

BR-Tech

Tel: 0512-62886165

E-mail: [ir@beiren-tech.com](mailto:ir@beiren-tech.com)

Address: No. 18, Songbei Road, Suzhou Industrial Park, Suzhou, Jiangsu, China

2024

Environment, Social and Governance  
(ESG) Report

Jiangsu Beiren Smart Manufacturing  
Technology Co., Ltd

Collaborate for Sustainability · Innovate for Tomorrow

About the Report	03
Message from the Chairman	05
Jiangsu Beiren’s Roadmap for Empowering China’s Intelligent Manufacturing	
About Beiren	08
Manufacturing by Beiren	09
Development	11
Brilliant Beiren	13
Appendix	
Key Performance Indicators (KPIs)	57
GRI Index	61
List of Participating Associations	63
Reader Feedback	64

01

Governance Responsibility: Strengthening Control to Create Long-term Value	
Governance Innovation Driving Long-term Value: Building a Sustainable Decision-making Ecosystem	17
Governance Resilience: Safeguarding Long-term Enterprise Value Amid Uncertainty	21
Anti-Corruption and Sustainability: Dual-Bottom-Line Practices in Transparent Governance	24

03

Product Stewardship: Innovation Drives the Future, Responsibility Leads Change	
From Efficiency to Resilience: Industrial Automation Builds a New Quality Productivity Ecosystem	41
Energy Storage Solutions: Accelerating the Zero-Carbon Future with Technological Innovation	43
Innovation: "BR-InMan" Intelligent Welding Robot System	45
Industry 5.0 Revolution: Zero-Defect Practices in Flexible Manufacturing	47

02

Social Responsibility: People-Centric Practices as a Responsible Employer and Corporate Citizen	
Enhancing Talent Development Momentum: Fostering Inclusive Growth in the Labor Market	27
Creating a Low-Carbon Supply Chain: Empowering Sustainable Development of Industrial Ecosystems	35
Commitment to Good and Shared Value: Empowering the Future Through Donations	37

04

Environmental Responsibility: Green Manufacturing, Supporting China’s “30·60” Goals	
Symbiosis of Intelligence and Green Practices: Full Lifecycle Digital Management	53
Energy Innovators: Promoting Clean Energy Applications	54
Zero-Waste Factory: Circular Economy in Production	55





## About this Report

This report is the 2024 Environmental, Social, and Governance (ESG) Report released by Jiangsu Beiren Intelligent Manufacturing Technology Co., Ltd. (hereinafter referred to as "Jiangsu Beiren" or the "Company"). Under the principles of objectivity, standardization, transparency, and comprehensiveness, this report discloses the Company's practices and performance in economic, product, environmental, and social responsibility to all stakeholders.

### Reporting Scope

Unless otherwise specified, this report covers Jiangsu Beiren and its subsidiaries consolidated in the financial statements. The reporting period is from January 1, 2024, to December 31, 2024. To enhance readability, some information outside this timeframe may be included.

### Data Source

Data and case studies in this report are derived from operational records or financial reports of Jiangsu Beiren and its subsidiaries. Financial data is presented in Renminbi (RMB). In case of discrepancies, the financial reports shall prevail.

### Standards

This report is prepared in accordance with the Shanghai Stock Exchange Guidelines for Listed Companies No. 14 – Sustainability Reporting (Trial), Sustainability Reporting Guidelines (Trial), Corporate Sustainability Disclosure Standards – Basic Standards (Draft for Comments), Guidelines for Listed Companies on Sustainability Reporting, and Guidelines for Preparing Sustainability Reports of Listed Companies (Draft for Comments). It also references the Global Reporting Initiative (GRI) Standards 2021.

### Assurance

The Board of Directors and all directors of the Company warrant that this report contains no false statements, misleading information, or material omissions, and assume individual and joint liabilities for its authenticity, accuracy, and completeness.

### Publishment

This report is published in both Chinese and English, available in print and digital formats. In case of discrepancies, the Chinese version shall prevail. Questions or suggestions regarding the report are welcomed.

### Forward-looking Statement

Certain content in this report constitutes forward-looking statements, which may be affected by uncertainties and risks, leading to material differences from actual results. The Company assumes no obligation to update such statements.

### Contact

Phone: 0512-62886165  
Email: ir@beiren-tech.com





## Chairman's Speech

Dear Partners, Colleagues, and Valued Employees,

As the seasons change, new chapters unfold. On releasing Jiangsu Beiren's 2024 Sustainability Report, I extend my heartfelt gratitude on behalf of the Company to all partners, stakeholders, and friends who have supported Jiangsu Beiren's growth. The past year marked a period of resilience and breakthroughs for Jiangsu Beiren, as we achieved leapfrog advancements in intelligent manufacturing and energy storage.

During the reporting period, the Company achieved a total operating revenue of 69,921.67 million yuan and a net profit attributable to shareholders of 4,519.84 million yuan. Despite industry-wide challenges, we strengthened our core business through strategic adjustments and operational synergy, enhancing market share, customer loyalty, and supply chain resilience. Healthy cash flow was maintained, and customer satisfaction ranked industry-leading for three consecutive years. Recognized as an "Outstanding Economic Contributor" in Suzhou Industrial Park, Jiangsu Beiren has demonstrated both technological prowess and social responsibility.

In 2024, we accelerated global expansion with the establishment of subsidiaries in Hong Kong, Mexico, and Germany. The successful launch of our first projects in Mexico and Europe exemplifies the seamless integra-

tion of "Chinese innovation" with "global standards", solidifying our reputation for professionalism, efficiency, and reliability worldwide.

As a national high-tech enterprise, innovation remains our cornerstone. In 2024, R&D investment reached 4,166 million yuan, with 33 additional intellectual property rights, bringing the cumulative total to 163.

We recognize that corporate success hinges on societal support and employee dedication. Deepening our ESG integration in 2024, Jiangsu Beiren initiated the "Building a 'Bottle-Free' Home" public welfare campaign, donated to education funds for talent development, and retained titles such as "Best Employer in Greater Suzhou" and "Most Promising Employer". These efforts reflect our commitment to responsibility and team cohesion.

Talent is our most valuable asset. Through programs like the "Future Star Initiative", "University-Enterprise Partnerships", and "High-Potential Talent Incubation", we have built a multi-tiered talent development system. The "Chairman Dialogue" platform identifies high-potential individuals, empowering those eager to innovate and excel, thereby strengthening our talent pipeline.

Looking ahead to 2025, the global manufacturing sector's shift toward intelligence and sustainability is unstoppable. Jiangsu Beiren will continue to drive growth through our dual-core strategy of "Intelligent Manufacturing + Energy Storage", expand overseas markets, pioneer smart welding robotics systems, and explore AI-driven upgrades in intelligent manufacturing.

2025 marks Jiangsu Beiren's 14th anniversary. Over these 14 years, we have evolved from a local start-up into an industry leader, expanding from Jiangnan to the global stage. Through relentless innovation, we have written a remarkable chapter in intelligent manufacturing. Standing at this new juncture, I am confident that with unity, courage, and vision, we will conquer new frontiers and embrace an even brighter future in the realms of intelligent manufacturing and green energy.

**Zhu Zhenyou, Chairman of Jiangsu Beiren**  
Jiangsu Beiren Smart Manufacturing Technology Co., Ltd






# Jiangsu Beiren's Roadmap for Empowering China's Intelligent Manufacturing

In the field of intelligent manufacturing, Jiangsu Beiren continues to focus on robotics integration and smart factory solutions for the automotive industry, offering one-stop services spanning digital consulting, intelligent robotic automation system integration, digital software, and smart logistics systems. The company has achieved significant progress in the R&D, design, production, assembly, and sales of: the new energy welding production lines, flexible automated welding and assembly lines, intelligent welding equipment production lines, laser processing equipment, automated polishing and grinding systems, production management information systems, and digital workshops.

In the energy storage, leveraging the strengths in intelligent manufacturing and digitalization, Jiangsu Beiren has established an integrated chain covering product design, production line R&D, supply chain management, manufacturing, and asset operations. This enables full lifecycle management of energy storage products and delivers high-quality energy storage solutions to clients.


Aligned with China's 14th Five-Year Plan and the dual-carbon policy, Jiangsu Beiren actively responds to national strategies, seizing opportunities in the new energy industry. Guided by high-quality development, the company is committed to becoming a leader in intelligent manufacturing, driving the advancement of "Made in China with Intelligence". In 2025, Jiangsu Beiren will further intensify efforts in technological innovation and market expansion, enhancing its global competitiveness in intelligent manufacturing and energy storage.

## About Beiren |




Mission

Focus on industry challenges, talents cultivation, customer demands, Provide customer perfect solution and high-quality service.




Philosophy

Professional; Innovation; Dedication; Responsibility.



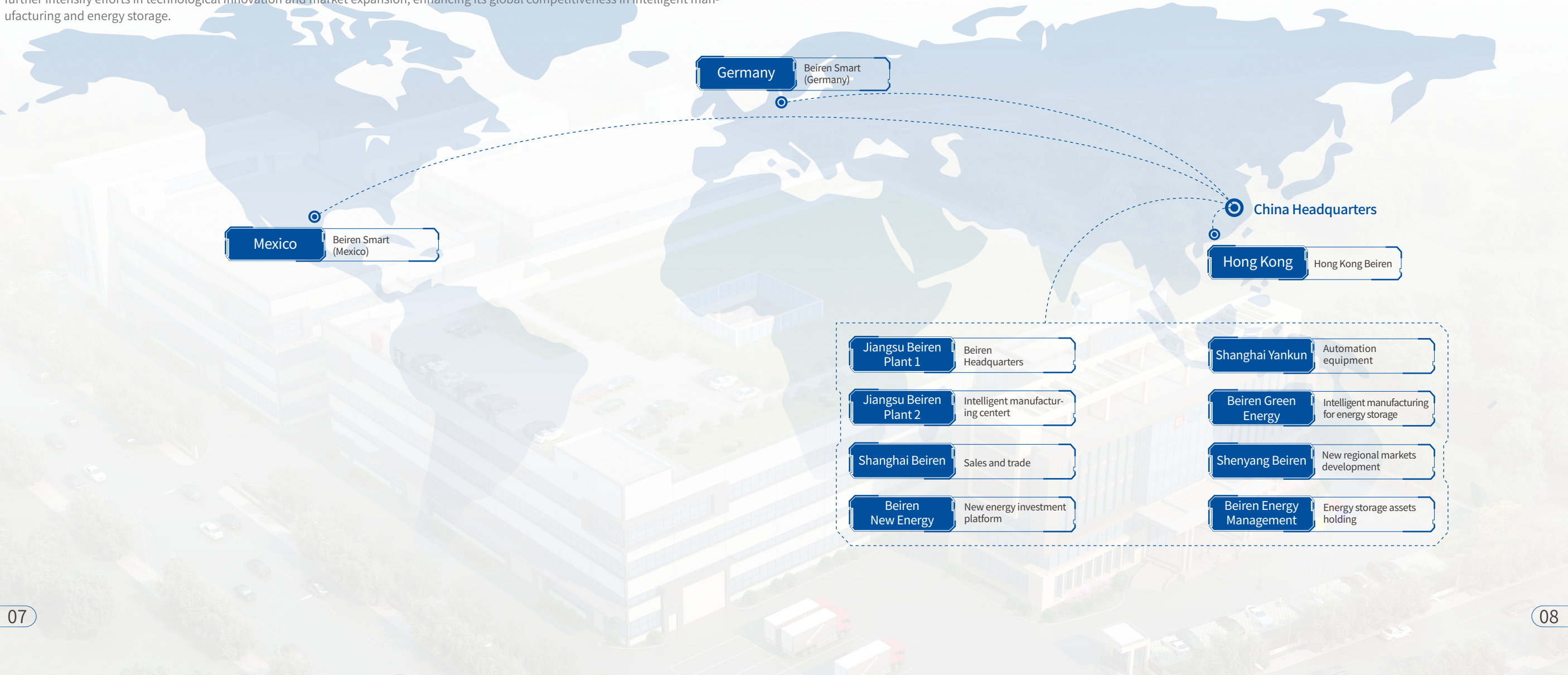
Vision

Become a leader in intelligent manufacturing.



Core Value

Integrity, pursuing excellence; Mutual-believe cooperation, talent first; Continuous innovation, making customer successful.







## Manufacturing by Beiren |

Jiangsu Beiren is a high-tech enterprise specializing in industrial robot integration and smart factory construction, with a focus on industries such as automotive and new energy. The company provides end-to-end solutions encompassing digital consulting, automated production lines (e.g., welding, assembly, laser processing), intelligent logistics, and information systems, delivering turnkey projects through its integrated "product + technology + service" model. In recent years, it has expanded into the energy storage sector, achieving full-chain integration from R&D design to production and operations, and offering smart energy storage system solutions. Under the guidance of China's 14th Five-Year Plan and the dual-carbon strategy, Jiangsu Beiren continues to drive smart manufacturing upgrades through technological innovation, striving to become an industry benchmark and propel China's manufacturing sector toward high-end and green transformation.

