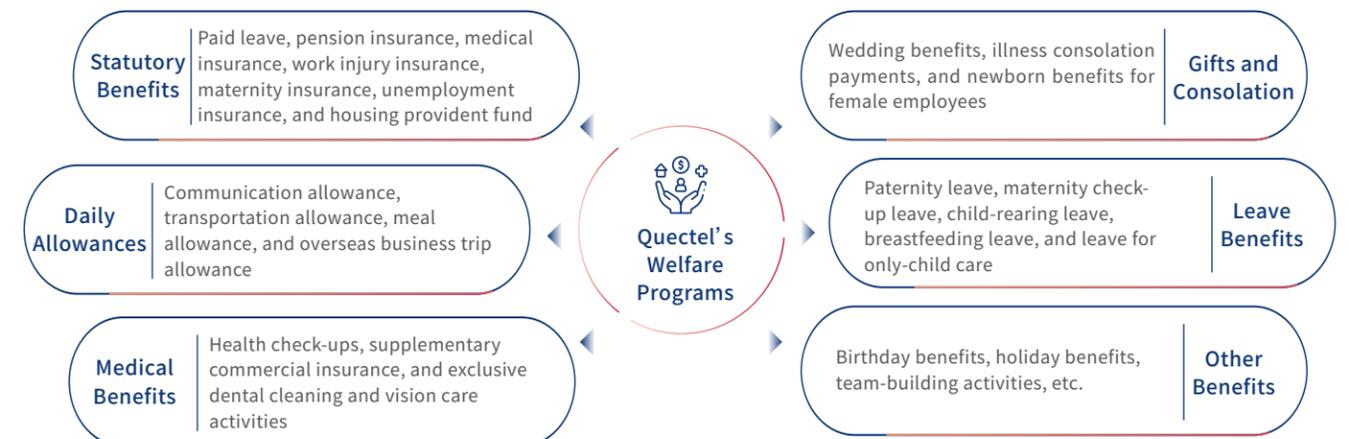


Welfare Benefits

We value employee rights, interests and welfare benefits, as well as work-life balance. In addition to providing statutory benefits in accordance with relevant laws, we offer additional subsidies and welfare programs based on internal policies such as the Corporate Welfare Management System, the Team Building Management Regulations, the Quectel Attendance and Leave Management System, and the Rest and Leave Management Measures. These policies regulate work hours, attendance management, and enhance employee well-being and sense of belonging, improving their quality of life and work experience.

In 2024

- ✓ We provided supplementary commercial insurance of RMB **7.83** million
- ✓ Employee health check coverage reached **89%**, with a total investment of RMB **1.708** million
- ✓ Average paid annual leave per employee: **7.02** days



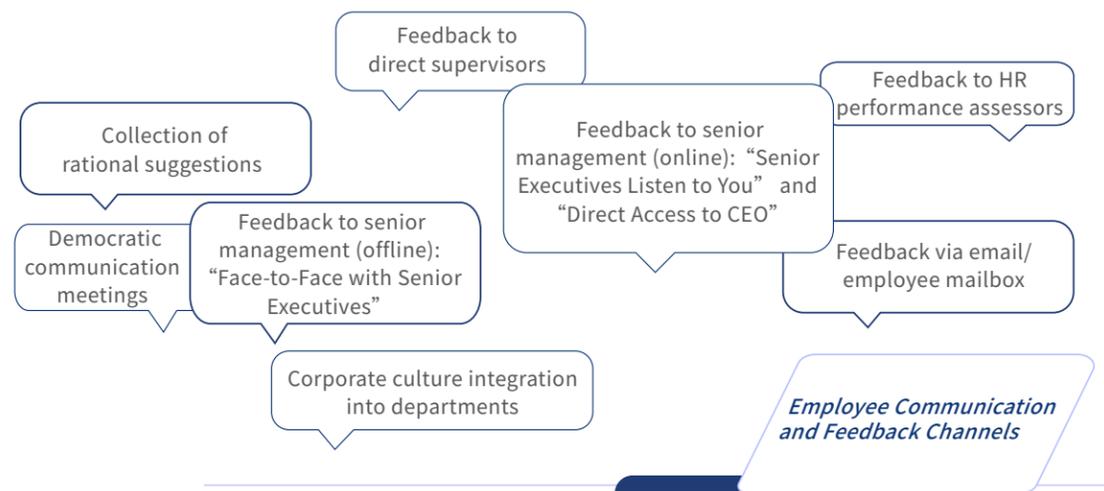
Case **Tooth & Vision Care Hub: Energizing Smiles, Safeguarding Sight**

In June 2024, we held a health campaign in collaboration with subsidiaries in Hefei, Guilin, and other locations, offering dental and eye care activities. We secured exclusive discounted prices at dental clinics, providing consumption benefits to employees. The activity combined health and fun, highlighting our commitment to employee well-being and helping employees engage in work with a better state of health.



Democratic Management and Communication

At Quectel, we are committed to creating an open and communicative work environment, advocating for open-door management, and emphasizing the importance of listening to employee voices. We continuously improve our employee grievance mechanism, where suggestions are collected and communicated by dedicated personnel, and regular reviews of the suggestions are conducted with results made public. Relevant departments respond to employee feedback or suggestions promptly and provide feedback on the actions taken to the employees involved. In 2024, the Administration Department responded to 40 employee inquiries on the online EIP platform.



▲ Rational Suggestions Result Release



▲ Corporate Culture Integration into Departments



▲ Direct Access to CEO



▲ Tea Reception for New Hires

Sharing Workplace Confusion Between New and Senior Employees

To encourage communication and feedback, we organized a “Workplace Confusion Sharing from 0-14 Years of Service” activity. We invited new employees, core staff, and senior employees to share their challenges and difficulties encountered in the workplace. Through this sharing session, senior employees helped new hires quickly understand corporate processes, culture, and industry knowledge, and also gained new insights from the new hires’ experiences, broadening their perspectives and fostering an open and inclusive communication atmosphere.



“Face-to-Face with Senior Executives” Event

In 2024, we held two “Face-to-Face with Senior Executives” sessions to build a direct communication bridge between executives and employees. During the events, senior management shared in-depth insights on topics such as corporate strategic planning and business development directions, presenting the long-term strategic blueprint and short-term operational strategies to employees. This helped employees better understand the Company’s overall development goals and identify how their individual work aligns with the corporate strategy.



Employee Communication Meetings

In 2024, we held multiple employee communication meetings to encourage employees to actively participate and focus on optimizing the work environment, improving the quality of meals in the canteen, enhancing logistics services, improving welfare benefits, and discussing our long-term development plans. These meetings collected a wide range of employee opinions and suggestions, and targeted improvements were implemented to enhance employee work experience and satisfaction.



Employee Satisfaction Surveys

We actively conduct employee satisfaction surveys, covering employees across all departments and levels. Functional departments implement targeted improvements based on the survey results. To evaluate the onboarding experience of new hires, we conducted a new employee satisfaction survey, evaluating feedback on onboarding processes, orientation training, and welcome packages, ensuring a smooth, effective and coherent onboarding process.

In 2024, we conducted employee satisfaction surveys across various areas including administrative work, employee training, financial work, and new employee onboarding, receiving **2,636** survey responses. The satisfaction results for various areas were as follows:

New employees' onboarding satisfaction rate	Satisfaction rate on IT work	Satisfaction rate on financial work
98.4%	94%	97.5%
Satisfaction rate on administrative work	Satisfaction rate on Quectel Academy training	Satisfaction rate on human resources work
91%	93.8%	93.6%

Employee Care and Assistance

Care for Special Groups

At Quectel, we pay close attention to the needs of employees and their families, particularly those in special circumstances such as nursing mothers or employees facing hardships, and offer them timely support. We consistently care for the interests of these special groups, providing assistance to ill employees and distributing support money to resolve practical difficulties.

In 2024

- ✓ We supported **81** employees with illness, with a total support money of RMB **81,000**.

We place particular emphasis on protecting the rights and interests of female employees, offering exclusive benefits, providing maternity leave and dedicated breastfeeding rooms, and providing professional counseling services, and comprehensive health screenings including gynecological and breast health check-ups. We fully support their physical and mental well-being, actively fostering an equal, harmonious, and female-friendly workplace environment.

In 2024

- ✓ We assisted **53** female employees with childbirth-related support, with a total of RMB **26,500** in exclusive welfare benefits.