### Intelligent Equipment

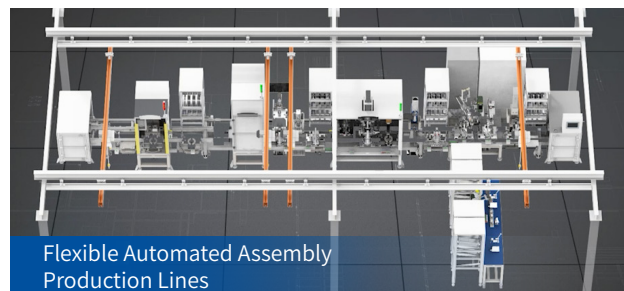
### Comprehensive Intelligent Manufacturing Solutions Provider



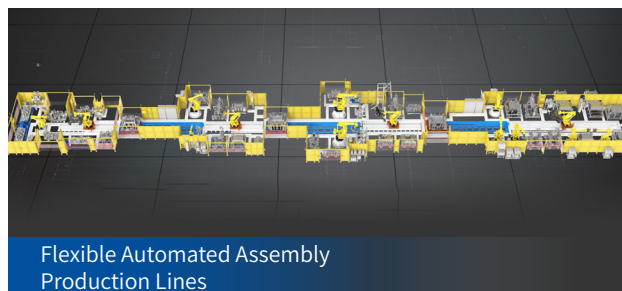
Intelligent Manufacturing Production Lines for New Energy Vehicles



Flexible Automated Intelligent Manufacturing Production Lines



Flexible Automated Assembly Production Lines



Flexible Automated Assembly Production Lines



Laser Processing Equipment



Automated Polishing and Grinding Equipment



Production Management Information Systems



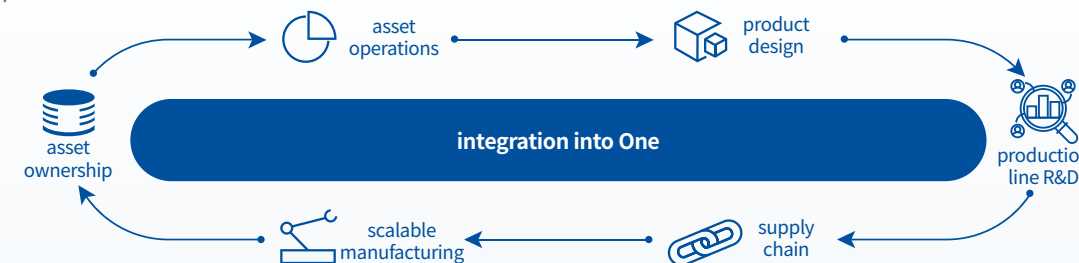
Digital Workshops

### New Energy

### Energy Storage Manufacturing and Full Lifecycle Operator



We integrate the entire value chain of "energy storage smart production lines, energy storage PACK products, energy storage systems, energy storage asset ownership, and energy storage asset operations", adopting a holistic business model that spans "product design – production line R&D – supply chain – scalable manufacturing – asset ownership – asset operations".



### Manufacturing Information System



Establish a full lifecycle digital management system and a collaborative data platform for battery cell raw materials, manufacturing, and energy storage asset operations.



Mitigate safety risks, optimize system operation, and extend system lifespan



Continuously iterate on product design, improve manufacturing quality, and enhance system efficiency





## Development |



### Establishment

In 2011, Beiren Robotics Systems (Suzhou) Co., Ltd. was founded.

2011



### Successful IPO

The company went public on the Shanghai Stock Exchange Sci-Tech Innovation Board (STAR Market) on December 11, 2019.  
Stock Code: 688218  
Awarded the designation of "Jiangsu Provincial Academician Workstation."

2019



### Pursuit of Excellence

Founded Jiangsu Beiren Green Energy Technology Co., Ltd.  
Commissioned a 4GWh Smart Energy Storage Factory.  
Launched integrated operation of Commercial & Industrial Energy Storage Solutions.

2023

2013

### Forging Ahead

Focusing on the automotive sector, the company broke through industry barriers with its aluminum alloy CCB welding production line. It was approved as the "Suzhou Welding Robot System Engineering Technology Research Center."



2022

### New Journey

Recognized as a National-level Specialized, Sophisticated, Innovative, and Emerging Small Giant Enterprise, the company expanded into the energy storage industry.  
Established Jiangsu Beiren New Energy Technology Co., Ltd.



2024

### Global Expansion and Intelligent Innovation

Successfully initiated the Mexico Project.  
Dispatched overseas teams to Italy.  
Officially inaugurated Beiren Germany.



## Brilliant Beiren |

### Honors

In 2024, Jiangsu Beiren further solidified its leading position in intelligent manufacturing and the energy storage sector. Recognized for its technological innovation, industry contributions, and social responsibility, the company received multiple honors and accolades. It has demonstrated outstanding performance in integrated intelligent manufacturing solutions, energy storage technology R&D, and employer branding, highlighting its robust comprehensive capabilities and growth potential. Moving forward, Jiangsu Beiren will continue to prioritize high-quality development, driving innovation and advancement in intelligent manufacturing and the energy storage industry.



#### 2024 Honor and Recognition

Economy & Corporate Governance	
Outstanding Economic Contribution Unit in Suzhou Industrial Park	Top 300 Most Popular Listed Companies by East Money Information
Initiating Member of Suzhou Industrial Park ESG Alliance	Most Investable Advanced Manufacturing Enterprise by Caillian Press
AAA Credit-Rated Enterprise (Corporate Credit Rating)	

Products & Technology		
Top 100 Non-Standard Customized Automation Integrators for Smart Factories (2023)	Founding Member of Suzhou Humanoid Robot Ecosystem Consortium	2024 Suzhou Municipal Model Smart Workshop (Beiren Green Energy)
Capek Award - 10th Annual Excellence in Branding	EESA Starlight Award - 2024 Best Commercial & Industrial Energy Storage Solution	Lingyun Award - 2024 Outstanding Supplier
China's Top 100 Emerging Energy Storage Brands by Energy Storage Leaders Alliance	EESA Starlight Award - 2024 Best Emerging Enterprise	Technological Innovation Achievement Award by Shanghai Fengxian Automotive Industry Technology Association

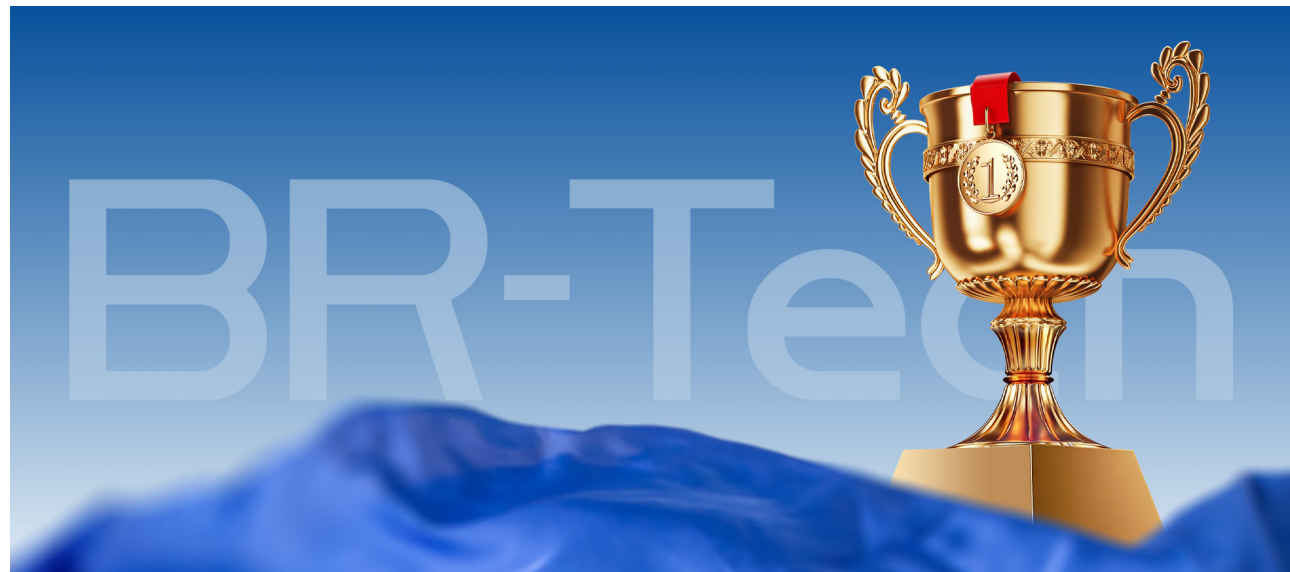
Human Resource	
2024 Greater Suzhou Best Employer Award	2024 Most Promising Employer Award

### Returns to Shareholders

To safeguard investor rights, uphold the development philosophy of "investor-centricity," and enhance investor benefits, the company has implemented a high-ratio, consistent, and stable dividend policy since its IPO. This policy has been formalized in the Company's Articles of Association and further detailed in the Three-Year Shareholder Dividend Return Plan.

Dividend Distribution Since Listing:

Unit: CNY				
Dividend Year	Dividend per 10 shares (including tax)	Total cash dividend (including tax)	Amount paid for share repurchases (excluding stamp duty, transaction commissions, etc.)	Ratio of the sum of cash dividends and share repurchases to the net profit attributable to ordinary shareholders of the listed company in the consolidated financial statements (%)
2020	0.8	16,427,600.00	/	31%
2021	0.6	9,387,200	/	32%
2022	0.9	7,040,400.00	/	32%
2023	3.5	10,410,238.17	32,164,774.53	134%
2024	1.9	22,130,314.22	/	49%







# Governance Responsibility: Responsibility: Strengthening Control to Create Long-term Value

- Governance Innovation Driving Long-term Value:  
Building a Sustainable Decision-making Ecosystem 17
- Governance Resilience:  
Safeguarding Long-term Enterprise Value Amid Uncertainty 21
- Anti-Corruption and Sustainability:  
Dual-Bottom-Line Practices in Transparent Governance 23

# 01



# Governance Responsibility: Strengthening Control to Create Long-term Value

## Governance Innovation Driving Long-term Value: Building a Sustainable Decision-making Ecosystem |

### Corporate Governance

Jiangsu Beiren has established a modern corporate governance structure in compliance with laws and regulations such as the Company Law and the Securities Law. This structure includes a shareholders' meeting, board of directors, supervisory board, and management layer, ensuring the standardization and effectiveness of corporate governance. Under this framework, the board has set up four specialized committees: strategy, audit, nomination, and compensation and evaluation, to enhance the professionalism and efficiency of internal deliberation and decision-making.

The company has developed various management systems, including the Articles of Association, Information Disclosure Management System, Fundraising Management System, Shareholders' Meeting Rules, Board of Directors Rules, and Supervisory Board Rules, continuously improving its governance structure and level to ensure compliance and stability in operations.

The company fully considers factors such as industry experience, background, and gender of board members to ensure the optimization and diversity of the board. Currently, the board consists of six directors, including two independent directors and one female director, promoting scientific and comprehensive decision-making through diverse perspectives and expertise.

Jiangsu Beiren is committed to establishing a corporate governance framework with clear responsibilities and checks and balances, strengthening compliance management, and safeguarding the interests of shareholders and the company. During the reporting period, the company held 5 shareholders' meetings, 11 board meetings, 9 supervisory board meetings, and 2 independent director-specific meetings, achieving full-year compliance in information disclosure and internal control governance. During the reporting period, the company's management actively participated in specialized training organized by regulatory authorities and industry associations to enhance compliance awareness, with directors and senior management attending 6 training sessions. In 2024, Jiangsu Beiren successfully completed the transition from the third to the fourth board of directors, supervisory board, and senior management, ensuring a smooth renewal process.



### Materiality Management

#### Stakeholder Communication

Jiangsu Beiren is committed to establishing communication mechanisms with all stakeholders. We define stakeholders as individuals or groups that influence or are affected by our operational activities, including governments, investors, clients, and others. To address their expectations and concerns, we maintain ongoing communication with stakeholders through channels such as our website, media, meetings, reports, and events.

#### Stakeholder Communication Channels

Stakeholder	Communication Methods
Shareholders & Management	Shareholders' meetings, earnings briefings, investor forums, SSE E-Interaction platform, investor hotline, investor email, etc.
Clients	Client surveys, customer service hotline, client satisfaction surveys, etc.
Employees	Employee engagement activities, intranet, training programs, employee handbook, internal publications, etc.
Government	Institutional visits, official correspondence, policy compliance, information disclosure, etc.
Suppliers	Public bidding meetings, strategic partnership negotiations, mutual visits, etc.
Industry Associations	Regular communication, information disclosure, participation in association events, etc.
Community Representatives	Community philanthropic donation projects, etc.

### Identification

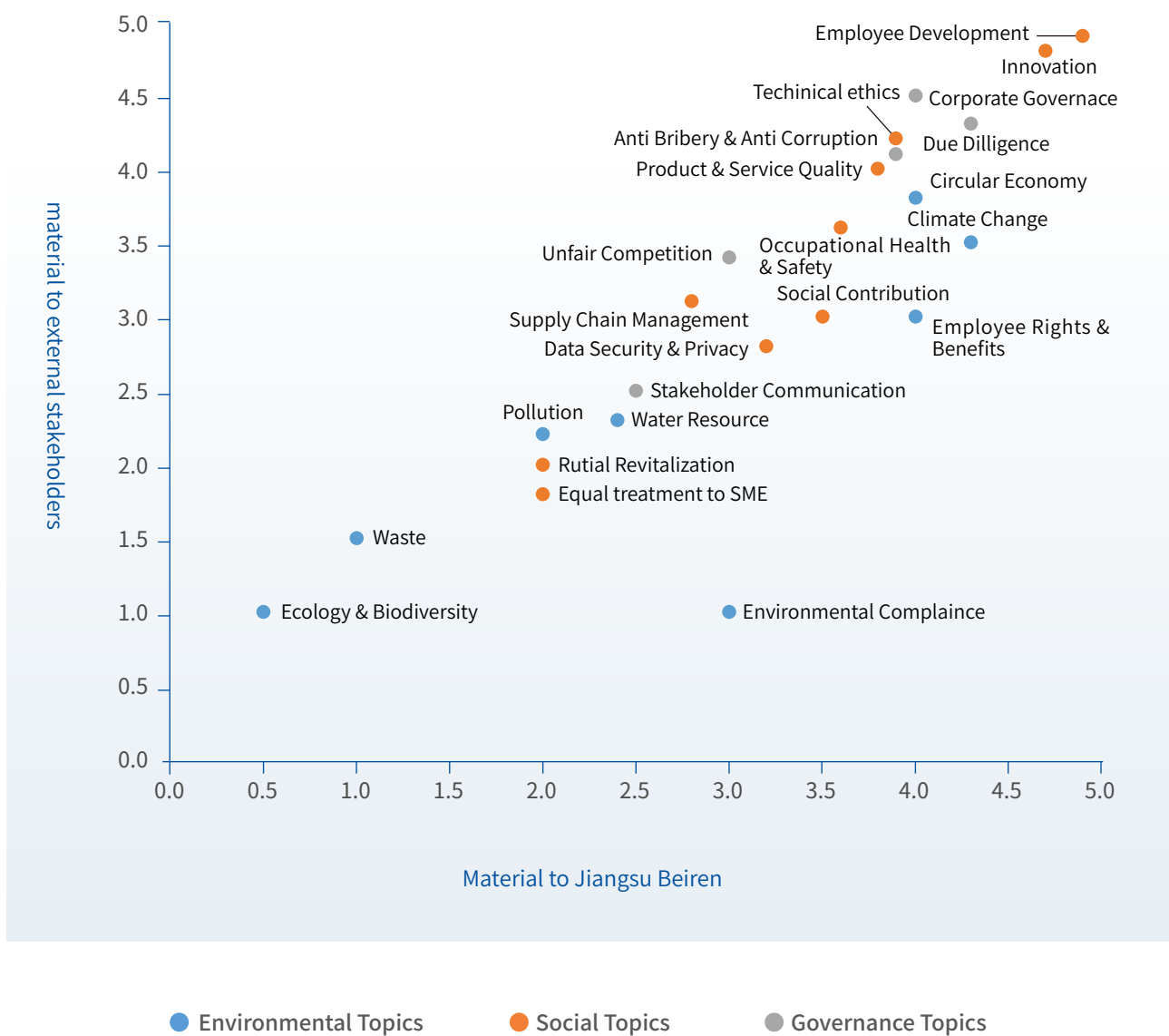
During the previous reporting period, the company conducted issue identification and screening, stakeholder survey, and priority analysis of material issues. The analysis fully considered international and domestic regulatory policies, industry trends, corporate vision, strategic planning, and insights from an online stakeholder questionnaire. After balancing these factors, we developed the 2023 Materiality Matrix. Building on the 2023 material issues, we refined the 2024 key disclosure topics by referencing the Shanghai Stock Exchange's 2024 guidance on sustainability reporting and the focus areas prioritized by domestic and international rating agencies for intelligent manufacturing.