Welfare Benefits for Female Employees

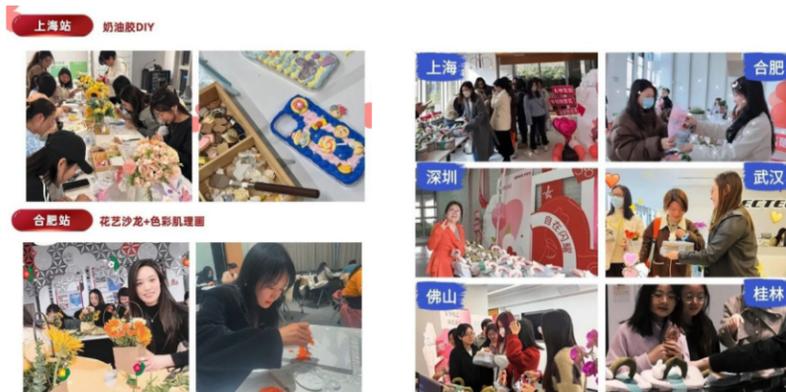
Breastfeeding Room	Warm and comfortable breastfeeding rooms are provided, offering a private, hygienic, and comfortable space for nursing mothers.
Health Check-ups	In the annual health check-up program, gynecological and breast examinations are added to help female employees detect common gynecological issues early and address their specific health needs.
Health Lectures	Regular health lectures for female employees are offered to raise their awareness of health issues and promote healthy work and lifestyle habits.



▲ Breastfeeding Room

Case Goddess Festival Activities

At Quectel, we value the “Her Power” in the workplace and hosted a variety of activities for the Goddess Festival, focusing on the workplace experience of female employees. We invited female employees to share their workplace experiences and bravely break career stereotypes; prepared customized care packages to address the diverse needs of female employees; and organized DIY activities to inspire creativity and imagination, enhancing female employees’ workplace experience from multiple perspectives.



▲ DIY Activity

▲ Care Package

Caring for Employee Mental Health

In the increasingly fast-paced workplace, employee mental health has become an increasingly important concern. Since launch of the “Yixin Program”, Quectel has implemented a series of innovative initiatives to focus on and improve employee mental health, effectively alleviating work-related stress and creating a positive and uplifting work environment.

Yixin Program Activities in 2024



Stress Relief

In 2024, we hosted the “Yixin Carnival 2.0” in Guilin, featuring interactive activities such as mandala painting and sand play therapy to help employees release stress.



Worry-Free Mailbox

During Thanksgiving, we launched the “Worry-Free Mailbox,” providing employees with a secure and private platform to express their concerns. A professional psychological counselor responds to the messages, with quarterly rewards to encourage participation.



Parent-Child Communication

We hosted activities such as “Communication for Love” and psychological support for employees with children preparing for high school and college entrance exams. These sessions shared exam preparation experiences and psychological adjustment techniques to improve parent-child relationships for employees.



Immediate Counseling

We launched six cloud-based psychological services on various themes, such as emotional stress and interpersonal communication, integrating brainwave technology to help employees better understand their mental states.

Work-Life Balance

We actively build a regular “Warmth Delivery System” to care for employees comprehensively. We regularly organize various team-building activities to effectively relieve work-related stress. On important holidays and employees’ birthdays, blessings and gifts are provided timely. Quarterly team-building activities are planned and organized by department heads.



Nurturing Excellent Talent

Employee Training

At Quectel, we adhere to the craftsmanship spirit and value the collaborative development of both us and our employees. We have established a Training System to standardize the training framework and ensure training quality. In terms of training methods, we adopt a combination of practical and theoretical training, as well as a blend of online and offline training models, accelerating the conversion of learning outcomes into practical applications. We offer various training courses, including specialized, managerial, and general courses, to meet the training needs of employees across different roles and levels.

New Employee Training

New employee training is a key component in helping new hires integrate into the Company. For both domestic and international new hires, we organize 2-4 training programs each month. The training includes 11 key topics, including company introduction, corporate culture, corporate policies, EHS (Environment, Health, and Safety), and more. For fresh graduates, we offer a 45-day “Take-off Training Camp” with a blended online and offline learning model to speed up their transition. Additionally, a mentoring system is in place to provide one-on-one guidance for new employees, helping them adapt to their roles quickly.



▲ New Employee Onboarding Training



▲ 2024 “Take-off Training Camp”



Skills Enhancement Training

To align with the evolving business needs, we continuously provide professional skills training across various areas such as R&D, product development, and sales, covering both domestic and international employees. In line with industry trends, we have developed specialized courses such as AI Operations Skills Training, offering self-learning platforms and course resources to help employees quickly acquire new skills and enhance their efficiency and competitiveness.

In 2024, we organized **480** professional training sessions and recorded **1,772** internal department sharing sessions.



▲ Skills Enhancement Training



▲ AI Operations Skills Training

Management Training

We recognize enhancing the capabilities of our management is a core driver for efficient business operations. In 2024, we targeted training programs for our management at different levels. The training combined online training camps and face-to-face sessions, enhancing participants' decision-making, communication, and coordination skills through lectures, case analysis, and other methods, helping them address complex management challenges.

- **High-potential talent:** We launched the “Refinement Camp” project in Hefei, Guilin, Foshan, and other locations, to systematically cultivate and enhance the comprehensive abilities of high-potential employees.
- **Front-line managers:** We held several “Wolf Warrior Classes”, achieving a satisfaction rate of **99%**. This training helped front-line managers solidify their management foundation and improve their execution and team management abilities.
- **Middle-level and senior managers:** We introduced the “Wolf King Class” courses and “Management Talks” exchange activities.



▲ Management Training “Refinement Camp” Activities

General Training

To comprehensively improve employees' overall competencies, we offer a variety of general training courses and use a combined online and offline approach to support holistic employee development..

- **Offline Grand Lectures:** We held **19** sessions, focusing on our core business, processes, and basic skills. These lectures improved employees' professional foundation and work efficiency through lectures and case studies.
- **Online Grand Lectures:** We held **9** sessions covering topics such as career skills, mindset development, and management capabilities, providing learning opportunities for employees despite time and space limitations.
- **Academy Lectures:** We organized **8** sessions providing a platform for employees to share experience and exchange ideas.
- **English StarTalk Activity:** We organized **22** sessions, with over 1,500 participants. Through interactive activities, movies in their original language, and dubbing competitions, we created an English-speaking environment, enhancing employees' English skills to better adapt to international markets.
- **Customized Thematic Courses:** We tailored nearly **30** thematic courses to meet the specific learning needs of employees as required by their business departments, supporting employees' professional development.



▲ Online Learning Platform



▲ Academy Grand Lectures



▲ English StarTalk



▲ Academy Small Lectures

Employee Training Performance

Total Investment in Employee Training Total Training Hours

RMB **2.315** million **279,778**



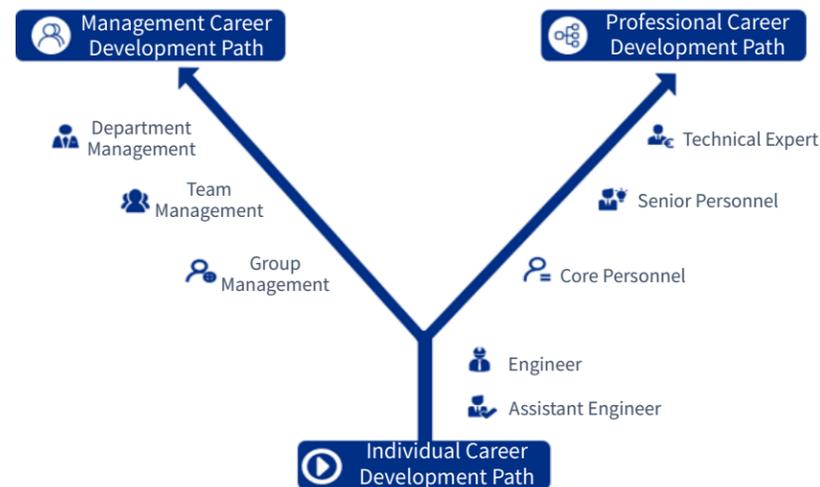
Average Training Hours per Employee	Training Coverage Rate	Training Hours for New Employees	Proportion of New Employees Trained
58.6	93.4%	942	100%
Mid-level Management Training Hours	Proportion of Mid-level Management Trained	Senior Management Training Hours	Proportion of Senior Management Trained
17,266	88%	317	100%

Employee Promotion

To continuously promote talent development, the Company has established internal promotion policies, including the Cadre Management System, which defines promotion criteria, standardizes the competitive selection process, and ensures fairness, equity, and transparency in the promotion process. At the same time, we have developed a dual-track career track for management and professional roles, enabling employees to choose a career development path aligned with their career goals and interests, enabling mutual growth for both them and the Company.