#### 2024 Materiality Issue Analysis Process

Stakeholder Identification and Assessment	<ul style="list-style-type: none"><li>Identify key stakeholder groups based on corporate strategy and development level, including those potentially impacted by the company's production, operations, strategies, and objectives, such as management, employees, governments, investors, industry associations, suppliers, customers, and community representatives.</li></ul>
Topic Definition and Screening	<ul style="list-style-type: none"><li>Develop 24 preliminary ESG topics by aligning industry regulations, policies, standards, corporate vision, and strategic plans, while benchmarking against peer companies' disclosure practices.</li></ul>
Questionnaire Survey	<ul style="list-style-type: none"><li>Analyze the level of attention to the 24 topics through online questionnaires, management records, and feedback from stakeholder groups.</li></ul>
Priority Ranking and Comprehensive Evaluation	<ul style="list-style-type: none"><li>Rank the importance of ESG topics for each stakeholder group based on valid feedback.</li><li>Validate and refine the rankings using disclosure requirements from the Shanghai Stock Exchange (SSE) and focus areas of mainstream rating agencies. Finalize the materiality matrix with input from management.</li></ul>



Materiality Matrix



In 2024, Jiangsu Beiren conducted a systematic materiality assessment and identified 10 high-priority ESG topics for the year, including Climate Change Mitigation, Circular Economy, Innovation-Driven Development, Technology Ethics, Product and Service Safety & Quality, Employee Rights and Welfare, Talent Cultivation and Development, Occupational Health and Safety, Due Diligence, Anti-Commercial Bribery and Anti-Corruption, and Corporate Governance. This report will focus on disclosing these material ESG topics, comprehensively demonstrating the company's practices and achievements in these areas. The remaining 14 topics, due to their limited current impact, are not prioritized for detailed disclosure.

Material Topics	Topics
Environment	01. Climate Change Mitigation 02. Pollution 03. Waste Management 04. Ecosystem and Biodiversity Conservation 05. Environmental Compliance Management 06. Energy 07. Water Stewardship 08. Circular Economy
Social	09. Rural Revitalization 10. Social Contribution 11. Innovation-Driven Development 12. Technology Ethics 13. Supply Chain Security 14. Fair Treatment of SMEs 15. Product and Service Safety & Quality 16. Data Security and Customer Privacy Protection 17. Employee Rights and Welfare 18. Talent Cultivation and Development 19. Occupational Health and Safety
Governance	20. Due Diligence (Risk Management) 21. Stakeholder Communication 22. Anti-Commercial Bribery and Anti-Corruption 23. Anti-Unfair Competition 24. Corporate Governance

2023 Materiality vs 2024 Materiality

	2024 Material Topics	2023 Material Topics
Environment	Climate Change Mitigation; Circular Economy	
Social	Innovation-Driven Development; Technology Ethics; Product and Service Safety & Quality; Employee Rights and Welfare; Talent Cultivation and Development; Occupational Health and Safety	Smart Manufacturing; R&D and Innovation; Digital Transformation; Product Quality and Safety; Customer Relationship Management; Employee Rights and Welfare; Occupational Health and Safety
Governance	Due Diligence; Anti-Commercial Bribery and Anti-Corruption; Corporate Governance	Standardized Governance; Business Ethics; Quality and Efficiency Improvement





Jiangsu Beiren has established a comprehensive and efficient risk management framework by clearly defining the responsibilities of each department within its risk management system. Through cross-departmental collaboration, the company ensures timely identification, assessment, monitoring, and response to risks, safeguarding its stable operations and sustainable development.

Legal Department

As the core department for external business risk management, the Legal Department identifies and evaluates risks arising from business activities. Through market research, interpretation of policies and regulations, and analysis of competitors, it pinpoints potential market risks, credit risks, and legal risks, formulating targeted mitigation strategies. Additionally, the department reviews commercial contracts to ensure legality and compliance, preventing legal risks at the source and fortifying a robust legal defense for business operations.

Risk Control Department

Focused on external technology risk management, the risk control department monitors industry trends and emerging technologies to anticipate risks posed by technological shifts. Leveraging technical expertise, it evaluates the reliability, stability, and compatibility of new technologies with existing systems, ensuring seamless integration and avoiding operational disruptions. The department also implements a technical risk early-warning mechanism to detect anomalies in real-time during technology application, enabling rapid activation of contingency plans to minimize potential losses.

Operations Department

Responsible for project execution risk management, the operation control department oversees critical indicators—progress, quality, and cost—throughout a project's lifecycle. Regular reviews and progress updates allow for early detection of deviations and risks, such as operational risks or schedule delays. It develops detailed risk response plans, optimizes resource allocation, and refines workflows to ensure on-time, high-quality project delivery.

Business Management Department

As the core of internal process and system management, the business management department streamlines operational workflows and institutional frameworks. Through periodic process audits and system evaluations, it identifies bottlenecks and gaps, enhancing operational efficiency and compliance. It also designs and refines the company's risk management policies, clarifying departmental roles and responsibilities to drive continuous improvement of the risk management system.

Audit Department

Central to integrity and business ethics governance, the audit department conducts regular internal audits and investigations to scrutinize employee conduct and adherence to anti-corruption standards. It enforces a zero-tolerance policy for violations of integrity or ethical guidelines, imposing strict disciplinary actions. The department also organizes integrity training programs to foster a culture of self-discipline and ethical awareness, ensuring a transparent and principled work environment.

Through the specialized execution and close collaboration of all departments in risk management and control, Jiangsu Beiren has built a robust risk defense system. This framework not only effectively navigated the complex and volatile market challenges of 2024 but also laid a solid foundation for the company's sustained and stable growth.

## ■ Anti-Corruption and Sustainability: Dual-Bottom-Line Practices in Transparent Governance |

In today's complex and dynamic business environment, enhancing business ethics management and compliance competitiveness has become essential for building a distinguished brand, implementing modern governance, and demonstrating core organizational resilience. Jiangsu Beiren prioritizes this as a strategic objective, committing to elevating compliance standards through comprehensive, multi-tiered efforts to bolster stakeholder confidence and cultivate a reputable corporate image.

The company upholds a robust anti-corruption framework and compliance culture. In alignment with the Criminal Law of the People's Republic of China, Anti-Unfair Competition Law of the People's Republic of China, and Interim Provisions on Prohibiting Commercial Bribery by the State Administration for Industry and Commerce, Jiangsu Beiren has established the Beiren Professional Integrity and Ethics Pledge. This pledge regulates conduct related to bribery, conflicts of interest, and other ethical risks, requiring all employees to sign and adhere to its provisions. By defining clear ethical standards and legal boundaries, the pledge underscores the company's unwavering commitment to combating corruption. Regular training and awareness campaigns ensure employees fully understand and comply with these rules, preventing unethical behavior at its source and fostering an integrity-driven workplace.

Jiangsu Beiren enforces stringent compliance requirements and zero-tolerance policies for corruption among both employees and business partners. For suppliers, the procurement team mandates the signing of a Sunshine Procurement Agreement, ensuring fair, impartial, and transparent procurement practices. This agreement not only governs interactions with suppliers but also extends the company's compliance expectations across the value chain, encouraging partners to strengthen their own ethical management systems. Through mutual oversight and collaboration, the company builds a law-abiding, fair, and transparent business ecosystem. During the reporting period, 280 suppliers signed the Sunshine Procurement Agreement.

The company has established secure reporting channels, including a complaint hotline and dedicated email, to address concerns transparently and impartially. Employees who report issues in good faith receive rewards and guaranteed confidentiality. This mechanism empowers staff to voice concerns safely, reflecting the company's dedication to fairness and employee rights. By encouraging internal oversight, Jiangsu Beiren swiftly identifies and rectifies risks, reinforcing compliance and risk management. In 2024, the company resolved 12 customer complaints with a 100% response rate.

Jiangsu Beiren remains steadfast in advancing business ethics and compliance, refining systems and mechanisms to strengthen its competitive edge. As the company pursues excellence in brand building and modern governance, it pledges to contribute to a cleaner, fairer, and more transparent business future through concrete actions and collaboration with all stakeholders.





## Social Responsibility: People-Centric Practices as a Responsible Employer and Corporate Citizen

- Enhancing Talent Development Momentum:  
Fostering Inclusive Growth in the Labor Market
- Creating a Low-Carbon Supply Chain:  
Empowering Sustainable Development of Industrial Ecosystems
- Commitment to Good and Shared Value:  
Empowering the Future Through Donations

27

35

37

02



Social Responsibility:

People-Centric Practices as a Responsible Employer and Corporate Citizen

Enhancing Talent Development Momentum:

Fostering Inclusive Growth in the Labor Market |

Jiangsu Beiren prioritizes talent development, firmly believing that every employee is a source of innovation and growth. Their professional expertise, creativity, and dedication collectively form the company's core competitiveness. To this end, the company places talent strategy at the forefront, continuously refining training programs and offering diverse learning and development opportunities. This ensures employees stay abreast of cutting-edge technologies and market trends, enabling them to grow alongside the company's rapid evolution.

To unlock employees' full potential, we are committed to building a fair, transparent, and challenging work platform with clear career progression pathways. Talented and ambitious employees are empowered to rise swiftly, take on greater responsibilities, and earn commensurate recognition and rewards. We recognize that employee growth and corporate success are intertwined—every advancement injects fresh vitality into the organization.

We foster a culture of empathy and inclusion, grounded in respect, understanding, and acceptance, ensuring every employee feels valued and supported. At Jiangsu Beiren, employees are not just contributors but integral members of a cohesive community. Through team-building activities, comprehensive occupational health safeguards, and a clean, comfortable work environment, we help employees recharge and strengthen their sense of belonging, even amidst demanding workloads.

Employee Rights and Welfare

Jiangsu Beiren strictly adheres to national laws and regulations, including the Labor Contract Law of the People's Republic of China and the Social Insurance Law of the People's Republic of China, treating employees as core assets and safeguarding their lawful rights. The company has established a comprehensive internal policy framework, including: Reward and Discipline Management System; Employee Attendance and Leave Management System; Recruitment Management System; Training Management System; Compensation and Benefits Management System. These policies ensure fair and equitable treatment across all human resource processes.

The company upholds equal opportunity principles, selecting candidates based on role requirements and competencies, free from discrimination based on age, gender, origin, religion, or other non-work-related factors. Every candidate competes on a level playing field. Transparent career promotion pathways are tied to performance, skill development, and achievements, encouraging employees to pursue professional growth through merit. Tailored to role-specific needs and individual development plans, the company provides diverse training resources to enhance employees' technical skills and holistic competencies, aligning with evolving market demands and strategic goals.

Overview of Employee Benefits



Social insurance and housing provident fund



Commercial insurance for accidental injury



Annual health checks



Paid annual leave



Holiday benefits



Different types of bonuses available



Housing accommodation for fresh graduates



Communication allowance



On-site dining hall



Team building events

Jiangsu Beiren consistently treats employees as its core resource for development, committed to building a scientific, equitable, and market-competitive compensation system. The company has meticulously designed a fair, reasonable, and motivating salary management framework to ensure employees' contributions are appropriately rewarded.

By actively participating in salary benchmarking studies conducted by authoritative institutions and analyzing market trends, Jiangsu Beiren establishes compensation guidelines for various job categories. This enables the company to offer competitive salaries, maintaining an edge in talent attraction and retention.

To better motivate and retain key talent, the company has implemented a multi-tiered incentive system. In addition to competitive base salaries, employees benefit from:

Annual Bonus

Calculated and distributed before the Chinese New Year based on the company's annual profitability, individual year-end performance, and overall contributions.

Annual Salary Adjustment

Conducted uniformly in June each year, aligned with prior-year financial results, employee performance, and external market data.

Project Performance Bonus

Awarded based on cost savings and efficiency improvements in projects.

Stock Incentive Plan

To drive core talent engagement, the company refined its incentive program by implementing a Category II Restricted Stock Incentive Plan, with 410,400 shares vested during the reporting period.

These initiatives not only enhance employees' sense of belonging and loyalty but also inject momentum into the company's sustainable growth. Moving forward, Jiangsu Beiren will continue optimizing its compensation and incentive systems to grow alongside its workforce.