We have established a scientific employee promotion mechanism based on departmental development and individual growth needs. This process evaluates employees across multiple dimensions, including job performance, professional ability, and professional ethics. Employees are nominated by department heads, and the promotion process includes comprehensive assessments, management review interviews, and promotion announcements to ensure high-quality promotions and enhance both the Company's and employees' core competitiveness.

Transparent Promotion Mechanism — Dual-Track Pathways to Guide Career Development



▲ Dual-Track Career Development Path

We attach great importance to talent selection and have established a well-defined and merit-based standard and a structured promotion system. From entry-level employees to senior management, we set clear progression paths, using competency assessments and practical evaluations to precisely identify and cultivate outstanding talent. The goal is to select and promote exceptional cadres who can lead us towards steady growth, injecting strong momentum into our development.

Cadre Selection Standards



To integrate and continuously optimize the strengths of internal talent, we have established the Global Internal Transfer System, offering career development opportunities for employees across all subsidiaries globally. This allows employees to find positions that suit their career plans and interests on a global scale.

In 2024

- ✓ We recorded **98** internal transfers, accounting for **1.66%** of the total workforce.

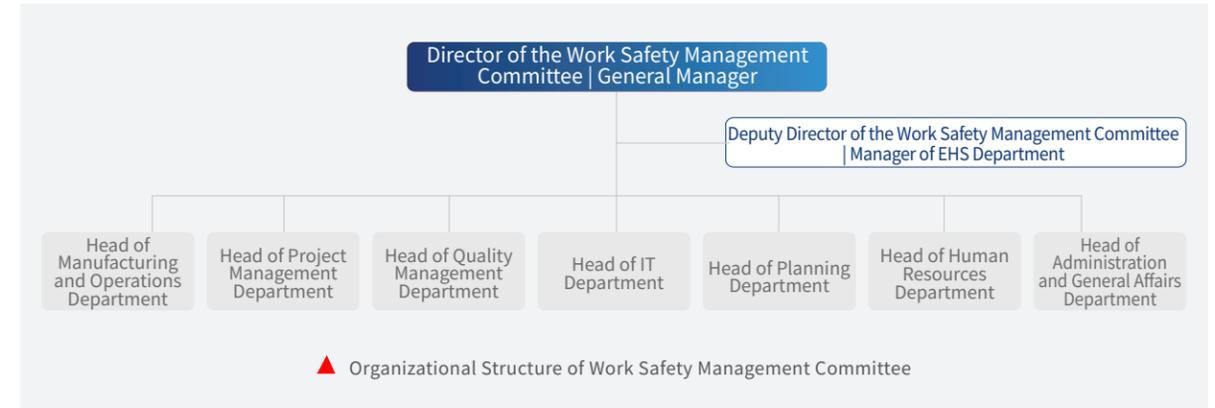


Occupational Health and Safety

Occupational Health Management System

We strictly comply with the *Law of the People's Republic of China on Work Safety* and actively improve our occupational health and safety system. We have established a series of policies and measures, including the Occupational Health Management and the Labor Protection Supplies Management System to optimize the working environment, improve facilities, and conduct safety training, all aimed at preventing occupational injuries and diseases through a comprehensive approach. Additionally, we conduct regular safety inspections to ensure the safety and health of employees, effectively fulfilling our responsibility for work safety. In 2024, we obtained the ISO 45001 Occupational Health and Safety Management System Certification.

Occupational Safety Target Management	Progress in the Reporting Period
Continuous Investment in Work Safety	A total investment of RMB 3.65 million in work safety
Occupational Disease Incidence Rate: 0%	√
No Light or Severe Injuries, Fatalities, or Occupational Diseases	√
Employee Work Injury Insurance Coverage: 100%	√ Total Work Injury Insurance of RMB 2.42 million
Safety Hazard Inspection	√ 879 hazards identified, with a rectification rate of 100%
Work Safety Training Coverage: 100%	√



▲ Organizational Structure of Work Safety Management Committee



▲ Occupational Health and Safety Management System Certification

Strengthening Work Safety

To ensure work safety, we have established a mechanism for hazard identification and mitigation. We have developed systems such as the Safety and Environmental Inspection and Monitoring Management Standards and the Emergency Response and Control Procedures. Regular emergency drills are conducted to ensure that, in the event of an emergency, emergency rescue operations can be carried out swiftly and efficiently, minimizing losses as much as possible.

Hazard Identification

- Work safety hazards are classified based on their severity. Once identified, each hazard is registered, documented, and tracked and addressed to ensure that hazard identification and rectification work can be traced.
- Daily Inspections: Safety inspectors are responsible for conducting detailed inspections of the production site, ensuring timely detection and resolution of all types of hazards.
- Special Period Inspections: During holidays, major events, or other special periods, special hazard inspections are organized in advance to ensure safety.
- Regular Special Inspections: Regular comprehensive reviews of production processes, equipment facilities, and work environments are conducted to enhance overall work safety.

Emergency Drills

- Emergency Management: An emergency command center has been established to standardize emergency response procedures. Various comprehensive emergency drills, specialized drills, and on-site response activities are organized.
- Plan Development: Emergency response plans have been developed for different types of incidents, ensuring categorized and targeted response strategies.

Work Safety Management Committee

Organizational Structure: We have established the Work Safety Management Committee, which includes corporate leaders, functional department heads, and dedicated safety and environmental protection managers. The General Manager serves as the Director, overseeing overall safety governance, while the Manager of the Plant Operations and EHS Department assists as the Deputy Director. This structure establishes a robust, multi-level safety management system to ensure employee safety.

Responsibilities: We have developed the Occupational Safety, Health, and Environmental Responsibility Management Standards, which clearly define the responsibilities of each department, reinforce accountability among department heads, and promote the implementation of comprehensive measures to ensure work safety.

Assessments: We have established the Safety Accountability Team to monitor and assess the performance of department heads in the Work Safety Management Committee. The results of these assessments are linked to annual performance appraisals, enforcing a strict rewards-and-penalties mechanism to encourage departments to enhance their safety management practices.

Supervision: The Safety Accountability Team carries out supervision and accountability functions. The senior management sign the Occupational Health and Safety, Environmental, and Security Responsibility Letter with department heads annually, ensuring clear accountability at all levels and the effective implementation of workplace safety initiatives.

Case Fire Safety Drill

We place a high premium on fire safety and organize regular fire drills every year. The drills simulate fire scenarios, with professional instructors guiding employees on the proper use of firefighting facilities, teaching escape techniques, and thoroughly testing fire alarm systems, evacuation routes, and other facilities. These efforts aim to enhance employees' emergency response capabilities and ensure the safety of the Company.



Safety Risk Prevention and Control Among Employees

To effectively identify and manage environmental hazards, we have established the Hazardous and Harmful Factor Evaluation and Control Table and the Work Injury Emergency Response Plan. These systems provide comprehensive assessments and accurate identification of potential workplace risks, reducing the likelihood of injuries at the source and ensuring employee safety.

Occupational Disease Hazard Management Measures

Monitoring and Evaluation of Hazardous Factors	Regularly monitor occupational disease hazards in the workplace, periodically update the Occupational Hazard Factor Identification Summary Table, conduct risk assessments, and develop control measures.
Facility Maintenance	Strengthen and maintain occupational disease prevention facilities to ensure their proper functioning.
Health Monitoring	Monitor occupational health, establish employee health records, and organize regular occupational health check-ups and diagnoses.
Training and Education	Hold regular training sessions to popularize occupational disease prevention and enhance employees' protective awareness.

Safety Culture Development

We place great emphasis on employees' awareness of occupational health and safety. We organize a variety of occupational health and safety training activities, and regularly conduct emergency drills for fire safety, explosion prevention, flood and typhoon protection, chemical leak handling, etc. These initiatives aim to enhance employees' safety awareness and ability to respond to emergencies.

In 2024

- Quectel Changzhou
- ✔ Total Work Safety Training Sessions: **460**
- ✔ Total Number of Participants in Work Safety Training: **3,878**
- ✔ Total Hours of Safety Training: **5,817**

Case Mandatory EHS Training for New Hires



To enhance new hires' EHS awareness, we provide them with EHS training. This training helps deepen their understanding of the importance of environmental protection, occupational health, and work safety, increasing safety awareness and emergency response capabilities.

Case First Aid Safety Training

To raise health and safety awareness among all employees, we invite professional medical experts from health check-up institutions to deliver first aid and safety training annually. The training covers topics such as basic first aid knowledge, CPR procedures, and how to interpret medical examination reports. Hands-on simulations help reinforce knowledge, ensuring strong support for self-rescue and mutual aid in emergencies.