Case Study: Building Global Competitiveness to Drive Sustainable Business Expansion

1. Talent Inventory and Precision Matching

The HR department established a comprehensive talent database and competency models. By assessing managerial capabilities, willingness for overseas assignments, and cross-cultural adaptability, the company ensures optimal person-job alignment for expatriates, enhancing the efficiency of global teams.

2. Cross-Cultural Training: Fostering Integration

The HR department conducts systematic cross-cultural training programs covering topics such as customs clearance, daily habits, cultural integration, safety and health, legal compliance, cultural dimensions models, four manifestations of cross-cultural differences, and cross-cultural barriers and strategies of benchmark enterprises. These initiatives holistically enhance employees' cross-cultural communication skills and cultural sensitivity, effectively prevent cultural conflicts, foster team collaboration, and improve work efficiency.

3. Comprehensive Support: Ensuring Well-Being

The HR department has developed a comprehensive travel handbook, providing overseas employees with one-stop services covering accommodations, cultural immersion, local living guides, safety and health protocols, travel allowances and reimbursement, English learning resources, and digital compliance guidelines. Regular employee care initiatives are conducted to understand their needs, promptly address concerns, and ensure they can work with peace of mind and enjoy a fulfilling life. These efforts aim to enhance employees' sense of belonging and well-being.

4. Compliance-Driven Operations: Safeguarding Sustainability

Collaborating with finance, legal, and IT departments, HR conducts rigorous reviews of local labor laws, tax policies, and data security requirements in target markets. Proactive compliance frameworks and risk mitigation plans ensure lawful operations and protect employee rights.



Jiangsu Beiren remains dedicated to its people-centric philosophy and ESG commitments, continuously elevating global HR practices. By empowering employees and prioritizing compliance, the company advances its vision of becoming a global leader in intelligent manufacturing solutions, creating value for employees, stakeholders, and society.



## Talent Cultivation and Development

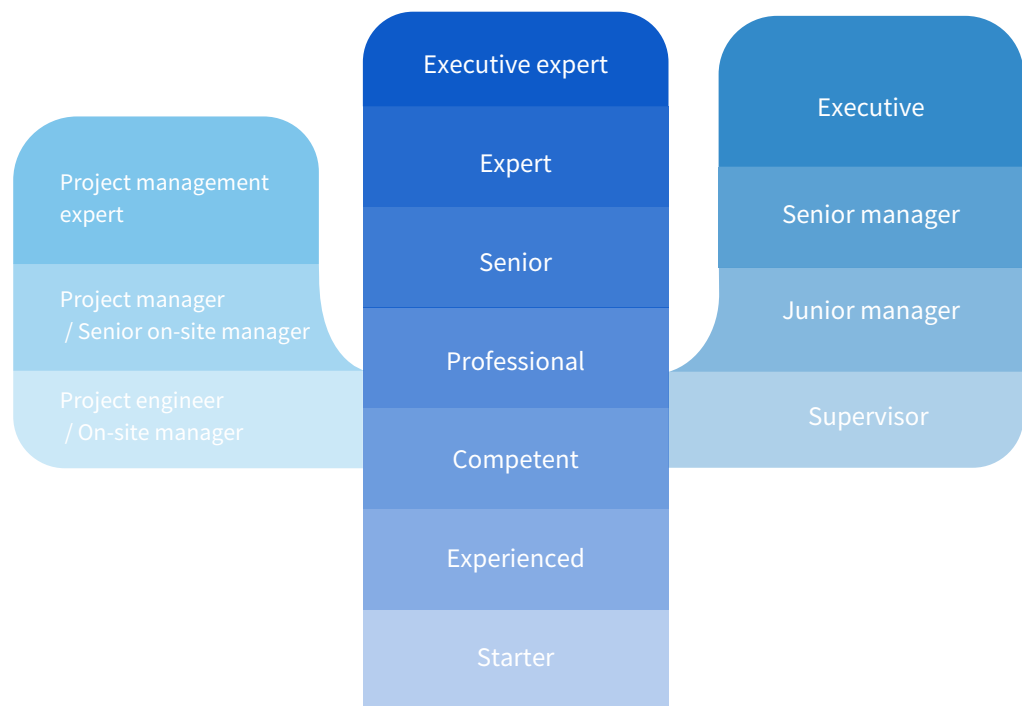
### ● Jiangsu Beiren Talent Management Philosophy

Talent as Priority	The company's greatest asset is its people. We focus on accelerating talent growth and enabling rapid replication of talent capabilities.
Internal Promotion	Establish an effective evaluation mechanism to provide objective criteria for internal talent selection.
Merit-based Incentives	Eliminate egalitarianism by aligning compensation and resources with individuals who are "motivated to act," "capable of acting," and "deliver results."
Continuous Growth	The company commits to offering employees opportunities for sustained career development.

Jiangsu Beiren consistently regards talent as the core driver of corporate development. Upholding the principle that "talent is the primary resource," the company continuously invests in talent development, optimizes human resource allocation, and fosters a corporate culture that values knowledge and respects talent.

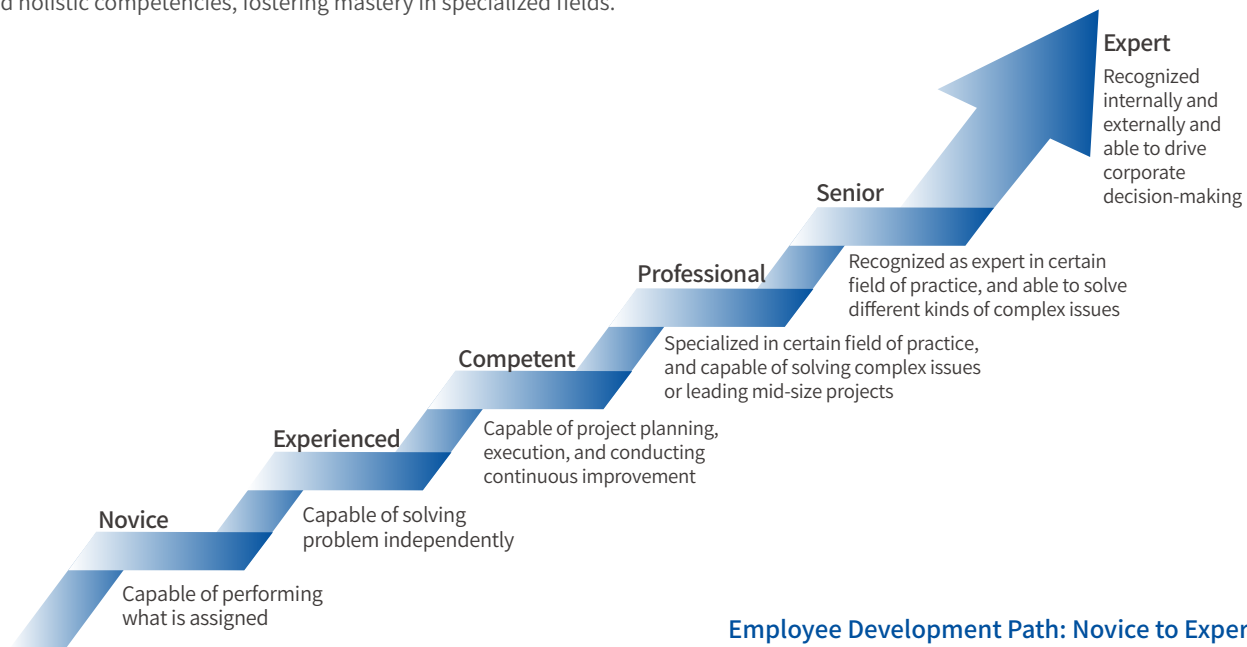
The company advocates that "every employee is the master of their own career development," designing clear growth pathways and career ladders encompassing both horizontal and vertical directions. For horizontal development, Jiangsu Beiren innovatively implements a three-track talent development model: Professional Technical Track; Project Management Track; Business Management Track. After building foundational expertise, employees can autonomously choose their preferred development track based on personal strengths and aspirations, enabling diversified career progression.

### ● Career Development Pathways



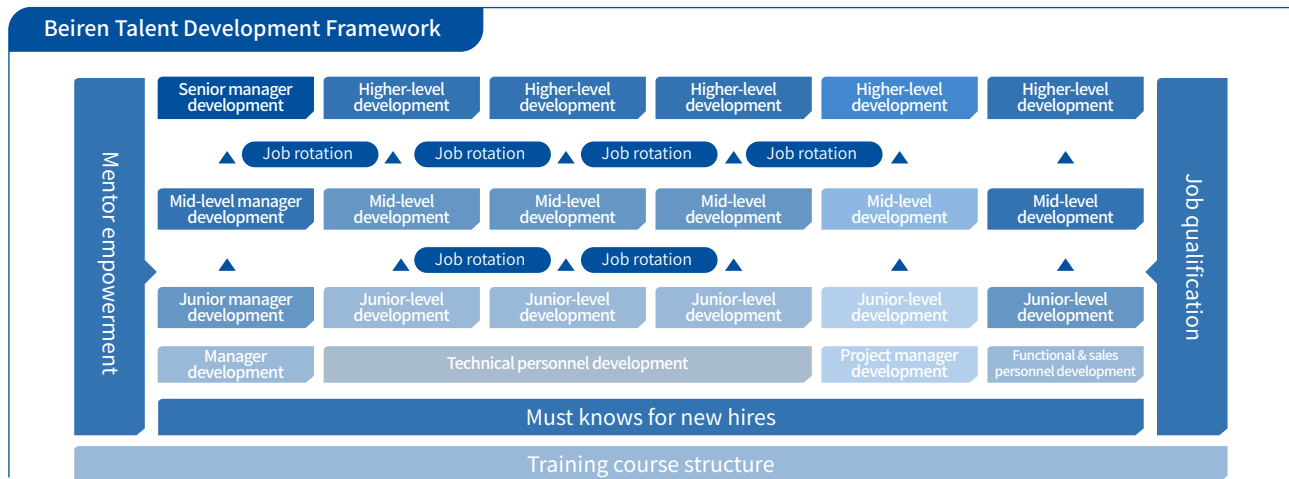
### ● Employee Development Pathways

In vertical specialization, the company scientifically categorizes qualification levels in alignment with talent development principles. Criteria are structured across progressive stages: Novice, Experienced, Competent, and Expert, enabling precise identification of employees' career development phases. This framework supports their steady advancement in professional expertise and holistic competencies, fostering mastery in specialized fields.



### ● Talent Development Framework

In today's fiercely competitive market, the company recognizes the critical role of employee efficiency and innovation in sustaining growth. Employee training is elevated to a strategic priority, with a focus on building a learning-oriented organization that unlocks potential and enhances professional competencies across the workforce.



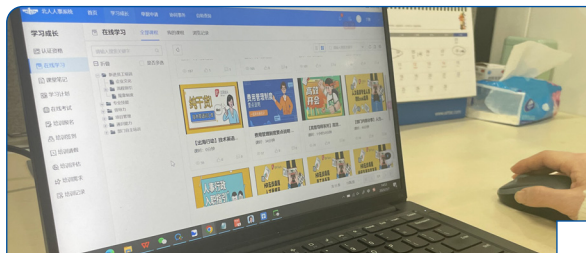
The company has established a robust framework through its Training Management System and Jiangsu Beiren Mentorship System, offering scenario-based, personalized training programs tailored to employees' career stages, roles, and domains. Leveraging a hybrid online-offline training model, the framework provides specialized learning opportunities in technical and managerial fields. Supported by mentorship programs and a qualification certification system, it empowers employees to achieve personal growth while driving organizational success.

Specialized Skill Development Programs

Star Creation Program

Target: Trainees

2023: 11 trainees completed 9,172 study check-ins; 4 were nominated as "Outstanding Employees of the Year."  
 2024: 14 trainees completed 12,758 study check-ins; 3 were nominated as "Outstanding Employees of the Year."



PEAK Climb Program

Target: Interns & Campus Hires

2023: 68 employees participated in 2 sessions.  
 2024: 79 employees participated in 2 sessions.



On-Site Mentorship Program

Target: Technical Roles

2023: 83 trainees, guided by 41 mentors, achieved 6 mentorship development goals and submitted 6 monthly progress reviews, advancing from junior/assistant roles.  
 2024: 46 trainees, supported by 28 mentors, successfully advanced to higher roles.



Case Study: Empowering Outstanding Talent through “Chairman Dialogue”  
 – Building a Sustainable Future

As the most valuable asset of the enterprise, talent development is central to Jiangsu Beiren's ESG-driven vision. The “Chairman Dialogue” initiative exemplifies the company's commitment to fostering talent growth and advancing sustainable development.

Bridging Communication Gaps to Ignite Talent Potential

The “Chairman Dialogue” breaks hierarchical barriers, offering young professionals across roles and levels a direct platform to engage with the Group's top leadership. This open, inclusive, and egalitarian communication reflects Jiangsu Beiren's respect for talent and aligns with the ESG principle of “people-centricity.”

Listening and Accelerating Growth

Young talents share their onboarding experiences, achievements, and career aspirations, while the Chairman provides personalized guidance to clarify development paths and ignite motivation. Through these exchanges, the company gains deeper insights into employees' strengths and potential, offering tailored support to align individual growth with corporate sustainability. By leveraging the strengths and potential of each employee, we provide personalized development plans and resource support to accelerate their growth, seamlessly aligning individual advancement with the company's sustainable development. This ensures that outstanding talent thrives while driving long-term organizational success.

Advancing Social Responsibility through Shared Success

The initiative extends beyond internal talent development, cultivating innovators with global perspectives who will drive high-quality growth in intelligent manufacturing. This underscores Jiangsu Beiren's social responsibility to nurture industry leaders and contribute to societal progress.



董事长面对面



## Occupational Health and Safety

Jiangsu Beiren prioritizes workplace safety in automated production line design and project execution, strictly adhering to national regulations and establishing a comprehensive safety management system to protect employees and equipment.

While automated production enhances efficiency, cost-effectiveness, and product quality, heightened automation introduces critical safety risks. Robust safety protocols are essential to prevent accidents and ensure operational continuity.