Promoting Rural Vitalization

We actively support the rural vitalization strategy by providing one-stop smart agricultural solutions to empower modern agriculture. Leveraging our diverse advantages, we contribute to agricultural production, support rural economic development, and improve the living standards of the rural population.

Smart Agriculture Promotes Rural Vitalization

As a global leader in IoT solutions, Quectel aligns with the development trends and the goals of rural revitalization. In 2024, we launched the Beidou high-precision agricultural machinery autonomous driving system—YuanZheng FMA310, leveraging multiple advantages to empower agricultural production.

- High-Precision Positioning and Navigation**
 Integrating Beidou high-precision positioning, satellite-inertial navigation, 4G communication, and other technologies, the system leverages RTK and PPP algorithms to achieve centimeter-level positioning, ensuring precise operation of autonomous agricultural machinery.
- Full-Process Coverage and Intelligent Management**
 Covering the entire process from “plowing, planting, management, to harvesting”, and combined with the smart agricultural IoT platform, the system enables real-time monitoring and management of agricultural machinery and operations, providing data-driven decision-making support and improving management efficiency.
- Environmental Adaptability and Stability**
 Adapting to a wide operational temperature range from -30° C to 65° C, the system enhances the environmental adaptability of the equipment, ensuring continuous and stable agricultural production in complex environments.
- Multiple Operating Modes and Flexible Adjustments**
 With multiple operating modes, such as one-button turn-around, operators can flexibly adjust the operational plan based on the terrain and scale of the fields.
- Resource Optimization and Increased Efficiency**
 Through high-precision positioning, the system optimizes planting spacing, ensuring that tilling, fertilization, and pesticide spraying cover areas without omissions or overlap, reducing resource waste and promoting increased agricultural yield and efficiency.



Social Contributions

Fulfilling Corporate Responsibility

With the vision of “Building a Smarter Earth”, we are committed to making an outstanding contribution to the global IoT development and creating value for society. With a strategic location in the Yangtze River Delta, we actively participate in the “Integrated Development of the Yangtze River Delta” strategy, strengthening regional collaboration and promoting the interated and innovation of communication technologies such as 5G and IoT, thereby empowering the region’s digital economy.

Contributing to the Local Economy

At Quectel, we strictly adhere to national laws and regulations, such as the *Law of the People’s Republic of China on Enterprise Income Tax*, the *Law of the People’s Republic of China on the Administration of Tax Collection*, and the *Interim Regulations of the People’s Republic of China on Value-Added Tax*. We consistently adhere to integrity business practices, fully comply with national tax laws and regulations, and ensure timely and full payment of all tax obligations. By fulfilling our corporate tax obligations, we contribute to local economic and social development. In 2024, we paid a total of RMB122.21 million in taxes.

Supporting the Silver Economy

We focus on the development of the silver economy, emphasizing the provision of high-quality, convenient, and considerate services for the elderly through technological innovation and industrial upgrades. With advanced IoT technology and diversified solutions, we provide comprehensive safety monitoring and health management services for elderly people through the “Internet + Elderly Care” model. These initiatives not only improve the quality of life for the elderly but also bring convenience to their families and caregivers, significantly enhancing product accessibility and demonstrating our commitment to social responsibility.



Smart Elderly Care Leads the New Future of the Silver Economy

Home Monitoring

Smart door magnets with NB-IoT modules are used to monitor the elderly's status at home in real time. If the door is not opened within 24 hours, the system sends an automatic alert to community staff or family members to ensure timely checks.



Smoke Detection for Safety

Smart smoke detectors can continuously monitor smoke concentration and temperature in areas where the elderly are likely to gather, offering multi-level alarms to reduce fire risks and ensure safety.

Daily Water Usage Tracking

Smart water meters with NB-IoT modules can be used to monitor, upload, and analyze water usage data in the homes of elderly individuals. If there is any abnormality (e.g., no water usage for an extended period), the system sends an alert, and dispatches personnel for a visit to ensure safety.



Real-Time Location Tracking

Smart wearable devices, through a combination of Beidou, GPS, base stations, and Wi-Fi, can track the elderly's location in real time, preventing elderly individuals with memory loss from getting lost and providing round-the-clock safety protection to meet various elderly care needs.

Remote Medical and Health Management

In collaboration with medical institutions and community healthcare providers, our smart devices can transmit health data of the elderly in real time to doctors, enabling remote diagnosis and health management while improving the timeliness and effectiveness of medical services.



Practicing Social Welfare

We uphold a strong sense of social responsibility and actively engage in social welfare activities through donations, volunteer works, and other initiatives, striving to contribute to social harmony. We remain committed to advancing education by donating educational equipment and student grants, and participating in charitable activities to enhance and optimize educational resources.

Public Welfare Activities

Support for Higher Education

In 2024, we donated RMB 100,000 to Guilin University of Electronic Technology to support campus construction and development, helping the growth and development of students and further advancing higher education.

Educational Support

In 2024, we donated 3,449 items of educational supplies to two primary schools—Shatou Town Central School and its Shitang Branch School in Wuzhou, Guangxi Province. The total value of the donation was RMB 796,800, benefiting 1,824 teachers and students. The donation included electronic devices, teaching equipment, and sports supplies, significantly improving the schools' infrastructure and teaching environment. This donation highlights our social responsibility in the field of educational charity.



▲ Educational Donation in Wuzhou City

Continuous Charity and Follow-up

In 2022 and 2023, we donated 2,744 items of supplies to 11 primary schools in Guangxi Province and organized a follow-up visit in 2024. Student representatives expressed their gratitude, noting that the donations not only improved their learning and living conditions but also taught them the importance of gratitude and giving back to society. The children created hand-drawn pictures and thank-you letters as a gesture of appreciation. Moving forward, we will actively participate in more public welfare initiatives to help more schools and children.



▲ Follow-up Visit in Hezhou City

“No Difficulty is Insurmountable, and Move Forward with Love” – Joint Volunteering Efforts

On December 18, 2024, we organized volunteer activities in six cities simultaneously: Shanghai, Hefei, Shenzhen, Wuhan, Foshan, and Guilin. Over 200 employees participated in the event, with a total investment of RMB 20,000. Volunteers made handmade backpacks, canvas bags, and pencil cases, and printed the children's artwork onto the items, which were then donated to schools in need. This activity greatly enhanced our reputation as a socially responsible enterprise, showcased our care, and strengthened team spirit among employees.



▲ Charitable Volunteering Activity

2024 Quectel's Social Welfare Key Performance

Total Volunteering Activity Hours

224

Total Number of Beneficiaries from Our Volunteer Services

278

Total Number of Beneficiaries from Our Donations

1,824

Total Charitable Donation Amount

RMB **0.8968** million



QUECTEL

Governance

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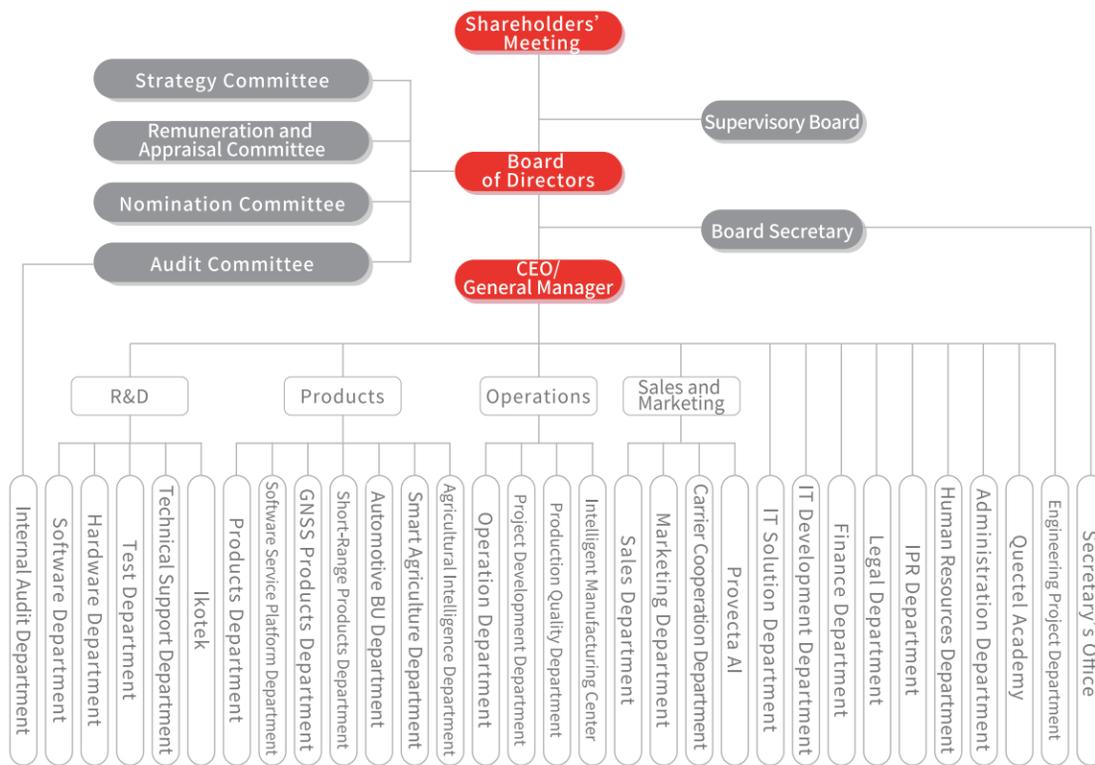
At Quectel, we recognize the critical importance of a sound governance mechanism to our success. We strictly comply with relevant laws and regulations, including the *Securities Law of the People's Republic of China*, the *Company Law of the People's Republic of China*, the *Code of Corporate Governance for Listed Companies*, the *Measures for the Administration of Information Disclosure of Listed Companies*, and the *Rules Governing the Listing of Stocks on Shanghai Stock Exchange*. We continually improve our "Four Modernizations" strategy, strengthen resource integration, optimize the organizational structure, and further enhance our core competitiveness.



Improving Corporate Governance

Corporate Organizational Structure

At Quectel, we continuously enhance our governance structure by establishing a corporate governance system that ensures cooperation and complementarity among the Shareholders' Meeting, the Board of Directors, and the Supervisory Board. Our specialized committees, based on internal regulations and practical control requirements, implement standardized and efficient management decision-making and operational supervision mechanisms, providing professional and precise support for the board's decisions.



Operations of the Three Meetings

At Quectel, we strictly follow the *Company Law of the People's Republic of China*, the *Code of Corporate Governance for Listed Companies*, and other relevant regulations, and have adopted the Articles of Association of Quectel Wireless Solutions Co., Ltd., the Rules of Procedure for the Shareholders' Meeting, the Rules of Procedure for the Board of Directors, and the Rules of Procedure for the Supervisory Board. These documents help ensure stable and orderly operation of the Three Meetings system, continuously improving the corporate governance structure and ensuring clear roles and effective collaboration all governance bodies, thus establishing a science-based, efficient mechanism for decision-making, execution, and oversight.

During the reporting period, the organization and operation of the Three Meetings followed legal and regulatory requirements, ensuring the protection of all shareholders' interests in an objective and science-based manner.

Meeting Details

	Number of Meetings	Proposals
Shareholders' Meeting	2 meetings: 1 Annual General Meeting 1 Extraordinary General Meeting	23 proposals were deliberated 100% got approved
Board of Directors	6 meetings 100% of directors attended	67 proposals were deliberated 100% got approved
Supervisory Board	5 meetings 100% of supervisors attended	22 proposals were deliberated 100% got approved
100% of approval rate at the three types of meetings		

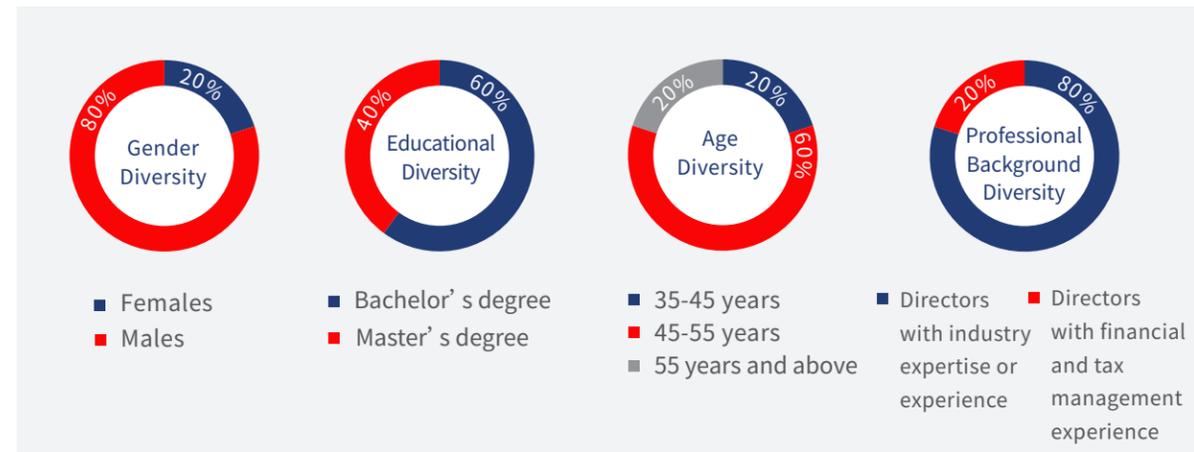
During the reporting period

- The specialized committees of the board convened **8** meetings and deliberated **32** proposals:

	Number of Meetings	Proposals for Deliberation	Approval Rate
Audit Committee	5	21	100%
Strategy Committee	1	3	100%
Nominatio Committee	1	4	100%
Remuneration and Appraisal Committee	1	4	100%

Board Independence and Diversity

At Quectel, we recognize diversity as a key factor in enhancing the corporate value and select board members based on the principles of diversity. We promoted the formulation of the Board Diversity Policy to improve the board's effectiveness, documented in the Board Nomination Committee Work Rules. The main content includes: when determining the composition of the board, the Company considers diversity from multiple aspects, including but not limited to age, gender, cultural and educational background, professional experience, skills, and knowledge. All board appointments are made based on the principle of selecting the most qualified individuals, and the benefits of diversity are assessed objectively when considering candidates.



The Company strictly complies with the *Measures for the Administration of Independent Directors of Listed Companies* and other relevant regulations, continuously strengthening the role of independent directors within the corporate governance structure, and promoting standardized corporate governance.

Independence

- As of the end of the reporting period, our board consisted of **5** members, including **2** independent directors, accounting for **40%** of the total. In 2024, we revised and established the Independent Director Work System and the Independent Director Special Meeting System, ensuring that independent directors can perform their duties independently, provide independent opinions on major corporate matters, protect the overall interests of the Company, and particularly safeguard the legitimate rights and interests of minority shareholders.

We continuously optimize the board structure, emphasize the diversity of board members, and encourage each director to express different viewpoints and opinions based on their professional backgrounds, thereby enhancing the scientific and rational nature of board decision-making. We have also established a science-based performance evaluation mechanism and regularly evaluate the board members, such as through special reports on the self-assessment of independent directors' independence. This ensures that they dedicate sufficient time and effort to their duties, ensuring effective performance. To promote digital management, we have introduced digital tools (such as an online meeting management platform) to improve meeting efficiency and the transparency of decision-making. Additionally, we engage external intermediaries to provide independent financial advisory reports on equity incentive plans, ensuring that their design and implementation comply with regulatory requirements and effectively safeguard the legitimate rights and interests of all shareholders. We also arrange for board members to attend relevant training organized by regulatory authorities and other institutions to enhance their expertise in corporate governance, sustainability, industry trends, and risk management.

Remuneration Management

At Quectel, we have established remuneration systems based on industry standards and in compliance with relevant laws and regulations, including the *Company Law of the People's Republic of China* and the Articles of Association. We disclose the remuneration of directors, supervisors, and senior management in regular reports, ensuring the professionalism and institutionalization of remuneration management.

<p>Remuneration Basis</p>	<ul style="list-style-type: none"> The remuneration of our directors, supervisors, and senior management is determined based on the remuneration levels of the industry and region, as well as our annual operational performance and performance appraisal results. Independent directors' allowances are determined based on our actual conditions, referencing industry and regional standards.
<p>Decision-Making Process</p>	<p>The remuneration of directors and supervisors is approved by our Shareholders' Meeting; the remuneration of senior management is determined by our Board of Directors.</p>
<p>Remuneration Structure</p>	<p>Senior management are subject to an annual salary system. The annual remuneration consists of base salary and performance-based pay. Senior management and employees are required to meet relevant environmental management standards, enhance environmental performance. Environmental management-related performance is considered an important factor affecting senior management's remuneration. This is implemented through signing responsibility agreements and a relevant rewards and penalties system.</p>
<p>Salary Payment</p>	<ul style="list-style-type: none"> The base salary is paid monthly. During the reporting period, the company's compensation system of directors, supervisors and senior management personnel of the company strictly follows relevant systems, with reasonable and standardized payment standards, matching with performance and development of the company.
<p>Incentive Implementation</p>	<ul style="list-style-type: none"> Senior management is incentivized and rewarded according to the position value and performance results, strictly following the remuneration and bonus policies approved by the Board of Directors. During the reporting period, we had no violations of the remuneration management system.