The company complies with the Work Safety Law of the People's Republic of China, Occupational Disease Prevention Law, and Fire Protection Law, anchoring its safety framework on accountability. The system encompasses policies, organizational structures, and defined responsibilities to ensure continuous improvement.



The company takes a series of proactive safety measures. In Equipment Management, the company developed an equipment management manual outlining usage, maintenance, and inspection protocols. Preventive maintenance ensures optimal functionality. In the risk mitigation, a dedicated safety task force conducts regular hazard inspections and risk assessments. Safety protocols, protective devices, and emergency stop mechanisms are implemented. 126 hazards were identified and resolved; zero workplace injuries or lost time incidents. In the data security, the company established an information security system with encrypted data storage, regular backups, and technical safeguards for production systems. In terms of employee training, the company conducted 5 safety training sessions (625 participants) and 3 emergency drills in 2024, enhancing operational competence and crisis response. In terms of environmental stewardship, the company enforced waste management standards, monitored emissions, and promoted eco-awareness through training.

These measures ensure safe operations, elevate employee safety awareness, and lay a robust foundation for sustainable growth.

### Work Safety Management System



Governance

- The Company has established a Safety Production Committee as the highest leadership group for safety production, with the General Manager serving as the Director of the Safety Committee.



Risk control

- Conducting assessment to identify major risk factors each year.
- Each department developing and implementing control measures based on the results of risk assessment.
- Reviewing the risk identification content of the previous year in the first quarter of each year, and arranging safety education and training for relevant personnel.



Policy development

- Management System for Major Hazardous Sources, Occupational Health Management System, Supplier Safety Production Management Policy, etc.



Safety culture

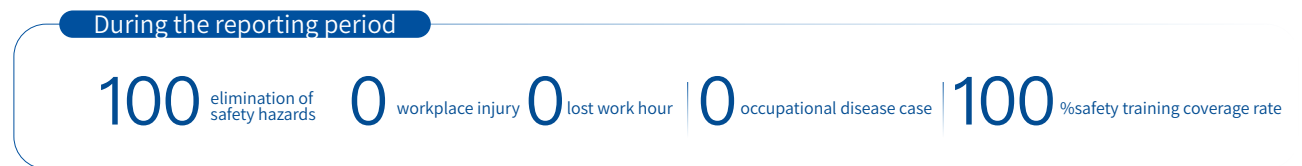
- Regularly conducting employee awareness training, including fire drills, etc.

Jiangsu Beiren has established a comprehensive safety management system for suppliers and contractors through policies such as the Supplier Work Safety Management Policy and Safe and Civilized Service Agreement. The company defines safety requirements across the entire project lifecycle—from supplier selection and onboarding training to construction oversight and post-project evaluations. In supplier screening, rigorous review of safety qualifications and performance to ensure partners possess sound safety track records. In onboarding training, mandatory safety education and training for supplier/contractor personnel, covering company safety protocols, operational procedures, and emergency response measures. Personnel must pass assessments before commencing work. In construction oversight, full-process safety supervision with regular inspections of construction sites to eliminate hazards. The company also developed strict enforcement of safety protocols and protective measures. Safeguarding labor rights across the supply chain by ensuring suppliers/contractors provide safe and healthy working environments. During 2024 reporting period, the company reviewed 2 high-risk contractor operation plans, monitored 2 implementation plans, and resolved 6 hazards.

To improve the work environment, the company has implemented various measures to control and eliminate occupational health hazards. These include providing effective ventilation systems to ensure air circulation, with regular testing and cleaning; installing air purification equipment to reduce harmful substances in the air; using noise reduction or soundproofing devices to minimize noise exposure; and substituting harmful chemicals with less toxic alternatives.

Additionally, the company places high importance on occupational health training. It designs training programs tailored to the industry's characteristics, ensuring appropriate content, duration, methods, assessment criteria, and passing standards to meet the needs of employees in different roles. Through these initiatives, employees acquire essential knowledge and skills to protect their health, enhancing their awareness and competence in occupational health.

During the reporting period, the company's business activities and work environment did not involve significant occupational health hazards, and no cases of occupational diseases occurred. All occupational health risks were effectively mitigated.



### Occupational Disease Hazard Prevention Measures

 <div> <div>Hazard identification and monitoring</div> <p>Reporting occupational hazards and management practices to local health departments regularly.</p> <p>Formulating annual work plans on occupational hazards control.</p> </div>	 <div> <div>Hazard communication</div> <p>Setting up warning signs at workplaces, job sites, and equipment facilities.</p> <p>Notifying employees of potential occupational hazards exposure risks.</p> </div>	 <div> <div>Hazard detection and control</div> <p>Conducting occupational hazard factors detection on a regular basis.</p> <p>Repairing and maintenance of on-site facilities for occupational hazard controls.</p> </div>	 <div> <div>Protection and health checks</div> <p>Providing employees with protection equipment.</p> <p>Organizing pre-job, on-the-job and departure health checks for employees exposed to occupational hazards.</p> </div>
--	---	---	---

### 2024 Gas Safety Training

In recent years, gas accidents have occurred from time to time, posing a serious threat to the safety of company employees and property. To enhance the gas safety awareness, knowledge, and skills of cafeteria staff and prevent accidents, the company has conducted gas safety training. On March 15, 2024, the company's EHS department organized a special gas safety training session for cafeteria managers, gas operators, and other relevant personnel. The training covered topics such as basic knowledge of gas, safe usage standards, accident prevention, and emergency response.



■

Creating a Low-Carbon Supply Chain:  
Empowering Sustainable Development of Industrial Ecosystems |

The company closely follows industry development trends, seizes the opportunity of rapid industry growth and low-carbon transformation, actively expands its business, and promotes the company's development to a new level. At the same time, the company deepens all-round communication and cooperation with partners in the industrial ecosystem. On the premise of fully respecting the intellectual property rights of all parties, it jointly promotes innovation and change across the industry, supports industry upgrading and transformation, and collaborates to open up broader market space, creating more development opportunities and value for the company and its partners.

In the manufacturing industry, the perfection and efficiency of the industrial chain system are crucial for sustainable development. Jiangsu Beiren fully recognizes this key point and actively engages in deep cooperation with supplier partners, committed to jointly building a sustainable supply chain. In this process, the company fully leverages its influence as a manufacturer, continuously radiating and driving suppliers at all levels, guiding and helping them to actively fulfill product quality, environmental, and social responsibilities, and ensuring the healthy and orderly development of the entire value chain.

To ensure product quality and timely delivery, Jiangsu Beiren places great emphasis on the compliance and sustainability of supply chain management. The company strictly requires suppliers to comply with all applicable laws, regulations, and internal management standards, while actively guiding suppliers to fulfill environmental and social responsibilities and effectively managing environmental and social risks in the supply chain. The company has established comprehensive systems such as the "Supplier Management System" and "Processing Management System." Based on these systems, a rigorous internal supplier evaluation standard system has been built. In transactions with suppliers, the company always follows the principles of fairness, impartiality, and openness, ensuring the transparency and standardization of cooperation between both parties.

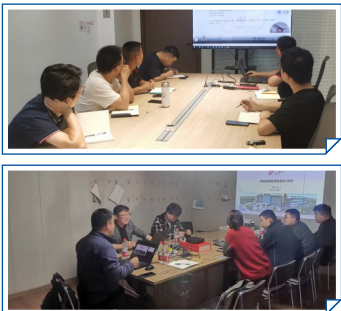
●

Supply Chain Management System

 <div>Selection</div>	<p>Evaluating new suppliers based on product quality, delivery capacity, environmental protection, and business ethics.</p> <p>For suppliers involved in pollution and waste discharge processes, the Company will not work with those without environmental qualifications.</p>
 <div>Performance</div>	<p>Establishing a supplier performance monitoring mechanism and evaluation system against suppliers' quality, pricing, and technical support.</p> <p>Conducting supplier performance evaluations once every six months.</p>
 <div>Elimination</div>	<p>Suppliers with a performance score below 60 in the evaluation will have their supplier qualification directly revoked.</p>
 <div>Continuous improvement</div>	<p>Conducting regular supplier training sessions to help improve their management capabilities in areas such as product quality, etc.</p>

In empowering its suppliers, Jiangsu Beiren supports their improvement and development through various initiatives. Leveraging its technical and managerial expertise, the company provides suppliers with technical training and shares management experience to help enhance production efficiency, improve product quality, and optimize cost control. Additionally, Jiangsu Beiren collaborates with suppliers on R&D activities to promote technological innovation and product upgrades, thereby strengthening their market competitiveness. Through these empowerment measures, Jiangsu Beiren has established long-term, stable, and mutually beneficial partnerships with its suppliers, jointly driving the sustainable development of the entire industrial chain and contributing to the prosperity and progress of the industry.

From March to May 2024, Jiangsu Beiren conducted on-site quality training for non-standard machining suppliers, covering topics such as past project quality issues, quality requirements, quality management methods and processes, delivery management requirements, and feedback mechanisms. A total of six training sessions were held, involving six major suppliers, with 34 participants including corporate leaders and quality and production managers. From May to December 2024, internal quality training was conducted, focusing on SPC, CMM measurement, daily quality management, and work standardization, with all quality personnel participating.



As one of the leading companies in the industry, Jiangsu Beiren is committed to driving overall industry development with a strong sense of responsibility and mission. The company fully utilizes its business and technical advantages to integrate resources and promote collaborative innovation and technological progress across the industrial chain, contributing to sustainable industry growth.

In facilitating industry exchange, Jiangsu Beiren actively builds platforms for technological cooperation and communication, regularly organizing technical seminars, experience-sharing sessions, and other industry events. These events bring together enterprises, research institutions, and experts from upstream and downstream sectors of the industrial chain to promote information sharing and idea exchange. Such activities not only help companies stay updated on the latest industry trends and cutting-edge technologies but also strengthen cooperation and trust among participants, laying the foundation for broader technological collaboration.

In standard-setting, Jiangsu Beiren, leveraging its deep technical expertise and rich experience in smart manufacturing, actively supports the development and revision of industry standards. The company organizes internal teams of technical experts to participate in standard-setting projects of industry associations and standardization organizations, contributing its wisdom and experience to the improvement of industry standards. Through this involvement, Jiangsu Beiren not only promotes its advanced technologies and management practices across the industry but also enhances alignment and collaboration with upstream and downstream enterprises within the framework of these standards, fostering integrated industrial chain development. In recent years, the company has contributed to the development of standards such as the "Welding Manufacturing Specifications for Aluminum Alloy Battery Trays in New Energy Vehicles" and the "Technical Specifications for Stirring Friction Welding of Cast Aluminum." and etc.

Additionally, Jiangsu Beiren actively participates in various industry associations and exchange events, playing a significant role and contributing to industry development. Company leaders and technical experts are frequently invited to deliver keynote speeches at industry association meetings and exhibitions, sharing Jiangsu Beiren's innovative achievements and practical experience in smart manufacturing to provide reference and inspiration for the industry. These activities also enable the company to stay informed about policy directions and market demand changes, allowing it to adjust its development strategy and business layout to maintain its leading position in the industry.



On March 12, 2024, the 2024 China Electric Vehicle Power Battery Industry Summit and the 8th China Electric Vehicle Battery Module and PACK Innovation Technology and Process Development Forum & 3rd China Electric Vehicle Power Battery (Large Cell) Developer Forum were held in Shanghai. Wang Bin, Technical Director of Jiangsu Beiren, was invited to attend and deliver a keynote speech titled "Automation Line Planning Solutions for Steel/Aluminum Alloy Battery Trays in New Energy Vehicles," sharing insights on battery tray automation line process planning and case studies.

In summary, through initiatives such as building industry technology cooperation platforms, supporting standard-setting, and actively participating in industry associations and exchange events, Jiangsu Beiren effectively aggregates the wisdom and strength of multiple stakeholders, driving overall industry development and technological progress. Looking ahead, the company will continue to increase its investment in industry exchange and standard-setting, working hand in hand with upstream and downstream enterprises in the industrial chain to jointly create a bright future for the smart manufacturing industry.

Commitment to Good and Shared Value:  
Empowering the Future Through Donations

In 2024, Jiangsu Beiren Smart Manufacturing Technology Co., Ltd. actively fulfilled its corporate social responsibility (CSR) by making continuous contributions to public welfare and charity, demonstrating its role as a responsible corporate citizen.

During the 2024 "99 Public Welfare Day," the company responded to the national call for "China Charity Day" by donating to the Suzhou Industrial Park Charity Federation through the Tencent Charity platform to support charitable activities and public welfare initiatives. In addition to financial support, the company encouraged employee participation. Before the event, it issued an initiative to all staff, calling for their involvement in the "99 Public Welfare Day" donation drive. The management led by example, and the company pledged to match employee donations at a certain ratio, significantly boosting participation and creating a positive atmosphere of collective engagement.

Moreover, Jiangsu Beiren plans to establish a long-term public welfare partnership with the Yangpu Road Community, participating regularly in community-organized public welfare activities and addressing the actual needs of community residents to contribute to the community's harmonious development. The company's head stated that as a socially responsible enterprise, it is well aware of the importance of giving back to society. Through the "99 Public Welfare Day" donation activity, the company not only conveyed its compassion but also forged a strong bond of public welfare with the Yangpu Road Community.



In 2024, Jiangsu Beiren continued to fulfill its CSR by actively engaging in educational initiatives (public welfare initiatives). In terms of educational donations, the company donated RMB 500,000 to the Educational Development Foundation of Harbin Institute of Technology, to support the university's educational development and talent development. This donation aims to help Harbin Institute of Technology enhance its educational quality and train more outstanding individuals, contributing to the nation's technological progress and social development. Through this initiative, Jiangsu Beiren demonstrated its sense of social responsibility and commitment to education, making a contribution to the advancement of educational public welfare initiatives.

Building a Clean 'Bottle' Home: We Are in Action

On June 5, 2024, Jiangsu Beiren Smart Manufacturing Technology Co., Ltd. organized a thematic public welfare activity titled "Building a Clean 'Bottle' Home: We Are in Action" to celebrate World Environment Day. The event encouraged employees to recycle plastic bottles from their daily lives to contribute to environmental protection. For each bottle employees deposited at designated locations, the company donated a bottle of purified water to sanitation workers—a public welfare and environmental way to honor these environmental guardians.