Compliance and Risk Management

Compliance System Development

At Quectel, we emphasize the promotion of a compliance-driven business philosophy and the cultivation of a compliance culture. We comply with local laws and regulations, industry standards, and internal rules, and have developed internal documents such as the Export Control and Trade Compliance System and the Contract Management System. This ensures the formation of a rigorous compliance management framework to ensure that all business activities are conducted according to clear compliance guidelines.

External and Internal Stakeholder Focus	Externally, we focus on policies, regulatory bodies, partners, shareholders, and other stakeholders, with particular attention to risks such as related-party transactions and business compliance. Internally, we emphasize feedback from our governance bodies, employees, and various functional departments to ensure that internal stakeholders' needs are fully addressed.
Areas	The compliance system covers key areas including corporate governance, anti-commercial bribery, information security and data protection, product quality, environment, safety, and employee rights and interests.
Policy Guidance	We continue to develop and improve our corporate compliance policies and processes, providing guidance for the system's operation.
Review and Correction	We regularly conduct reviews and internal audits to identify and correct any potential compliance deviations, continuously optimizing our compliance management system.
Feedback Mechanism	We have established an effective feedback mechanism and channels to encourage employee involvement in compliance oversight activities.

Compliance Review Policies

Legal Ensure that business management actions, processes, and document content comply with domestic and international laws, industry standards, and internal regulations.	Procedural Ensure that all our business processes are carried out in an orderly manner according to our established norms and standards.	Thorough Review the logical structure and terms of documents to ensure there are no loopholes or ambiguities.	Applicable Compliance management should align with our actual business needs and operational environment.	Controllable Employ professional methods to identify and assess potential risks, and proactively develop response strategies to keep compliance risks within acceptable limits.
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Compliance Culture Development

We place great emphasis on building a compliance culture and actively cultivate professional compliance management talent. Through various methods such as regular compliance training, the development of compliance manuals, and setting up compliance bulletin boards, we aim to raise employees' awareness of compliance management and encourage them to consciously meet compliance requirements.

In 2024

- ✓ We organized a total of **265** hours of compliance-related training, with **106** participants.



▲ Compliance Training

Risk and Internal Control Management

At Quectel, we have established and improved our risk management and internal control systems by formulating internal documents such as the Internal Control Audit Evaluation Guidelines and the Internal Control Manual (2020 Edition), which define our internal control objectives, principles, and overall framework. We have also revised and improved the Comprehensive Risk Management Measures, specifying risk management processes across all management levels and fostering a strong risk management culture to enhance our ability to respond to risks and seize opportunities.

During the reporting period

- ✓ We had **no** major risk or crisis incidents.

Risk Management System



Risk Management Objectives

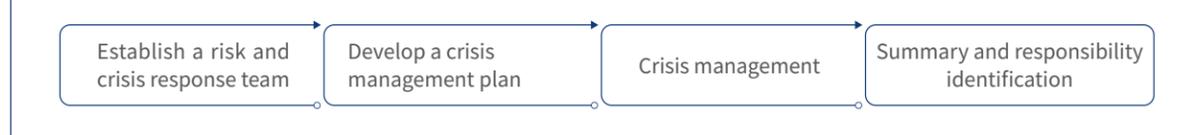
To avoid and mitigate potential losses arising from risks, thereby ensuring the Company's sustained healthy development.

Risk Management Structure

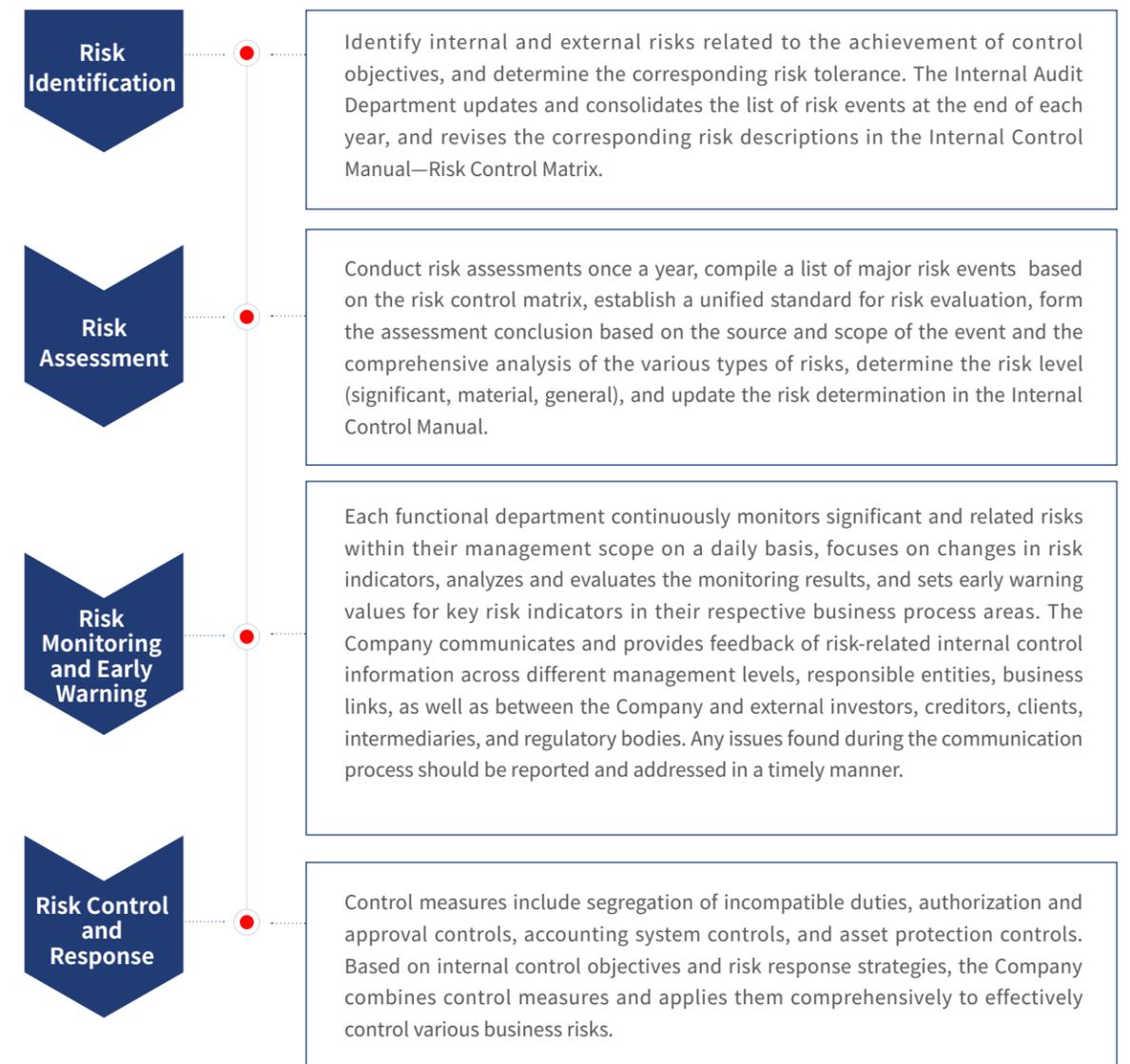
Department	Responsibilities
Board of Directors	Manage and monitor overall corporate risk at the strategic level.
Supervisory Board	Supervise the progress and effectiveness of the Company's risk prevention and monitoring system.
Audit Committee	Guide risk mitigation efforts, approve risk control policies, and evaluate the Company's risk status and management capabilities.
Management	Lead the daily operations of risk management and internal control, and establish and maintain a risk prevention and internal monitoring system for business and management processes.
Internal Audit Department	Monitor and manage key departmental risk areas on a daily basis, and conduct audits and inspections of the operational processes and results across departments.
Departments of Each Corporate Entity	Responsible for the daily maintenance and management of business and operational processes within their departments, identifying key risk areas, performing self-inspections, and executing key control procedures.

We focus on our overall strategy and business objectives to improve the risk management framework, strengthen risk control in key areas, and continuously enhance risk prevention capabilities. We implement a comprehensive closed-loop management process for the identification, assessment, response, implementation, and evaluation of major risks or corporate crises. For newly emerging significant risks without emergency response plans, the management team, together with the relevant departments, will immediately organize and coordinate personnel to study, develop, and implement risk response plans, under the supervision of Internal Audit Department.