During the event, Jiangsu Beiren's water donation team brought refreshment to sanitation workers who were working in the heat and cleaning the streets. The team then visited the Guoxiang Street Environmental Sanitation Management Office in Wuzhong District, Suzhou, to deliver over 20 boxes of purified water and express gratitude for the workers' hard work. This public welfare activity not only showed respect and care for sanitation workers but also reflected Jiangsu Beiren's emphasis on environmental protection and its determination to fulfill its social responsibilities. The goal was to jointly protect the blue skies, white clouds, clear waters, and green mountains, and to contribute to building a beautiful China.



Jiangsu Beiren has always actively carried out various initiatives (public welfare initiatives), such as donating scholarships, consoling firefighters, and environmental protection activities, aiming to be a practitioner of social responsibility. In the future, the company will continue to shoulder its responsibilities and make greater contributions to the sustainable development of society.





## Product Stewardship: Innovation Drives the Future, Responsibility Leads Change

- From Efficiency to Resilience:  
Industrial Automation Builds a New Quality Productivity Ecosystem 41
- Energy Storage Solutions:  
Accelerating the Zero-Carbon Future with Technological Innovation 43
- Product Innovation:  
"BR-InMan" Intelligent Welding Robot System 45
- Industry 5.0 o revolution:  
Zero-Defect Practices in Flexible Manufacturing Systems 47

03



Product Stewardship:

Innovation Drives the Future, Responsibility Leads Change

From Efficiency to Resilience:

Industrial Automation Builds a New Quality Productivity Ecosystem |

Jiangsu Beiren's intelligent manufacturing business is one of its core business. Leveraging its extensive expertise in robotic system integration and smart factory, the company provides customers with turn-key engineering services "products + technology + services."

Jiangsu Beiren specializes in delivering customized industrial robot automation and intelligent system integration solutions for clients in industries such as automotive, aerospace, shipbuilding, and heavy machinery. Its offerings include the R&D, design, manufacturing, assembly, and sales of flexible, automated, and intelligent workstations and production lines. These solutions cover flexible automated welding production lines, intelligent welding equipment and production lines, laser processing equipment, digital workshops, flexible automated assembly lines, and automated polishing and grinding equipment.

The company also provides digital software products like MES (Manufacturing Management System) and intelligent logistics systems to help enterprises achieve digital and intelligent management of production processes, enhancing efficiency and quality control.

Building on its strengths in intelligent manufacturing and digitalization, Jiangsu Beiren has established an energy storage technology R&D center and product production base. This initiative integrates product design, production line development, supply chain, manufacturing, and asset operations into a seamless chain, enabling full lifecycle management of its energy storage product series.

Jiangsu Beiren's Mexico Project



On June 14, 2024, Jiangsu Beiren's Mexico project successfully commenced, marking another significant milestone in the company's overseas expansion. After obtaining the Mexico project order, Jiangsu Beiren's various departments quickly responded, forming a dedicated project team composed of elite professionals in design, simulation, process engineering, planning, R&D, and installation and commissioning to ensure efficient and orderly project execution.

The Mexico project is to deliver a complete front subframe welding and assembly production line for an end customer. With an automation rate of 95%, the line incorporates nearly 200 robots and features functions such as welding, material handling, 3D vision guidance, and production line data tracing. The project encompasses various processes, including arc welding, projection welding, press riveting, punching, press-fitting, weld seam inspection, and dimensional inline inspection. The arc welding methods employed include TIG welding, MAG welding, and MIG welding. The inline measurement system operates on the principle of triangulation to obtain 3D spatial coordinates of measured features, ultimately deriving the three-dimensional information of measurement points in the vehicle coordinate system.

The successful launch of the Mexico project not only demonstrates Jiangsu Beiren's technical prowess and teamwork capabilities in intelligent manufacturing but also further solidifies the company's competitiveness and influence in the global market.

Jiangsu Beiren's Italy Project



On June 25, 2024, Jiangsu Beiren's overseas project team was officially deployed to Italy, marking a critical step in the company's global strategy. This project represents Jiangsu Beiren's first venture into international markets and serves as a major milestone in its global expansion strategy, highlighting the company's keen insights into international opportunities and unwavering commitment to overseas development.

The Italy project team comprises elite professionals in design, simulation, process engineering, R&D, safety, installation, and commissioning. Through close collaboration and collective innovation, the team completed pre-installation at Jiangsu Beiren's workshop within over 20 days and finalized all shipments in May, showcasing the company's signature efficiency and professionalism.

Jiangsu Beiren's Italy project delivers a customized high-end subframe welding production line for the client, integrating cutting-edge technologies such as precision arc welding, intelligent material handling, and vision inspection. The production line exemplifies exceptional technical sophistication in its development and implementation, featuring over 70 highly efficient and safety-certified robots. It covers precision welding and automated material handling processes and is integrated with the Sintra (SCADA) system to enable full-process traceability and efficient management. With an automation level of 95%, the production line sets a new benchmark for the intelligent manufacturing industry.

The company actively expands its presence in domestic and international markets, establishing long-term, stable partnerships with numerous renowned enterprises. For instance, Jiangsu Beiren has signed a strategic cooperation agreement with Schneider Electric. Leveraging their respective strengths in digital transformation and lean production, the two parties aim to jointly drive intelligent upgrades across industries. Additionally, the company has deepened collaborations with entities such as TCL PV Tech in the energy storage sector, further broadening its business horizons.

Through continuous technological innovation and high-quality services, Jiangsu Beiren's intelligent manufacturing business consistently creates value for clients, empowering enterprises to achieve intelligent transformation and upgrading.





## Energy Storage Solutions: Accelerating the Zero-Carbon Future with Technological Innovation|

Jiangsu Beiren's energy storage business is a vital component of its strategic portfolio. Building on its profound expertise in intelligent manufacturing, the company has successfully expanded into standardized energy storage products and established an integrated business model spanning "product design – production line R&D – supply chain – large-scale manufacturing – asset ownership – asset operations," positioning itself comprehensively in the energy storage sector of the new energy industry.

Jiangsu Beiren's energy storage product series adopts a modular design, integrating the latest energy storage technologies. The products feature enhanced safety with an AI-driven proactive safety warning system, higher energy density, faster charging/discharging capabilities, and a smarter energy management system, delivering efficiency, reliability, intelligence, and security. For industrial and commercial energy storage applications, the company leverages its industry-leading integrated PCS (Power Conversion System) and PACK liquid cooling system to ensure operational efficiency and product longevity.

### ● green characteristics of Beiren Products

PACK



Equipped with welding traceability database to ensure the reliability and safety of energy storage systems.

Fully liquid cooled industrial and commercial energy storage system



Equipped with a three-level fire warning system, with a 20% increase in cycle life and a 20% reduction in auxiliary control energy consumption.

Energy storage battery compartment



Product itself comes with key advantages such as safety and reliability; efficient charging and discharging; high mobility, flexibility, and scalability. It can provide stable and efficient energy supply solutions for various application scenarios.

Carbon management platform



Energy storage + carbon management, helping customers to peak carbon emission and achieve carbon neutrality.

Jiangsu Beiren's energy storage business has demonstrated robust growth, offering end-to-end services across the entire industry chain — from energy storage system manufacturing to asset ownership, asset operations, market channels, and virtual power plants. The company has successfully delivered multiple energy storage projects, actively contributing to optimizing energy structures and enhancing energy efficiency in industrial parks.

Currently, Jiangsu Beiren's industrial and commercial energy storage assets cover provinces and regions including Jiangsu, Zhejiang, Shanghai, Guangdong, and Hunan. Below are notable examples of energy storage projects developed and delivered by the company:

40MWh Project for a Zhejiang-listed Company

This project integrates solar and storage systems ("solar + storage") and provides intelligent energy operation services combining energy storage and carbon management. It addresses the client's demand for green and energy-efficient operations while effectively aligning with CBAM.



3.5MW/7.525MWh Project for Jiulong Steel Logistics Co., Ltd.

This project holds significant importance for Jiulong Steel Logistics Park in driving energy structure optimization, improving comprehensive energy utilization efficiency, and promoting green, low-carbon development. It stands as a benchmark project in the energy storage industry for logistics park applications.



Liandong U Valley Project

The three industrial parks under Liandong U Valley in Suzhou collectively total 8.6MWh, including:

- Liandong U Valley · Suzhou Industrial Park Dual Innovation Center: 1.5MW/3.225MWh
- Liandong U Valley Suzhou Xukou Technology & Intelligence Hub Industrial Park: 1.8MW/3.87MWh
- Liandong U Valley Suzhou Mudu Precision Manufacturing Industrial Park: 0.7MW/1.505MWh

These projects have made significant contributions to optimizing energy structures and enhancing energy efficiency in industrial parks.



Additional Projects

Guojiao Adhesive New Materials Industrial Park Management Co., Ltd.: 1.7MW/3.655MWh  
Jiangsu Gaogexin Microelectronics Co., Ltd.: 1.5MW/3.225MWh  
Zhuhai Hi-Tech Bay New Energy Technology Co., Ltd.: 0.8MW/1.72MWh



Moving forward, Jiangsu Beiren will continue to increase investment in its energy storage business, actively expand its business models, optimize product quality, and enrich its product portfolio. The company is committed to building a smart energy storage ecosystem and contributing to the achievement of dual-carbon goals.

## Product Innovation: "BR-InMan" Intelligent Welding Robot System |

The Beiren Research Institute focuses on technological R&D and innovative applications in intelligent manufacturing. With a professional R&D team, it is dedicated to developing new products, processes, and technologies while providing cross-functional business support.

Welding Technology Department

Specializes in welding process modeling and R&D, with a focus on laser welding, laser cutting, and laser cleaning processes for automotive and new energy industries. Delivers laser application solutions and engineering technical services.

Vision Technology Department

Focuses on R&D for machine vision guidance, inspection, and measurement technologies. Leverages extensive expertise to provide efficient and precise vision solutions.

Core R&D Department

Prioritizes "AI large models + robotics" for cutting-edge technology development and commercialization.

New Energy Product Center

Engages in R&D and design of energy storage and wireless charging technologies, delivering efficient energy storage solutions.

For industries such as shipbuilding, steel structures, and elevators — characterized by low-volume, multi-variety, single-unit production, complex workpiece structures, diverse welding skill requirements, and flexible processes — Jiangsu Beiren has developed the highly autonomous BR-InMan intelligent welding robot system. By advancing three core technologies — robot intelligence, skill, and functionality — the system overcomes the limitations of traditional industrial robots in balancing task complexity, autonomy, and adaptability. This enables the generalization of welding objectives and tasks across diverse industrial scenarios. The first-generation BR-InMan system has been deployed at Midea Group in Guangzhou and Zhongyifeng Group in Suzhou. The second-generation system is currently under continuous development.

	New in 2024		Cumulative as of 2024	
	Applications Filed (units)	Grants Obtained (units)	Applications Filed (units)	Grants Obtained (units)
Invention Patents	6	11	86	37
Utility Model Patents	13	17	101	78
Design Patents	0	0	0	0
Software Copyrights	5	5	35	35
Others	4	0	17	13
Total	28	33	239	163

## Technology Ethics


Jiangsu Beiren recognizes data as a core asset and strives to become a leader in ethical data utilization, whether as an industrial robot system integrator or a provider of intelligent manufacturing solutions. The company actively engages in data ethics and artificial intelligence (AI) initiatives, responding not only to growing regulatory demands and public discourse on these topics but also aiming to strengthen its internal AI governance framework and establish its position in regulatory landscapes.

The company employs AI responsibly in its operations under a robust AI governance framework. This includes ensuring a human-centric approach in AI system deployment, particularly when adopting generative AI solutions, where human oversight remains critical and is explicitly integrated into the governance framework. Ensuring compliance with current and emerging regulations, as well as proactively adopting best practices in anticipation of regulatory shifts, is a top priority in its data ethics strategy.


## Data Security and Privacy Protection

The company prioritizes the privacy protection of stakeholders and has established a comprehensive privacy management system that spans multiple data types, ensuring full lifecycle compliance for sensitive data.


Jiangsu Beiren strictly adheres to the Cybersecurity Law of the People's Republic of China and other relevant regulations. Aligned with ISO 27001 standards, it has implemented a robust information security management system and protocols to safeguard corporate data integrity and uphold overall corporate interests. Key measures include:




Critical equipment such as firewalls, network devices, and servers are housed in professional IT server rooms equipped with real-time monitoring systems; IT personnel conduct daily inspections to ensure stable operations.



Deploy advanced firewall systems and assign dedicated professionals to manage IT security, effectively mitigating hacker attacks and virus intrusions.



Classify and manage information assets based on protection levels, implementing strict access controls to ensure data security.



Provide mandatory onboarding and periodic cybersecurity training for all employees to reinforce security awareness; Deliver specialized training for IT staff to enhance their expertise in threat prevention and response.



Industry 5.0 o revolution:

Zero-Defect Practices in Flexible Manufacturing Systems |

Digitalization Drives Sustainable Development

In today's digital era, corporate sustainable development is inseparable from digital transformation. Jiangsu Beiren deeply recognizes the importance of digitalization and actively invests in digital projects to enhance competitiveness, management efficiency, and innovation capabilities, thereby achieving sustainable development goals.

By implementing digital projects, Jiangsu Beiren has achieved significant results in operational support. The deployment of 11 business support initiatives, such as the Wireless Charging Operations Platform and Tongcheng Business Travel Platform, has optimized employee collaboration, improved customer satisfaction, and strengthened market competitiveness, laying a solid foundation for business expansion and revenue growth. Digital projects have driven management optimization, enhancing both efficiency and scientific rigor. Three foundational digital management models, including comprehensive budget management, integrate management philosophies into system execution, ensuring transparent and controlled workflows. By combining data and rules to assist decision-making (e.g., automatic project pause/resume functions), the company achieves intelligent decision-making, reduces operational costs, improves resource efficiency, and safeguards economic benefits. Digitalized project ETC processes and POI-based budget tracking enable real-time cost monitoring and precise control, preventing budget overruns and boosting project profitability. A self-developed expense control system enhances flexibility in cost management and risk mitigation, optimizing cost structures and expanding profit margins.

Data-Driven Sustainable Development



Jiangsu Beiren prioritizes knowledge management and data value extraction. Digital projects facilitate efficient knowledge sharing and data utilization: Organized expertise is leveraged through AI-driven Q&A systems, breaking down knowledge silos and fostering employee growth and innovation. Large model capabilities enable intelligent data analysis, unlocking actionable insights for rapid decision-making, operational efficiency, and market responsiveness.The company independently deployed the Tongyi Qianwen 7B model to develop AI-powered Q&A systems and advance intelligent production lines. Real-time data accessibility, automated analytical dashboards, and AI-optimized equipment cycles and welding quality enhance production efficiency and product quality, positioning Jiangsu Beiren as an industry innovation leader.

Digital initiatives promote paperless operations and resource conservation: A proprietary OA system streamlines approval workflows and centralizes tasks, reducing paper usage. Optimized expense control and reimbursement processes minimize paper consumption, lowering environmental impact. Intelligent production line upgrades enable energy-saving adjustments based on real-time demand, while AI-controlled welding parameters reduce defect rates and material waste, achieving a balance between productivity and sustainability.

Jiangsu Beiren's digital projects have delivered remarkable outcomes in management, efficiency, and innovation, driving holistic sustainability across economic, social, and environmental dimensions. Moving forward, the company will deepen its digital investments, explore innovative models, and set benchmarks for sustainable development and industry-wide digital transformation.

Product and Service Safety and Quality

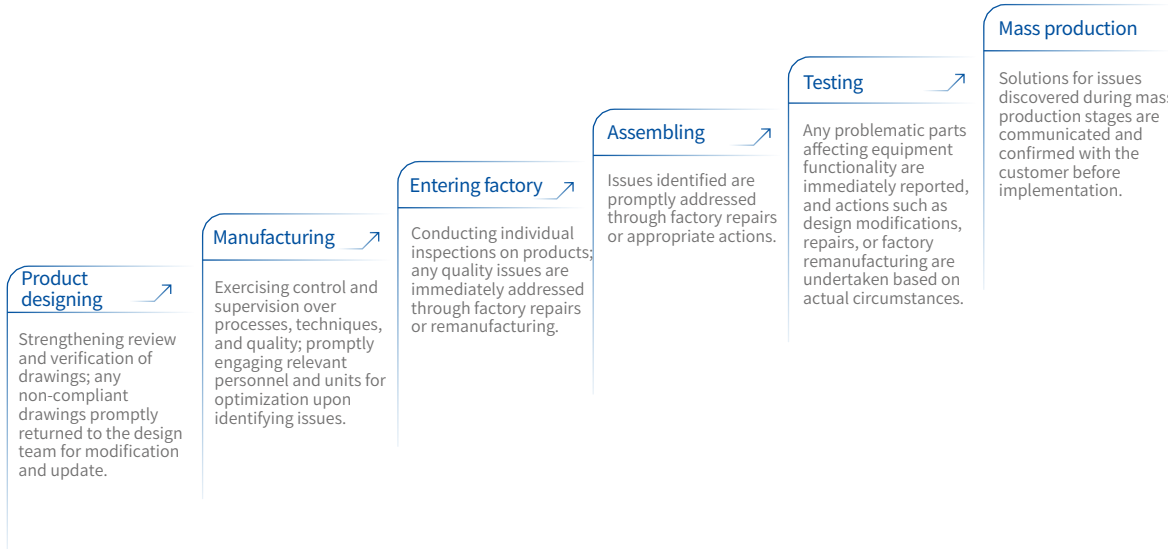


In today's highly competitive business environment, the stability and reliability of product quality are essential for a company's survival and development. The manufacturing process is crucial in determining product quality. Only by ensuring compliance in the production process and continuously providing safe and reliable products to customers can a company secure a foundation for ongoing growth.

At Jiangsu Beiren, we adhere to a quality policy that emphasizes "people-oriented approaches, technological leadership, integrity, and continuous improvement" in our pursuit of excellence. To this end, we have established a series of robust management systems, such as the "Product Monitoring and Measurement Control Procedure." During the reporting period, we successfully obtained certification for the GB/T19001-2016 / ISO9001:2015 quality management system, signifying that our quality management has reached international standards.

We have implemented a comprehensive quality control system that covers every stage of the process, from analyzing customer requirements, designing solutions, procuring raw materials, incoming material inspection, production operations, shipping management, to on-site supervision. Each stage is governed by stringent quality management requirements and safety protocols to ensure our products meet national and industry standards.

Full-Process Quality Control



In our day-to-day operations, we strictly enforce all rules and regulations. Everyone, from senior management to frontline workers, is well aware of their responsibilities in quality control. We regularly train our employees and suppliers to enhance their quality awareness and operational skills, ensuring that every stage meets high-quality standards.

To boost quality awareness across all departments, in August 2024, Jiangsu Beiren underwent an annual comprehensive audit of its quality management system through the certification body CQC, and the results met the system's operational requirements. For suppliers, Jiangsu Beiren assesses their capabilities before placing orders, conducts regular ratings and determines supply scopes. We also update the supplier capability matrix. Monthly performance evaluations are carried out on machining suppliers' on-time delivery rates and quality. Suppliers with poor performance undergo targeted training and on-site coaching.

Through these initiatives, we not only meet customer expectations for product quality but also maintain a leading edge in the competitive market, ensuring the company's sustainable development.

### Product & Service QA training

#### QA training



From May to December 2024, we conducted internal quality training sessions on topics such as SPC, MSA, CMM measurement, daily quality management, and work standardization, with all quality personnel participating.

#### Engineer training



On November 22, 2024, we conducted training for engineers on robot welding processes and quality. The training covered both theoretical knowledge, including welding principles, workstation composition, welding process parameter settings, welding quality inspection standards, industry safety norms, and analysis and prevention of common welding defects, and practical skills, such as robot programming and operation, daily maintenance and troubleshooting of welding equipment, practical operation of quality control points (CPK), and the production and quality evaluation of welding samples.

## Customer Relationship Maintenance

The company strictly follows a business philosophy that centers on meeting customer requirements, regarding the fulfillment of customer needs as the top priority for its development. To this end, we have established a comprehensive customer service system and formed a customer service team comprising quality and technical elites. This team is not only highly professional but also service-oriented, enabling it to respond promptly to various customer needs.

In December 2024, a customer reported that the fixture positioning pin on site was wobbling, affecting the positioning accuracy of their parts. The company responded immediately:

01

Upon receiving the information, the company promptly dispatched three personnel to the customer's site to conduct a comprehensive inspection of all fixture positioning pins delivered for the project. They replaced the pins (after confirming that the pin diameter was below the lower limit) and remeasured the coordinate measuring machine (CMM). The entire inspection and rectification process was completed within five days.

02

The company reviewed the processes for fixture machining, assembly, inspection, and raw material procurement and inspection. It was found that the positioning pin, purchased as a standard component, had not undergone incoming material inspection, and the fixture supplier had changed its procurement channel. The company mandated that subsequent procurement of positioning pins be fixed to a single channel and that incoming material inspection be conducted. The SQE (Supplier Quality Engineer) of Jiangsu Beiren was assigned to monitor compliance.

03

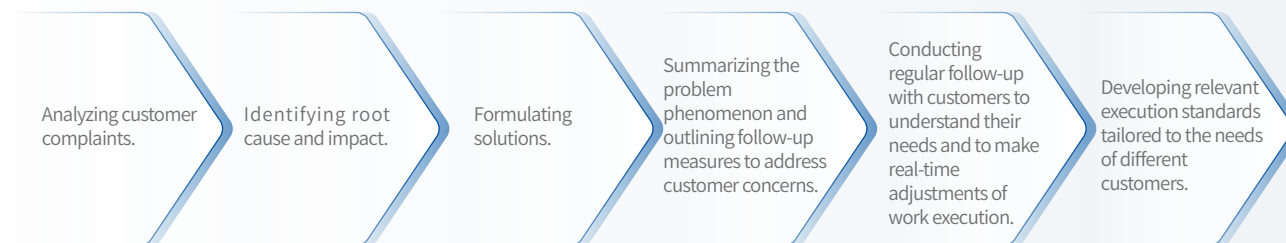
During the fixture installation process, whether the positioning pin wobbles was designated as a key inspection item.

04

The SQE of Jiangsu Beiren included whether the positioning pin wobbles in the mandatory inspection items for fixture inspection.

The company places great importance on customer feedback. By regularly conducting customer communication activities and satisfaction surveys, we gather customer opinions and suggestions, which serve as key references for improving service quality. Additionally, we have implemented a series of stringent information security measures to ensure the proper protection of customer information, allowing customers to enjoy our services without any concerns.

### Customer Complaint Handling Process



In March, we learned that a customer in Zhengzhou was experiencing frequent production line equipment failures and low operating rates. Jiangsu Beiren immediately arranged for personnel to provide on-site support. By recording, categorizing, and addressing the issues on site, and utilizing production downtime for verification, we ensured smooth production and met the customer's operating rate requirements.

In May, during a project in Shenyang, the supplier recommended by the customer exhibited poor cooperation and reluctance to solve problems during on-site construction. After agreeing on a timeline with the customer, Jiangsu Beiren promptly dispatched engineers to provide on-site support, resolving the issues in a timely manner and earning the customer's recognition.

To continuously enhance the quality of customer service, the company also regularly conducts professional training for its customer service team, enabling them to stay updated on the latest product knowledge and service skills. Furthermore, we have established a customer complaint handling mechanism to ensure swift and proper resolution of customer complaints, guaranteeing customer satisfaction.

### Customer Satisfaction

average **97.6** out of 100,  **0.5** increase vs 2023





# Environmental Responsibility: Green Manufacturing, Supporting China's "30·60" Goals

- Symbiosis of Intelligence and Green Practices:  
Full Lifecycle Digital Management 53
- Energy Innovators:  
Promoting Clean Energy Applications 54
- Zero-Waste Factory:  
Circular Economy in Production 55

04



# Environmental Responsibility: Green Manufacturing, Supporting China's "30·60" Goals

## Symbiosis of Intelligence and Green Practices: Full Lifecycle Digital Management |

Jiangsu Beiren adopts an integrated dual-industry layout of “smart manufacturing + AI” and “energy storage manufacturing + operations,” actively engaging in the fields of smart manufacturing and energy storage to support energy structure optimization and improved energy efficiency. In smart manufacturing, we offer end-to-end services from concept to implementation, including digital consulting and smart factory construction, helping customers achieve intelligent and eco-friendly production while reducing energy consumption and emissions. In the energy storage sector, we develop integrated energy storage systems covering product design, production line development, and asset operations, providing support for energy transition. Our energy storage systems utilize technologies such as full liquid cooling and cell consistency screening to ensure safe and efficient operation, extend battery life, and improve energy utilization. The company has also independently developed an intelligent energy operations platform that integrates multiple AI systems to achieve smart management and operational optimization of energy storage assets, further enhancing energy efficiency.

Jiangsu Beiren is committed to reducing emissions and conserving energy in its operations through technological innovation and management optimization. During production, we employ advanced technologies such as laser welding to improve efficiency and reduce energy consumption. We also implement lean production management principles to optimize processes, reduce waste, and enhance resource utilization. In supply chain management, we strengthen cooperation with suppliers, encouraging the use of eco-friendly materials and sustainable production methods to reduce the carbon footprint of the entire supply chain.

As a key measure to reduce emissions in operations, Jiangsu Beiren actively installs photovoltaic (PV) systems on factory rooftops, converting solar energy into electricity. These systems generate an annual total of 640,000 kWh of electricity for the company's daily operations, avoiding 365 tons of greenhouse gas emissions and effectively protecting the ecological environment.

PV generated	639,697	kWh
Purchased	1,209,511	kWh
Total volume	1,849,208	kWh



While transitioning to clean energy, Jiangsu Beiren is also reducing greenhouse gas emissions through electrification. During the reporting period, the company purchased electric forklifts to gradually replace diesel forklifts, saving energy consumption and reducing exhaust emissions, noise pollution, and greenhouse gas emissions.

During the reporting period, greenhouse gas emissions primarily stemmed from on-site natural gas and fuel usage, classified as Scope 1 emissions. Through self-built PV systems, 34% of electricity now comes from renewable energy. Preliminary estimates indicate that the company's total organizational greenhouse gas emissions (Scope 1 and Scope 2) for 2024 amount to 775 tons of CO<sub>2</sub> equivalent.

Moving forward, the company will enhance the implementation of lean production management and improvement measures, continuously driving initiatives for energy conservation, emission reduction, and carbon reduction, and make steady progress toward building a “zero-carbon factory.”

onsite solar panel

34 % renewable electricity | 775 tCO<sub>2</sub>e for scope 1+2 in 2024

## Energy Innovators: Promoting Clean Energy Applications |

As an innovator in smart manufacturing and energy storage, Jiangsu Beiren is dedicated to advancing clean energy applications to support global energy transition and sustainable development. Through smart manufacturing and energy storage operations, the company provides integrated solutions from smart factory construction to energy storage system operation, helping enterprises achieve green production and efficient energy utilization. In energy storage system manufacturing, Jiangsu Beiren employs advanced technologies such as full liquid cooling and cell consistency screening to ensure the safety, efficiency, and longevity of energy storage systems, providing reliable support for clean energy storage and release. The company's independently developed intelligent energy operations platform integrates various systems, including AI pre-sale analysis, user load forecasting, and energy scheduling, to achieve intelligent management and optimized operation of energy storage assets, enhancing energy utilization efficiency.



Jiangsu Beiren continues to prioritize R&D investment, consistently optimizing the performance and cost of energy storage products and expanding clean energy applications. The company plans to collaborate with more international enterprises to introduce advanced energy storage systems and smart manufacturing solutions to the global market, helping regions worldwide improve energy utilization efficiency and reduce reliance on traditional fossil fuels. Additionally, Jiangsu Beiren will actively participate in global energy transition discussions and practices, working with international organizations and research institutions to jointly explore innovations in clean energy technology and contribute to addressing global climate change challenges.