Major Risk or Corporate Crisis Response Procedure



Risk Management Process



Internal Control System

Regarding internal control, we have clearly defined objectives, principles, and an overall framework to ensure that all framework to ensure that all operations follow structured and consistent processes. The internal control systems define specific control requirements for key areas, with process designs covering all stages from start to finish, and provide detailed operation manuals to offer clear guidance to employees. We integrate internal documents with external laws and regulations, and gradually establish a rigorous internal control system. This system not only effectively prevents various risks but also provides strong protection for our stable development and asset security.

During the reporting period, we continued to enhance our internal control framework, supervised and standardized the implementation of these systems, and continuously optimized the internal control system to ensure that all business activities were efficient, legal, and compliant. In 2024, we did not identify any significant deficiencies in internal control over financial or non-financial reporting.

Classification	Details
Internal Control Structure	<p>Governance Level: The Board of Directors, the Supervisory Board, and senior management form a checks and balances mechanism, ensuring informed decision-making and effective oversight.</p> <p>Business Level: The organizational structure is divided based on business characteristics and management needs, with departments collaborating and exercising mutual oversight.</p>
Internal Control Mechanism	<p>Information Communication: Internal information is shared across departments to facilitate coordination and ensure effective communication with external stakeholders.</p> <p>Supervision Mechanism: It includes internal audits, self-assessments, external audits, and oversight to continuously monitor and evaluate the effectiveness of internal control.</p>
Internal Control Process	<p>Financial Management: The financial approval, fund management, and accounting procedures have been established to ensure that financial data is accurate, lawful, and complete.</p> <p>Asset Management: Asset acquisition, use, and disposal control processes have been refined to ensure the safety and integrity of assets.</p> <p>Business Processes: Key areas such as procurement, R&D, production, and sales are managed in a refined manner, and operational processes are standardized to prevent errors and fraud.</p>

In 2024

✓ A total of **670** issues were identified through audits, with a rectification rate of **83%**.

Tax Governance

At Quectel, we adhere to the principle of lawful and compliant tax in strict compliance with applicable laws and regulations such as the *Law of the People's Republic of China on the Administration of Tax Collection*, the *Law of the People's Republic of China on Enterprise Income Tax*, the *Interim Regulations of the People's Republic of China on Value-Added Tax*, and the tax policies of the country or region where we operate. We diligently fulfill our tax payment obligations, ensuring the accuracy and timeliness of tax declaration.

We consistently regard tax compliance as an important responsibility. Through continuous internal training and external consultation, we stay updated on the latest tax policies. Throughout the year, there were no significant tax violations, maintaining our strong tax credibility and corporate image.

We actively strengthen communication and collaboration with tax authorities, stay informed about changes in tax laws and regulations, enhance learning on tax policies, and continuously improve the comprehensive capabilities of our tax management personnel. This ensures the adaptability and foresight of our tax management. By reasonably planning taxes, we ensure we fully benefit from tax reduction policies while operating in full compliance, thereby increasing corporate profits.



Adherence to Business Ethics

Prevention of Commercial Bribery

Anti-Bribery System Development

At Quectel, we have always adhered to the business cooperation principles of integrity, fairness, impartiality, and transparency. We strictly follow the Company Law of the People's Republic of China, the Interim Provisions on Prohibition of Commercial Bribery, and other relevant laws and regulations. We have established a series of internal systems, including the Company's Anti-Corruption and Anti-Fraud Management Measures and the Anti-Corruption Standards on Resource Procurement, to maintain business ethics. Regular anti-corruption training and anti-corruption awareness education are conducted to ensure the implementation of the anti-bribery system, strengthen market order, and safeguard our development with integrity.

During the reporting period

✓ We had **NO** incidents of commercial bribery or corruption.

Anti-Bribery and Anti-Corruption Measures

System Development

We have established a comprehensive job rotation system, requiring key personnel to regularly rotate positions to avoid any individual being solely responsible for a specific business area, effectively preventing excessive concentration of power. A multi-layered anti-corruption system has also been formed, including a whistle blowing system and internal audits, to ensure cost transparency and maximize corporate interests. Through dynamic optimization and system integration, we have built a comprehensive anti-corruption network covering processes, personnel, and supervision, providing a solid foundation for our sustainable development.

Audit and Fraud Prevention

Our Audit Department is responsible for reviewing and evaluating the establishment and implementation of the anti-corruption and anti-fraud control mechanisms. It supervises and manages key business processes, departments, and personnel in crucial roles to ensure integrity and compliance, conducting regular or ad-hoc inspections.

Supplier Code of Conduct

We require all suppliers to sign the Supplier Integrity Commitment before cooperation, promising to eliminate bribery, refuse extortion, voluntarily declare related party relationships, and adhere to the principles of honesty, ensuring the authenticity of materials.

Employees

Employees are required to sign the Employee Integrity and Honesty Commitment, which standardizes behavior in the workplace and upholds professional integrity and honesty. 99.2% of our employees have signed the Employee Integrity and Honesty Commitment.

Anti-Corruption Training

We conduct several anti-corruption, compliance, and integrity training sessions for all employees every year, interpreting relevant domestic and international laws and regulations as well as our anti-corruption mechanisms and management measures, to raise employees' awareness of integrity.





Whistleblower Protection

We have established multiple public reporting channels to jointly uphold our reputation for integrity image and promote the healthy development of the entire industry, making a positive contribution to the creation of a fair and transparent market environment.

Whistleblower Protection Policy

Strict Information Confidentiality	We are committed to strictly maintaining the confidentiality of the whistleblower's identity and preventing any form of disclosure.
Avoiding Negative Impact	We ensure that whistleblowers do not suffer any adverse impacts on their job positions, compensation, career development, etc.
Prevention of Retaliation	We will take strict disciplinary action against any attempts to retaliate against whistleblowers and ensure they are not subject to any retaliation or threats.
Prompt Handling of Complaints	We have established a rapid response mechanism, with a dedicated investigation team from the Internal Audit Department to investigate whistleblower reports fairly, objectively, and professionally. Timely feedback on the progress and the investigation results will be provided to the whistleblower.
Whistleblower Reward System	We offer monetary rewards of 10%–20% of the direct financial loss recovered based on the whistleblower's effective evidence, or non-material rewards such as recognition, commendations, and awards for outstanding contributions.



Reporting Channels

Whistleblower mailbox, email, telephone, our WeChat official account, QR code, and the online EIP compliance platform.

Anti-Unfair Competition

We strictly adhere to the *Anti-Monopoly Law of the People's Republic of China*, the *Anti-Unfair Competition Law of the People's Republic of China*, the *Foreign Trade Law of the People's Republic of China*, and relevant laws and regulations in domestic and international business locations. Our operations comply with the principle of fair competition, and we have established internal policies such as the Code of Business Ethics and Compliance Guidelines to ensure that transactions with customers, suppliers, and other business partners are conducted fairly and with integrity, thus contributing to the maintenance of a healthy market environment and achieving greater social benefits.

During the reporting period

- There were **NO** lawsuits or significant administrative penalties resulting from our unfair competition behavior.

Code of Conduct on Anti-Unfair Competition

Confidentiality of Trade Secrets <p>We sign Non-Disclosure Agreement with employees, suppliers, and partners to protect sensitive business information. We prohibit any illegal acts such as bribery, coercion, and theft that may infringe upon our competitors' trade secrets.</p>	Opposition to Illegal Business Practices <p>We prohibit false or misleading business promotion through advertising or other means regarding business reputation, product performance, etc.</p>	Export Control <p>We comply with United Nations and relevant national export control, trade control, and embargo regulations to prevent monopolistic and unfair competition issues arising from improper export activities.</p>
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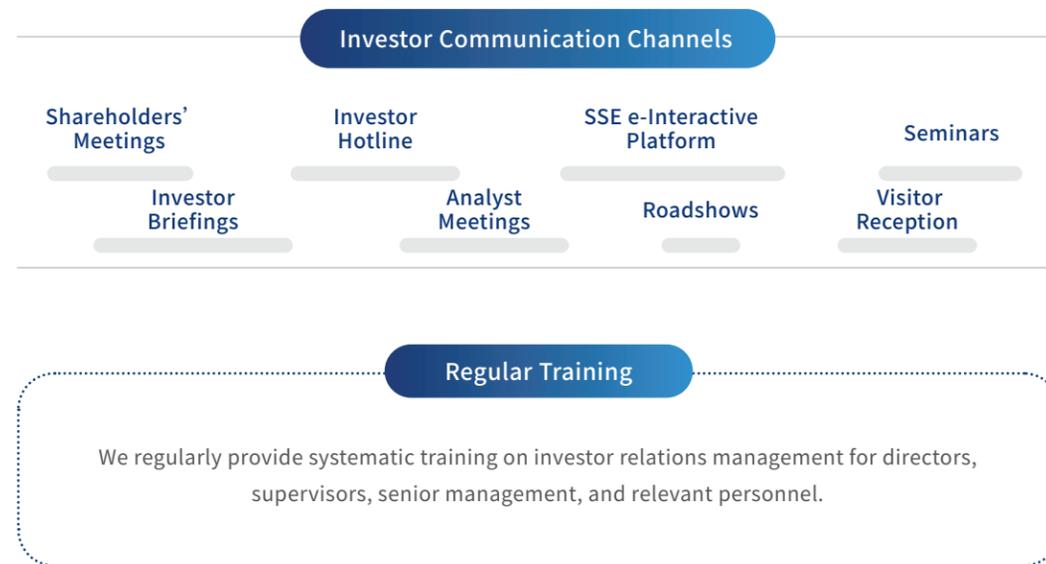