## Zero-Waste Factory: Circular Economy in Production

As a leading enterprise in smart manufacturing and energy storage, Jiangsu Beiren actively practices the concept of sustainable development, striving to achieve efficient and circular resource utilization in production and exploring pathways to realize zero-waste factory operations.



### Zero-Waste Measures in Smart Manufacturing

#### Digital and Automated Production

By introducing advanced digital consulting and robot-based intelligent automated system integration solutions, Jiangsu Beiren has achieved a high degree of automation and precision in production. This not only improves production efficiency but also reduces raw material waste caused by human operational errors, reducing waste generation at the source.

#### Smart Logistics System

The company uses a smart logistics system to optimize material transportation and warehouse management, reducing material loss during transit and improving inventory management accuracy to avoid resource waste from stockpiling.

### Zero-Waste Practices in Energy Storage Business

#### Integrated Energy Storage System Design

Jiangsu Beiren has established an integrated model covering product design, production line development, supply chain, large-scale manufacturing, and asset holding and operation. This allows the company to consider material recyclability and reusability from the product design stage, maximizing resource utilization throughout the product lifecycle.

#### Advanced Energy Storage Technology Application

The company employs advanced technologies such as full liquid cooling and cell consistency screening to ensure efficient operation and long battery life of energy storage systems, reducing waste from premature battery failure and supporting zero-waste goals.

### Waste Management in Production Process

#### Waste Classification and Recycling

Jiangsu Beiren implements a strict waste classification and recycling system, categorizing and treating different types of waste generated during production. For example, recyclables such as metal and plastic waste are specially processed for reuse, while hazardous waste is handed over to professional institutions for safe disposal to prevent environmental pollution.

#### Waste Reuse and Resource Utilization

The company actively seeks opportunities to reuse waste, transforming seemingly useless materials into valuable resources. Through cooperation with research institutions or partners, it explores the feasibility of processing waste materials into new raw materials or product components, achieving resource utilization and reducing reliance on virgin resources.

### Supply Chain Management and Collaboration

#### Promoting Sustainable Development Among Suppliers

Jiangsu Beiren establishes long-term and stable partnerships with its suppliers and actively encourages and promotes the adoption of environmentally friendly packaging and sustainable production methods. Through close collaboration with suppliers, the company is able to control the quality and environmental performance of raw materials at the source, thereby reducing waste generation and the carbon footprint across the entire supply chain.

### Employee Training and Awareness Enhancement

#### Environmental Training

The company regularly organizes environmental training and educational activities to raise employees' awareness of zero-waste concepts and the importance of sustainable development. Through training, employees better understand the company's zero-waste goals and measures and actively practice energy-saving, emission reduction, and resource recycling in their daily work.

#### Culture Building

The company fosters a culture within the enterprise that emphasizes environmental protection and sustainable development, encouraging employees to propose innovative zero-waste solutions. By establishing a reward mechanism, teams and individuals who excel in zero-waste practices are recognized and rewarded, stimulating employees' enthusiasm and creativity to work collectively toward the company's zero-waste goals.

# Appendix

## Key Performance Indicators (KPIs) |

### Employee Employment and Training

Type	Indicator	Unit	2023	2024
Employee Employment	Number of employees in parent company	Person	563	637
	Number of employees in key subsidiaries	Person	184	133
	Total number of employees	Person	747	770
	Doctor	Person	3	3
	Master	Person	33	40
	Bachelor	Person	353	423
	Associate Bachelor	Person	212	218
	Below Associate Bachelor	Person	146	86
	Percentage of female executives	%	25%	26%
Employee Training	Total Training Hours	Hours	6,837	23545
	Average training hours per employee	Hour/ Person	4.52	30.4

### Health and Safety

Type	Indicator	Unit	2023	2024
Occupational Health & Safety	Safety training coverage	%	100%	100%
	Employees with occupational diseases	人	0	0

### Environmental Management

Type	Indicator	Unit	2024
Environment Management	Total Investment	10K RMB	28
GHG emission	Total GHG emission1	tCO2e	775
	Scope 1	tCO2e	67
	Scope 2	tCO2e	708
	Total Electricity consumption	kWh	1,849,208
	Natural Gas	m3	13,214
	Gasoline	liter	14,082
	Water Usage	ton	14,267
	Renewable Electricity	kWh	639,697
	Renewable Electricity Ratio	%	34.6
Waste	Hazardous Waste3	ton	0.62
	Non-hazardous Waste	ton	220

- Notes:
- Total greenhouse gas (GHG) emissions represent the sum of Scope 1 and Scope 2 emissions.
    - Scope 1 emissions include GHG emissions from natural gas consumption and fuel use in company-owned vehicles.
    - Scope 2 emissions cover GHG emissions from purchased electricity.
    - Emission factors:
      - Scope 2 electricity: 0.5856 kg CO2e/kWh (2022 national grid emission factor published by China's Ministry of Ecology and Environment and National Bureau of Statistics).
      - Scope 1 natural gas: 2.16 kg CO2e/m<sup>3</sup> (from China Life Cycle GHG Emission Coefficients for Products by the Chinese Academy of Environmental Planning).
      - Scope 1 gasoline for vehicles: 3.04 tonnes CO2e/tonne (from the same source above).
  - Renewable electricity share = (Renewable electricity consumed / Total electricity consumption) × 100%.
  - Hazardous waste (e.g., waste packaging containers) is disposed of by qualified third-party providers in compliance with regulations.
  - Non-hazardous waste (primarily food and general waste) is handled by municipal environmental authorities.



## Supply Chain Management

Type	Indicator	Unit	2023	2024
Supplier Management	Total number of suppliers	u	260	280
	Number of suppliers assessed on environmental and social (including labor, ethics, etc.) aspects	u	40	50

## Products and Services

Type	Indicator	Unit	2023	2024
Product Management	Total number of health and safety non-compliance incidents in products/services	/	0	0
	Percentage of sold products recalled due to safety/health issues	%	0	0

## Social Responsibility

Type	Indicator	Unit	2023	2024
Social Welfare	Total charitable donations <sup>1</sup>	万元	40.4	51.1

Notes:

1. 2024 Donations:
- RMB 500,000 to the Harbin Institute of Technology Education Development Foundation.
  - RMB 3,000 via Tencent's 99 Giving Day campaign on its public welfare platform.
  - RMB 8,000 donated by Xuancheng Xintu Intelligent Equipment Co., Ltd. (a wholly-owned subsidiary at the time) to the Xuancheng Youth Development Foundation.

GRI Index

|

Note	Jiangsu Beiren prepared its 2024 ESG report referencing the GRI Standards, covering the period from January 1, 2024, to December 31, 2024.	
GRI 1	GRI 1: Foundation 2021	
GRI	Disclosure	Report Section
GRI 2: General Disclosures 2021	2-1 Organizational Details	About this Report
	2-2 Entities Included in the Report	Reporting Scope
	2-3 Reporting Period, Frequency, and Contact	Reporting Scope
	2-6 Activities, Value Chain, and Other Business Relationships	Manufacturing by Beiren
	2-7 Employees	The Future of Human-Machine Collaboration
	2-9 Governance Structure and Composition	Corporate Governance
	2-10 Nomination and Selection of the Highest Governance Body	Corporate Governance
	2-11 Chair of the Highest Governance Body	Corporate Governance
	2-12 Role of the Highest Governance Body in Overseeing Impacts	Corporate Governance
	2-13 Delegation of Responsibility for Managing Impacts	Corporate Governance
	2-14 Role of the Highest Governance Body in Sustainability Reporting	ESG Management
	2-16 Communication of Critical Concerns	Materiality Management
	2-26 Mechanisms for Seeking Advice and Raising Concerns	ESG Management
	2-27 Compliance with Laws and Regulations	Refer to Relevant Sections
	2-28 Membership in Associations	List of Associations
	2-29 Stakeholder Engagement Approach	Materiality Management
GRI 3: Material Topics 2021	3-1 Process to Determine Material Topics	Materiality Management
	3-2 List of Material Topics	Materiality Management
	3-3 Management of Material Topics	Materiality Management
GRI 201: Economic Performance 2016	201-1 Direct Economic Value Generated and Distributed	Brilliant Beiren
	201-3 Defined Benefit Plan Obligations and Other Retirement Plans	ESG Management
GRI 203: Indirect Economic Impacts 2016	203-2 Significant Indirect Economic Impacts	Brilliant Beiren

GRI	Disclosure	Report Section
GRI 205: Anti-Corruption 2016	205-2 Communication and Training on Anti-Corruption Policies	Corporate Governance
	205-3 Confirmed Incidents of Corruption and Actions Taken	No incidents occurred
GRI 302: Energy 2016	302-1 Energy Consumption Within the Organization	Key Performance Table
	302-4 Reduction of Energy Consumption	Symbiosis of Intelligence and Sustainability
	302-5 Reductions in Energy Requirements of Products and Services	Symbiosis of Intelligence and Sustainability
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG Emissions	Key Performance Indicator
	305-2 Energy Indirect (Scope 2) GHG Emissions	Key Performance Indicator
	305-5 GHG Emissions Reductions	Key Performance Indicator
GRI 306: Waste 2020	306-1 Waste Generation and Significant Waste-Related Impacts	Zero-Waste Factory
	306-2 Management of Significant Waste-Related Impacts	Zero-Waste Factory
	306-3 Waste Generated	Key Performance Indicator
GRI 401: Employment 2016	401-2 Benefits Provided to Full-Time Employees (Excluding Temporary/Part-Time)	Employee Rights & Benefits
	401-3 Parental Leave	Employee Rights & Benefits
GRI 403: Occupational Health and Safety 2016	403-1 Occupational Health and Safety Management System	Occupational Health & Safety
	403-2 Hazard Identification, Risk Assessment, and Incident Investigation	Occupational Health & Safety
	403-4 Worker Participation, Consultation, and Communication on OHS Matters	Occupational Health & Safety
	403-5 Worker Training on Occupational Health and Safety	Occupational Health & Safety
	403-6 Promotion of Worker Health	Occupational Health & Safety
	403-7 Prevention and Mitigation of OHS Impacts Directly Linked to Operations	Occupational Health & Safety
	403-8 Workers Covered by OHS Management Systems	Occupational Health & Safety
	403-10 Work-Related Health Issues	Occupational Health & Safety
	404-1 Average Training Hours per Employee per Year	Talent Cultivation & Development
	404-2 Programs for Skills Advancement and Transition Assistance	Talent Cultivation & Development
GRI 414: Supplier Social Assessment 2016	414-1 Proportion of New Suppliers Screened Using Social Criteria	Anti-Corruption & Sustainability
	414-2 Negative Social Impacts in the Supply Chain and Actions Taken	No incidents occurred



GRI	Disclosure	Report Section
GRI 416: Customer Health and Safety 2016	416-1 Assessment of Health and Safety Impacts of Product/Service Categories	Product Quality Management
	416-2 Incidents of Non-Compliance Concerning Health and Safety Impacts	No incidents occurred
GRI 417: Product and Service Labeling 2016	417-2 Incidents of Non-Compliance Concerning Product/Service Information	No incidents occurred
	417-3 Incidents of Non-Compliance Concerning Marketing	No incidents occurred
GRI 418: Customer Privacy 2016	418-1 Substantiated Complaints Regarding Breaches of Customer Privacy	Customer Relationship Management

### List of Participating Associations

NO	NAME	MEMBERSHIP LEVEL	JOINING DATE
1	Suzhou Industrial Park SME Credit Promotion Association	Member	2015
2	Suzhou Intelligent Manufacturing Industry Alliance	Council Member	June 2017
3	Jiangsu Laser Industry Technology Innovation Strategic Alliance	Member	September 2017 - September 2021
4	Intelligent Robotics Branch, China Mechatronics Technology Association	Council Member	December 2018 - December 2023
5	China Robotics Industry Alliance	Council Member	May 2019
6	Suzhou Robotics Industry Association	Council Member	November 2019 - October 2023
7	Suzhou Industrial Park Digital Economy Association	Council Member	July 2020
8	China Welding Association	Council Member	November 9, 2020
9	Suzhou Robotics Industry Association	Vice President Unit	February 2021 - October 2023
10	China New Energy Storage Industry Innovation Alliance	Member	July 7, 2023
11	Suzhou Intelligent Manufacturing Industry Alliance	Council Member	August 2, 2022 - August 1, 2027
12	Suzhou Humanoid Robotics Ecosystem Consortium	Initiating Member	April 2024
13	Jiangsu Energy Storage Industry Association	Council Member	April 7, 2024
14	Suzhou Photovoltaic Industry Association	Member	April 23, 2024
15	Suzhou Industrial Park ESG Alliance	Initiating Member	April 2024
16	CEIBS Alumni Industrial Internet Association	Vice President Unit	July 2024

## Reader Feedback

To continuously improve Jiangsu Beiren’s sustainability management practices, we welcome your feedback, which will serve as a critical reference for enhancing our performance. We sincerely appreciate your valuable input on this report despite your busy schedule.

### Your Information

Name: \_\_\_\_\_ Organization: \_\_\_\_\_ Phone: \_\_\_\_\_ Email: \_\_\_\_\_

### Your Feedback

1.Overall assessment of Jiangsu Beiren’s 2024 ESG Report:

☐Excellent   ☐Good   ☐Average   ☐Poor   ☐Very Poor

2.Completeness of information disclosed in the 2024 ESG Report:

☐Very Comprehensive   ☐Comprehensive   ☐Average   ☐Limited   ☐Very Limited

3.Quality of information disclosed in the 2024 ESG Report:

☐Excellent   ☐Good   ☐Average   ☐Poor   ☐Very Poor

4.Suggested new topics for Jiangsu Beiren’s 2025 ESG Report:

- Governance Pillar: \_\_\_\_\_
- Environmental Pillar: \_\_\_\_\_
- Social Pillar: \_\_\_\_\_
- Other: \_\_\_\_\_

### Contact Us:

Email: [ir@beiren-tech.com](mailto:ir@beiren-tech.com)   Phone: +86 512-62886165