Protecting Investor Rights and Interests

At Quectel, we have established systems such as the Investor Relations Management System, the Information Disclosure Management System, and the Board Secretary Work Guidelines to ensure that investors receive information in a timely and fair manner. We provide multiple communication channels for investors, patiently answering their inquiries and establishing a responsible and reliable corporate image.

Investor Communication

We are committed to enhancing the breadth and depth of communication with investors, continuously expanding investor relations management. We have established a multi-level communication mechanism. Through various channels, we maintain timely and efficient communication with investors, fully understand their needs, answer their questions, and absorb their feedback and suggestions.



Investor Returns

Since going public, we have distributed cash dividends 6 times, with a total amount of approximately RMB 495 million.

We have evaluated the feasibility of multiple dividends and, in accordance with relevant regulations, convened the Shareholders' Meeting to authorize the Board of Directors to formulate and implement interim dividend plans. Our 2024 semi-annual cash dividend was **RMB 68,030,990.04** (pre-tax), accounting for **32.49%** of the net profit attributable to shareholders in the 2024 semi-annual consolidated financial statements.

Our annual cash dividend for 2024 is estimated to be **RMB 109.90** million (this is an estimate, and the actual dividend amount will be subject to the approval of the 2024 annual shareholders' meeting).

We repurchased our shares in 2023 and 2024, with a total amount of **RMB 106** million, and on November 12, 2024, the repurchased shares were canceled, totaling **2,917,252** shares, accounting for **1.10%** of the total share capital before cancellation.

Information Disclosure Management

At Quectel, we adhere to the principles of truthfulness, accuracy, and transparency in information disclosures, in compliance with the *Measures for the Administration of Information Disclosure of Listed Companies* and other relevant laws and regulations. We have established internal management documents, including the Information Disclosure Management System, the Management of Insider Information and Insiders, the Internal Reporting System for Major Information, and the Management of Deferred and Exempt Business in Information Disclosure to improve disclosure quality and transparency, enhance the readability and clarity of announcements, and integrate with our operational and financial conditions, helping investors to stay informed of significant matters and maximizing the protection of investor rights and interests.

During the reporting period

- There were **NO** instances of publishing correction or supplementary announcements, nor did we face regulatory penalties for information disclosure violations.

Disclosure Results

During the reporting period,

we disclosed a total of **113** announcements and related documents (**4** regular reports and **109** interim announcements).

we received an "A" rating from the SSE for our information disclosure work for three consecutive years.

Our 2023 ESG Report received an **A** rating from Sino-Securities Index Information Service (Shanghai) Co., Ltd., and a **BBB** rating from Wind.



▲ Sino-Securities Index ESG Ratings

▲ Wind ESG Rating

Benchmarking Index Table

Chapter	Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial)	General Framework of the China Corporate Sustainability Reporting Guidelines (CASS-ESG 6.0)	GRI Standard 2021
About This Report	第六条	P1.1/P1.2	2-1/2-2/2-3
Message from Our Chairman	/	P2.1	/
Quectel: Empowering a Connected World with Ambitions			
About Us	/	P3.1/P3.2	/
Our Business	/	P3.3	2-6
Our History	/	/	2-28
Honors in 2024	/	/	2-28
ESG Performance Highlights	/	/	2-27
ESG Governance			
Sustainable Development Governance Structure	Article 12	G1.1.1	2-14
Sustainable Development Management Mechanism	Article 11, 12	G1.1.2/G1.1.3/G1.1.5	2-17/2-18
Materiality Analysis	Article 5, 53	G1.1.9/G1.3.1/G1.3.2	2-4/2-14/2-29/3-1/3-2/3-3
Environment			
Climate Change Response	Article 21, 22, 23, 24, 25, 26, 27	E1.1.1/E1.1.2/E1.1.3/ E1.1.4/E1.1.6/E1.1.7/ E1.1.8/E1.1.14/E1.1.15/ E1.1.16	201-2/305-1/305-2/ 305-4
Environmental Compliance Management	Article 33	E2.1.1/E2.4.1/E2.4.2/E2.4.3	2-23/2-27
Emissions Management	Article 30, 31	E2.1.2/E2.1.5/E2.1.6/ E2.1.7/E2.1.8/E2.2.1/ E2.2.3/E2.2.5/E2.2.6/E2.2.7	303-2/303-4/305-7/ 306-1/306-2/306-3/ 306-4/306-5
Optimizing Energy Management	Article 35	E3.1.1/E3.1.2/E3.1.3/ E3.1.4/E3.1.5	302-1/302-3/302-5
Enhancing Water Resource Utilization	Article 36	E3.2.1/E3.2.2/E3.2.3/E3.2.4	303-5

Chapter	Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial)	General Framework of the China Corporate Sustainability Reporting Guidelines (CASS-ESG 6.0)	GRI Standard 2021
Environment			
Promoting the Circular Economy	Article 37	E3.3.2/E3.3.3/E3.3.4	/
Safeguarding the Ecological Environment	Article 32	E2.3.1/E2.3.2/E2.3.3	101-1/101-2/101-4/304-2
Green and Low-Carbon Operations	Article 20	/	/
Society			
Driving R&D Innovation	Article 41, 42, 43	S2.1.1/S2.1.2/S2.1.3/S2.1.4/ S2.1.5/S2.1.6/S2.1.7/S2.1.8/ S2.1.12/S2.1.13	2-4
Contributing to Digital Intelligence Development	Article 42	S2.1.13/G1.1.12	
Product and Service Quality	Article 47	S3.3.1/S3.3.2/S3.3.4/S3.3.6	2-4/2-23/2-24/2-25/2-26/416-2/417-1/417-2/417-3
Supply Chain Management	Article 45, 46	S3.1.1/S3.1.2/S3.1.3/S3.1.4/ S3.2.1	2-25/2-28/308-1/308-2/ 414-1/414-2
Data Security and Privacy Protection	Article 48	S3.4.1/S3.4.2/S3.4.3/S3.4.4	2-23/418-1
Safeguarding Employee Rights and Interests	Article 49, 50	S4.1.1/S4.1.3/S4.1.4/S4.1.5/ S4.1.6/S4.1.7/S4.1.9/S4.1.11/ S4.1.12/S4.2.1/S4.2.2/S4.2.3/ S4.2.4/S4.2.5/S4.2.6	2-7/2-23/2-25/201-1/ 201-3/401-1/401-2/ 403-1/403-2/403-3/ 403-4/403-5/403-6/ 403-7/403-9/403-10/ 404-1/404-2/405-1
Promoting Rural Vitalization	Article 39	S1.1.1/S1.1.2	2-23/201-1/203-2/415-1
Social Contributions	Article 40	S1.2.1/S1.2.2/S1.2.3/S1.2.4/ S1.2.5/S1.2.6	2-23/201-1/203-1/ 203-2/413-1/413-2/415-1
Governance			
Improving Corporate Governance	Article 12, 53	G1.1.1/G1.1.4	2-9/2-10/2-12/2-16/2-19/ 2-20/2-23
Compliance and Risk Management	Article 12	/	2-23/207-1/207-2
Adherence to Business Ethics	Article 55, 56	G2.1.1/G2.1.2/G2.1.3/G2.1.4/ G2.1.5/G2.1.6/G2.1.7/G2.2.1/ G2.2.2	2-23/2-24/2-25/2-26/205-2
Protecting Investor Rights and Interests	Article 53	G1.3.1/G1.3.2	2-4/2-23
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